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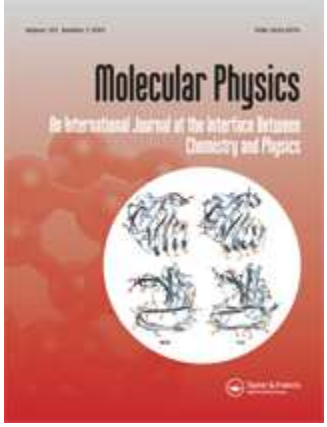

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Rotational and Rovibrational Spectroscopy of the ν_8=1 and 2 Vibrational States of CH_3NC

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Dedicated to Prof. Gianfranco DiLonardo in recognition of his many valuable contributions to molecular spectroscopy

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Abstract

The lowest frequency vibration-rotation band ν_8, corresponding to the degenerate CNC bending vibration of methyl isocyanide (CH_3NC) with band center at 267.3 cm^{-1}, was studied by FTIR spectroscopy between 215 and 320 cm^{-1} and rotational spectroscopy in the range from 201 to 383 GHz in order to describe the vibration-rotation dynamics with inclusion of all important anharmonic and vibration-rotation interactions. Assignments extended to higher-*K* rotational states in both vibration-rotation and rotational spectra reveal a resonance crossing with the $v_8 = 2$ overtone level due to a local anharmonic Fermi resonance. The simultaneous analysis of both types of data provides a fully quantitative reproduction of the experimental data as well as a preliminary characterization of the $v_8 = 2$ level. The parallel component of the overtone band $2\nu_8^0$ with band center at 524.6 cm^{-1} was assigned for the first time from spectra in the region from 480 to 585 cm^{-1} together with the hot bands $2\nu_8 - \nu_8$ in the region of the fundamental band.

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Keywords: methyl isocyanide; high-resolution FTIR spectroscopy; submillimeter wave spectroscopy; anharmonic and vibration-rotation resonances

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1. Introduction

A systematic investigation of high-resolution rovibrational spectra of methyl isocyanide (CH_3NC) was initiated in the 1990's by Plíva and coworkers with the aim of providing a more detailed spectroscopic background for the quantitative understanding of the rovibrational structure in the context of the problem of monomolecular isomerization of CH_3NC to CH_3CN. This reaction has been a subject of many kinetic investigations [1,2] because it demonstrated a substantial disagreement with the statistical behaviour (Rice-Ramsperger-Kassel-Marcus theory) for unimolecular reactions [3]. In their studies, Plíva and coworkers analyzed all fundamental vibrational levels [4-7] and determined the axial rotational constant A_0 and centrifugal distortion constant D_K^0 applying the method of combination loops to the $\nu_7+\nu_8$ combination band and the $(\nu_7+\nu_8)$-ν_8 hot band [8]. Their scheduled studies of the series of vibrational levels $v_8 = 1$, 2, … corresponding to the bending mode of the CNC chain, however, have not continued after the analysis of the fundamental level $v_8 = 1$ [8]. This may be explained by the problems which are unavoidably encountered in studies of this low-frequency mode, as observed for example in the structurally similar molecule CH_3CCH [9-13]. The strongly prolate structure of such molecules with a large value of $A - B \approx 5$ cm^{-1} makes the intensities of transitions rapidly vanish with the growing value of K. These high-K rotational levels are at the same time those for which the onset of strong local anharmonic (Fermi) resonances occurs. As a result, it becomes difficult to describe these vibrational levels as isolated ones because of the impaired convergence of the corresponding effective Hamiltonians when higher rotational states are studied. It is necessary to use a global treatment from the lowest vibrational levels which has been previously applied only to CH_3CCH but not to CH_3CN [14,15] and CH_3NC.

A series of microwave investigations of the lowest vibrational levels was undertaken even earlier in the 1970's. These studies covered the vibrational ground state [16], the lowest excited vibrational levels $v_8 = 1$-4 [17-19], and the fundamental level $v_4 = 1$ [20]. All these

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studies were also confined only to the lower-*K* rotational states because of the limited frequency range of microwave measurements.

Therefore the aim of the present investigations is to describe quantitatively these anharmonic resonances in the CH_3NC molecule which are obviously crucial for understanding the intramolecular vibrational redistribution of energy that plays an important role in the mentioned kinetic studies. We have prepared ground for them by a reinvestigation of the vibrational ground state of CH_3NC with a significant extension of the range of rotational states up to *K*=14 [21]. Because the new rotational data were supplemented with ground state combination differences generated from the fundamental ν_4 band, the $\nu_4 = 1$ level was also subject to a refined analysis.

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In the present paper we present a new analysis of the fundamental level $\nu_8 = 1$ based on the newly measured FTIR spectra of the ν_8 band and rotational spectra measured in this excited vibrational state, which both cross the region of the local Fermi resonance (*K*=9 and 10) and reach up to *K*=16 in the $\nu_8 = 1$ level. The combination of both types of data has been found extremely effective in the search for the exact position of the resonance which will be described in more detail in further sections. The current analysis provides also a preliminary characterization of the $\nu_8 = 2$ level involved in the Fermi resonance.

2. Experimental Details

The synthesis procedure of CH_3NC and the details of rotational measurements with the Prague High Resolution Microvawe Spectrometer [22] were described in the previous study [21]. The frequency range was extended up to 385 GHz in the present study by using a new set of semiconductor frequency multipliers and amplifiers. The optical path length of a conventional 280 cm long glass cell was doubled using a roof top mirror and THz polarizer from TYDEX (www.tydex.ru) to increase sensitivity. The pressure of the sample was varied according to transition intensities between 1.1 and 1.9 Pa and measured with a capacitance

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gauge (Leybold) with relative uncertainty of about 5%. The uncertainty of measurements is estimated to be better than 20 kHz for isolated lines with good signal-to-noise ratio.

The infrared experimental work was performed by using the Bruker IFS 120 HR Fourier transform spectrometer in the Infrared Laboratory at the University of Oulu. The CH_3NC sample was purified with cold traps before evaporating it into a White cell [23], which was provided with 60 μm thick polypropylene windows. The instrument was equipped with a Globar source and a multilayer Mylar beamsplitter made by Bruker Inc. Infrared radiation was detected with a He cooled Si bolometer operating at 1.4-1.8 K. Two series of registration were performed in different conditions. The absorption path lengths were 57.6 and 163.2 m and the sample pressures 72.4 and 147.4 Pa (spectra A and B), respectively. With suitable velocities for the detector 111 and 279 scans were performed in these measurements giving the total registration times 33.7 and 42.8 hours, respectively. An overview of the regions of the ν_8 and $2\nu_8$ bands is shown in Figure 1. During the measurements the sample gas was kept at room temperature. The spectra were calibrated with peaks of residual H_2O [24] in the region of the fundamental ν_8 band and also CO_2 in the region of the ν_8 overtone band [23b]. The spectral resolution for small well-separated lines was better than 0.0013 cm^{-1} and 0.0023 cm^{-1} in the regions of the ν_8 and $2\nu_8$ bands, respectively. The pressure shifts in these spectra have been estimated to be within the estimated accuracy of the FTIR measurements [25,26].

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3. Results and Discussion

In spite that the first vibration-rotation study of the degenerate fundamental vibrational level $\nu_8 = 1$ provided the basic characteristics from which the occurrence of the localized Fermi resonance with the overtone level $\nu_8 = 2$ could have been inferred, its effect remained neglected. The reason consists probably in difficulties of experimental observation of transitions to the rotational levels perturbed by this resonance. The absorption intensities in the fundamental band ν_8 decrease rapidly with the growing *K* rotational quantum number due

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to the large value of $A-B \approx 4.9$ cm^{-1} and the patterns of the weaker line series are thus hidden among the stronger lines of the fundamental ν_8 band and also the accompanying hot bands $2\nu_8$-ν_8 and $3\nu_8$-$2\nu_8$. This perhaps explains why the previous IR analysis [8] did not reach these perturbed levels. The details of the rotational structures of the $\nu_8 = 1$ and 2 levels around the resonant crossing and the accompanying vibration-rotation interactions are shown in Figure 2. It also illustrates another typical feature of the rotational levels in $\nu_8 = 1, 2, \ldots$ caused by the accidentally small value of the combination of constants $2(A-B-A\zeta)_8 \approx 0.08$ cm^{-1}. This makes the pairs of levels $v_8^{l_8} = 1^{-1}, K-1/\ v_8^{l_8} = 1^{+1}, K+1$, which are coupled by the q_{22} l-type resonance, systematically near-degenerate. The same effect couples the chains of levels $v_8^{l_8} = 2^{-2}, K-2/\ v_8^{l_8} = 2^{0}, K/\ v_8^{l_8} = 2^{+2}, K+2$ and also $v_8^{l_8} = 3^{-3}, K-3/\ v_8^{l_8} = 3^{-1}, K-1/\ v_8^{l_8} = 3^{+1}, K+1/\ v_8^{l_8} = 3^{+3}, K+3$. Such coincidence was, however, found useful in assigning transitions perturbed by the Fermi resonance.

Because the propagation of assignments in the ν_8 band across the resonant region was unmanageable in the stand-alone IR spectrum, we applied the strategy used before for the propyne (CH_3CCH) molecule [9-12]. We first searched for higher-K transitions in the l_8=+1 sublevel of $\nu_8 = 1$, having now access to the levels with $K \geq 12$ in rotational spectra extended to the region of 380 GHz, which corresponds to $J \leq 18$. We could also assign the corresponding weaker branches $^{r}R_K$ and $^{r}P_K$ with K up to 15 in the FTIR spectra, with the lower state combination difference (LSCD) verification of assignments. Although these levels are not directly perturbed by the Fermi resonance, the q_{22} l-type resonance makes the levels K=11 and 12 of the l_8=+1 sub levels sensitive to the Fermi resonance affecting K=9 and 10 of the l_8=-1 sublevel. This enabled estimating the value of the Fermi coupling term in the preliminary fits with its value kept constrained and changed stepwise. The progressively improved predictions of rotational transition frequencies with $K \geq 12$ in the l_8=-1 sublevel facilitated the search for them, of course at the price of recording wider frequency scans. With

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a consistent, but still not quantitative fit of these rotational data we finally succeeded in finding the $^{p}P_{12}$ and $^{p}R_{12}$ branches in the FTIR spectra, start fitting the Fermi coupling term and finally assigning the resonant transitions for K=9 and 10 in the l_8=-1 sublevel, both in the rotational and FTIR spectra.

This procedure would be difficult or even impossible without the simultaneous preliminary analysis of the $v_8 = 2$ level. The beginning of assignments of the IR spectrum was strongly facilitated by the available low-J rotational frequencies [17]. We first assigned the parallel band $2\nu_8^0$ which is the strongest feature in the overtone region around 525 cm^{-1}. Along with assignments of the overtone band we assigned also the $2\nu_8^0 - \nu_8$ hot band. Like in the case of the $v_8 = 1$ level, we were not able to propagate assignments to the levels of the Fermi resonance with $v_8 = 3^{+3}$ occurring for K=10 and 11 (cf. Figure 2) and beyond. We also assigned transitions to the degenerate sublevel (E symmetry) from the hot band $2\nu_8^2 - \nu_8$ in the FTIR spectrum. The branches $^{r}R_8$ and $^{r}R_9$ of the hot band $2\nu_8^{+2} - \nu_8^{+1}$ pertaining to the levels in Fermi resonance $K = 9$ and 10 were in fact assigned before the assignments of the perturbed branches $^{p}P_{10}$ and $^{p}P_{11}$ were accomplished in the fundamental band ν_8, because the former are stronger and provide clearer series in the Loomis-Wood diagrams. The effect of the Fermi resonance on switching the positions of the $^{r}R_8$ and $^{r}R_9$ branches of the hot band is illustrated in Figure 3 with the Loomis-Wood plot from the Loomis-Wood for Windows (LWW) program [27]. The $^{r}R_8$ branch represents transitions to the K=9 levels of $v_8 = 2^{+2}$ which is above those of $v_8 = 1^{-1}$ (cf. figure 2) and thus is shifted towards higher wavenumbers. The relative positions of the levels in resonance are interchanged for K=10, which puts the $^{r}R_9$ branch of the hot band below $^{r}R_8$. Since there were several concurrent series in the close neighborhood of these two critical branches, their assignment was an iterative trial-and-error procedure rather than a straightforward matter. This was also because in the earlier stages of

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the analysis the fit of the lower state involved in the hot band was not yet strictly quantitative and the lower state combination difference checking in the LWW program was thus not convincing. The attempts to estimate the Fermi coupling term led to a wide variation of its value between 0.5 and 0.8 cm^{-1} and the final value was established only with the assistance of the simultaneous submillimeter wave (SMMW) measurements of rotational transitions in both vibrational states and finding consistent IR and SMMW assignments, first for less perturbed states $K \geq 11$ and finally for the two resonant cases of K=9 and 10.

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The analysis of the $v_8 = 1$ and 2 levels relies mostly on the assignments in the P and R branches of the fundamental and hot bands, which provide clear patterns in the Loomis-Wood diagrams. The Q branches of all perpendicular bands of the CNC bending mode are, on the other hand, quite congested and resemble rather parallel bands. This is a consequence of the mentioned smallness of $2(A-B-A\zeta)_8 \approx 0.08$ cm^{-1} which determines the distance between adjacent $^{p,r}Q$ branches as shown in Figure 4. This leads to frequent overlaps of lines in the Q-branch region and makes them in most cases useless for LSCD checking.

The prominent role of the Fermi resonance also explains why we have not succeeded so far with assigning neither the vibrational-rotational IR nor the rotational SMMW transitions to the levels in Fermi resonance, K=10 and 11 in $v_8 = 2^0$ and K= 8 and 9 in $v_8 = 2^{-2}$ and beyond. At the present stage of the analysis, we have extended the assignments just below these Fermi crossings. A fully quantitative analysis of all sublevels of the overtone level $v_8 = 2$ will require extending the assignments to the $v_8 = 3$ level beyond the resonant crossings and determining a precise value of the Fermi coupling term by a similar procedure as described above.

The least-squares fit was performed with the standard effective Hamiltonian of degenerate vibrational levels including the q_{22} l-type resonance, the Fermi coupling terms, and the α-resonance ($\Delta k = \pm 2, \Delta l = \mp 1$). The last interaction needed to be included in order to remove the remaining residuals of data corresponding to levels in the neighborhood of the

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Fermi resonance. The definition of the matrix elements is given in the Appendix. The statistical weights of experimental data in the least-squares fits were taken as proportional to the inverse squares of their estimated experimental uncertainties. Overlapped IR lines were given higher uncertainties based on the extent of discrepancy with the LSCD checks. We merged the IR data from the two spectra in the following way. The lower-*J* transitions were in general taken from the weaker spectrum A, while spectrum B, saturated in the central part of the bands, was used for extending assignments towards higher *J* and *K* values. We have assigned over 2700 transitions in the fundamental band, over 1200 transitions in the parallel overtone band $2\nu_8^0$, and over 900 transitions in each of the still incomplete hot bands $2\nu_8^0-\nu_8$ and $2\nu_8^2-\nu_8$. The new rotational transitions in vibrational levels $v_8 = 1^{\pm1}$, 2^0, and $2^{\pm2}$ were measured for $J = 9$, 14, and 18 in the region between 201 and 385 GHz. We have also recorded rotational spectra for $J = 6$ in the region around 140 GHz to compare with the previous measurements [17] and found a remarkable consistency.

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The fitted parameters of the effective Hamiltonian of the levels $v_8 = 1$ and 2 are given in Table1 together with an overview of range of maximum *J* and *K* values of assigned transitions and standard deviations of reproduction. The details of the data reproduction have been deposited with the British Library under the Supplementary Publication scheme and are also available in electronic form upon request from one of the authors (P.P.). The parameters of the vibrational ground state were taken from the previous study [21] and kept fixed in this work. The centrifugal distortion parameters of the $v_8 = 1$ level lie close to the ground state values which confirms that no significant interactions were neglected in its analysis. The only exceptions are the sextic constants H_J and H_K which are rather effective fitting parameters. They could not be, however, kept fixed to the ground state value because of significant deterioration of the fit of rotational data in such case. It should be also noted that the rotational constant *B* and the quartic centrifugal distortion constants D_J and D_{JK} from the

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previous MW work [17] are closer to the present ones than those from the earlier IR study [8]. A similar agreement was observed also in the $v_8 = 2$ level. Its sextic centrifugal distortion constants are on the contrary quite far from the ground state ones. They cannot be constrained to the ground state values for the same reason as above and have to be accepted as effective fitting parameters at the present stage of the analysis.

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4. Conclusion

We have investigated the lowest vibrational levels $v_8 = 1$ and 2 corresponding to the CNC bending vibration of methyl isocyanide from its vibrational-rotational FTIR and SMMW rotational spectra. We extended significantly assignments in the fundamental ν_8 band across the region of the Fermi resonance between the levels $v_8 = 1^{-1}$ and 2^{+2} and assigned for the first time the overtone and hot bands to the $v_8 = 2^0$ and $2^{\pm 2}$ vibrational levels. The vibrational-rotational data were analyzed simultaneously with the newly measured SMMW rotational data whose assignments were also extended over the region of the Fermi resonance. The reproduction of data is quantitative for the whole vibrational level $v_8 = 1^{\pm 1}$ and the sublevel $v_8 = 2^{+2}$. The analysis of the sublevels $v_8 = 2^0$ and $v_8 = 2^{-2}$ provides preliminary results and the quantitative fit of the data will require exploring the vibrational state $v_8 = 3$ and its crossings with $v_8 = 2$ which will be the subject of a forthcoming paper.

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Appendix. Definition of matrix elements of the effective vibration-rotation Hamiltonian

The diagonal matrix elements up to octic terms were taken in the form

$$E_{vr}^{0}(J,k,l)=E_v+B_vJ(J+1)+(A_v-B_v)K^2-D_J^vJ^2(J+1)^2-D_{JK}^vJ(J+1)K^2-D_K^vK^4+$$
$$+H_J^vJ^3(J+1)^3+H_{JK}^vJ^2(J+1)^2K^2+H_{KJ}^vJ(J+1)K^4+H_K^vK^6+$$
$$+L_J^vJ^4(J+1)^4+L_{JJK}^vJ^3(J+1)^3K^2+L_{JK}^vJ^2(J+1)^2K^4+L_{JKK}^vJ(J+1)K^6+L_K^vK^8+$$
$$+\left[-2A\zeta_v+\eta_J^vJ(J+1)+\eta_K^vK^2+\tau_J^vJ^2(J+1)^2+\tau_{JK}^vJ(J+1)K^2+\tau_K^vK^4\right]Kl\,. \qquad \text{(A1)}$$

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Obviously, the fourth line of equation (A1) vanishes for the non-degenerate vibrational ground and $v_8 = 2^0$ states. For the definition of Hamiltonian off-diagonal matrix elements, it is more appropriate to use the signed quantum number k (K=|k|), because they can in general connect rotational states with different signs of k. The general form of the q_{22} l-type operator has the matrix elements

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$$\left\langle v_t^{l\pm2};J,k\pm2\right|\mathbf{H}_{22}+\mathbf{H}_{24}+\mathbf{H}_{26}\left|v_t^{l};J,k\right\rangle=\left[(v_t\mp l_t)(v_t\pm l_t+2)\right]^{1/2}\times$$
$$\times\left\{\begin{array}{l} q_{22}+f_{22}^{J}J(J+1)+f_{22}^{K}\left[k^2+(k\pm2)^2\right]+ \\ f_{22}^{JJ}J^2(J+1)^2+f_{22}^{JK}J(J+1)\left[k^2+(k\pm2)^2\right]+f_{22}^{KK}\left[k^4+(k\pm2)^4\right]\end{array}\right\}F_2^{\pm}(J,k) \qquad \text{(A2)}$$

The effects of the other vibration-rotation interactions within the studied vibrational level were neglected and are assumed to be absorbed into the effective values of the vibrationally diagonal parameters [28, 29]. The Fermi interaction between the $v_8 = 1$ and $v_8 = 2$ levels was described by the matrix element

$$\left\langle v_8=1^{\pm1},\ J,k\right|\mathbf{H}_{30}+\mathbf{H}_{32}\left|\ v_8=2^{\mp2},J,k\right\rangle=W_{12}+W_{12}^{J}J(J+1)+W_{12}^{K}k^2 \qquad \text{(A3)}$$

The matrix elements of the α-type resonance were taken in the form

$$\left\langle v_8=1^{\pm1},J,k\pm2\right|\mathbf{H}_{22}\left|v_8=2^{\pm2},J,k\right\rangle=1/\left(2\sqrt{2}\right)\alpha_{8-88}^{BB}\,F_2^{\pm}(J,k) \qquad \text{(A4)}$$

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The notation of the matrix elements of rotational shifting operators was taken conventionally as

$$F_n^{\pm}(J,k) = \prod_{i=1}^{n}\left[J(J+1)-(k\pm i\mp 1)(k\pm i)\right]^{1/2} \qquad \text{(A5)}$$

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References

[1] D.L. Snavely, R.N. Zare, J.A. Miller and D.W. Chandler, J. Phys. Chem. **90**, 3544 (1986).

[2] J.A. Miller and D.W. Chandler, J. Chem. Phys. **85**, 4502 (1986).

[3] H.H. Harris and D.L. Bunker, Chem. Phys. Lett. **11**, 433 (1971).

[4] C. He, J. Plíva, C.M. Faust, M. El-Shakre, L.P. Gold and R.A. Bernheim, J. Mol. Spectrosc. **160**, 491 (1993).

[5] M. El-Shakre, C. He, L.P. Gold and R.A. Bernheim, J. Mol. Spectrosc. **161**, 109 (1993).

[6] L. Le, J. Plíva, L.P. Gold and R.A. Bernheim, J. Mol. Spectrosc. **170**, 506 (1995).

[7] C. He and R.A. Bernheim, J. Mol. Spectrosc. **155**, 365 (1992).

[8] J. Plíva, L.D. Le, J.W.C. Johns, Z. Lu and R.A. Bernheim, J. Mol. Spectrosc. **173**, 423 (1995).

[9] P. Pracna, Š. Urban, H.S.P. Müller, V.-M. Horneman and S. Klee, J. Mol. Spectrosc. **256**, 152 (2009).

[10] P. Pracna, H.S.P. Müller, S. Klee and V.-M. Horneman, Mol. Phys. **102**, 1555 (2004).

[11] H.S.P. Müller, P. Pracna and V.-M. Horneman, J. Mol. Spectrosc. **216**, 397 (2002).

[12] P. Pracna, G. Graner, J. Cosléou, J. Demaison, G. Wlodarczak, V.-M. Horneman and M. Koivusaari, J. Mol. Spectrosc. **206**, 150 (2001).

[13] Š. Urban, P. Pracna and G. Graner, J.Mol.Spectrosc. **169**, 185 (1995).

[14] M. Koivusaari, V.-M. Horneman and R. Anttila, J. Mol. Spectrosc. **152,** 377 (1992).

[15] A.-M. Tolonen, M. Koivusaari, R. Paso, J. Schroderus, S. Alanko and R. Anttila, J. Mol. Spectrosc. **160,** 554 (1993).

[16] A. Bauer and M. Bogey, Acad. Sc. Paris, Sér. B **271**, 892 (1970).

[17] A. Bauer, M. Bogey and S. Maes, J. Phys. **32**, 763 (1971).

[18] M. Godon and A. Bauer, J. Mol. Struct. **38**, 9 (1977).

[19] A. Bauer, M. Godon and S. Maes, J. Mol. Spectrosc. **59**, 421 (1976).

[20] A. Bauer and M. Godon, Can. J. Phys. **53**, 1154 (1975).

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For Peer Review Only

[21] P. Pracna, J. Urban, O. Votava, Z. Meltzerová, Š. Urban, V.-M. Horneman and B.J. Drouin, J. Phys.Chem A **115,** 1063 (2011).

[22] L. Nová Stříteská, M. Šimečková, P. Kania, P. Musil, L. Kolesniková, J. Koubek and Š. Urban, J. Mol. Struct. **919**, 89 (2009).

[23a] T. Ahonen, P. Karhu and V.-M. Horneman, presented at the Fifteenth Colloquium on High Resolution molecular spectroscopy, Glasgow, Scotland, 1997 (unpublished).

[23b] T. Ahonen, S. Alanko, V.-M. Horneman, M. Koivusaari, R. Paso, A.-M. Tolonen and R. Anttila, J. Mol. Spectrosc. **181**, 279 (1997).

[24] V.-M. Horneman, R. Anttila, S. Alanko and J. Pietilä, J.Mol.Spectrosc. **234**, 238 (2005).

[24b] V.-M. Horneman, J. Mol. Spectrosc. **241**, 45 (2007).

[25] P. Kania, L. Stříteská, M. Šimečková and Š. Urban, J. Mol. Struct. **795**, 209 (2006).

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[26] J. Cernicharo, C. Kahane, M. Guélin and J. Gomez-Gonzales, Astron. Astrophys. **189**, L1 (1988).

[27] W. Lodyga, M. Kreglewski, P. Pracna and Š. Urban, J. Mol. Spectrosc. **243**, 218 (2007).

[28] Š. Urban, D. Papoušek and M. Garcia Hernandez, J. Mol. Spectrosc. **124**, 272 (1987).

[29] J.K.G. Watson, C. Gerke, H. Harder and K. Sarka, J. Mol. Spectrosc. **187**, 131 (1998).

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Captions to figures

Figure 1. Overview of the FTIR spectra in the regions of the ν_8 and $2\nu_8$ bands of CH_3NC. The spectra A and B were recorded at pressures of 72.4 and 147.4 Pa and pathlengths 57.6 and 163.2 m, respectively.

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Figure 2. The *K*-dependent part of the energy terms $E = E_{vib} + (A - B)K^2 \mp 2A\zeta Kl$ of the ν_8 = 1, 2, and 3 vibrational levels of CH_3NC. The local Fermi resonaces are indicated by ellipses, the global q_{22} *l*-type resonances by dashed lines, and the α-resonance by dotted lines. For further details see text. The upper bounds of rotational states in the previous IR and MW studies are shown by dot-and-dashed lines.

Figure 3. The Loomis-Wood diagram of the LWW program (lower frame) with the ${}^{r}R_K$ branches of the fundamental ν_8^{+1} and hot $2\nu_8^{+2} - \nu_8^{+1}$ bands of CH_3NC. The regular spacing of the ${}^{r}R$ branches, coresponding to $2(A - B - A\zeta) \approx 0.08$ cm^{-1}, is distorted at the Fermi resonance crossing and inverts the positions of the ${}^{r}R_8$ and ${}^{r}R_9$ branches in the hot band. The section of the IR spectrum corresponding to the „line“ in the frame in the Loomis-Wood diagram (transitons *J*=14←13) is shown in the upper frame.

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Deleted: $\nu_8 = 1^{+1} \leftarrow 0$

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Figure 4. The Q-branch region of the fundamental ν_8 band and the hot bands $2\nu_8 - \nu_8$ of CH_3NC. The heads of individual Q-branches are indicated by dots, the larger ones for *K*-$l = 3n$. The two branches ${}^{p}Q_{10}$ and ${}^{p}Q_{11}$ of the ν_8 band, affected by the local Fermi resonance, are apparently moved from the otherwise regular positions. The Q-branches of all bands are blue degraded due to the difference of rotational constants $B' - B'' > 0$. (Spectrum A recorded at pressure of 72.4 Pa and pathlength 57.6 m).

Deleted: $\nu_8 = 2^0 \leftarrow 1^{\pm1}$ and $\nu_8 = 2^{\pm2} \leftarrow 1^{\pm1}$

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Caption to table

Table 1. Energies, rotational, and centrifugal distortion parameters [a] (in cm^{-1} units) of the vibrational states $v_8 = 1$ and 2 of CH_3NC and their interaction terms.

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Parameter	$v_8 = 1$ Present work	$v_8 = 1$ IR [b]	$v_8 = 1$ MW [c]	$v_8 = 2^{\pm 2}$ Present work	$v_8 = 2^{\pm 2}$ MW [c]	$v_8 = 2^0$ Present work	$v_8 = 2^0$ MW [c]
E	267.319414 (11)	267.3173 (1)		545.295387 (20)	20.259 [d]	524.633133 (15)	
A	5.24725371 (62)	5.2472237 (77)		5.2461394 (17)		5.2481718 (15)	
B	0.3366313467 (62)	0.33662748 (1)	0.3366314	0.337899924 (9)	0.3378556	0.337942990 (13)	0.3379431
$D_J \times 10^7$	1.629558 (58)	1.91921 (105)	1.64	1.695440 (99)	1.71	1.696839 (127)	1.71
$D_{JK} \times 10^6$	7.592406 (149)	7.45032 (41)	7.575	7.59672 (47)	7.582	7.64033 (75)	7.582
$D_K \times 10^5$	8.55562 (76)	8.5748 (5)		8.4745 (38)		8.2815 (42)	
$H_J \times 10^{14}$	0.458 (109)			-2.7357 [d]		-2.7357 [d]	
$H_{JK} \times 10^{11}$	7.8727 (28)			3.0044 (270)		13.3783 (210)	
$H_{KJ} \times 10^{10}$	2.0337 (75)			1.5419 (39)		11.7281 (826)	
$H_K \times 10^{10}$	0.421 (232)			-2.464 (182)		-4.867 (34)	
$L_J \times 10^{18}$	1.82 [e]			1.82 [e]		1.82 [e]	
$L_{JJK} \times 10^{16}$	-9.71 [e]			-9.71 [e]		-9.71 [e]	
$A\zeta$	4.8702548 (13)	4.870139 (1)	4.772	4.8720353 (14)	4.772		
$\eta_J \times 10^4$	0.196017 (10)	0.19116 (2)	0.1967	0.196080 (9)	0.1967		
$\eta_K \times 10^4$	3.37847 (33)	3.4199 (5)		3.36375 (64)			
$\tau_J \times 10^9$	-0.23476 (45)						
$\tau_{JK} \times 10^9$	-1.4869 (67)						
$q_{22} \times 10^4$	2.315153 (41)	2.30826 (5)	2.314	2.324442 (25)	2.316		
$q_{22}^J \times 10^9$	-1.4399 (33)			-1.4605 (15)			
$q_{22}^{JJ} \times 10^{14}$	1.058 (59)						
W_{12}				0.79415 (22)			
$W_{12}^J \times 10^6$				-7.694 (63)			
$\alpha_{8-88}^{BB} \times 10^5$				1.267 (34)			
Range of J, K [f]	85,9 / 18,16	na,9 / -	- / 6,6	55,12/ 18,15	- / 6,6	70,9 / 18,9	- / 6,6
No. of data [f]	2705 / 96	478 / -	- / 55	966 / 42, 28 [h]	- / 52	2135 / 36	- / 27
St. deviation [f,g]	0.14 / 24	0.28 / -	- / na	0.28 / 71, 191 [h]	- / na	0.23 / 96	- / na

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[a] Numbers in parentheses are one standard deviation in units of the last digit quoted.
[b] Ref. [8]. [c] Ref. [17].
[d] $E(v_8 = 2^{\pm 2}) - E(v_8 = 2^0)$
[e] Constrained to the ground state value. [f] Rovibrational / rotational data.
[g] 10^{-3} cm^{-1} / kHz units
[h] l=+2 and -2, respectively..

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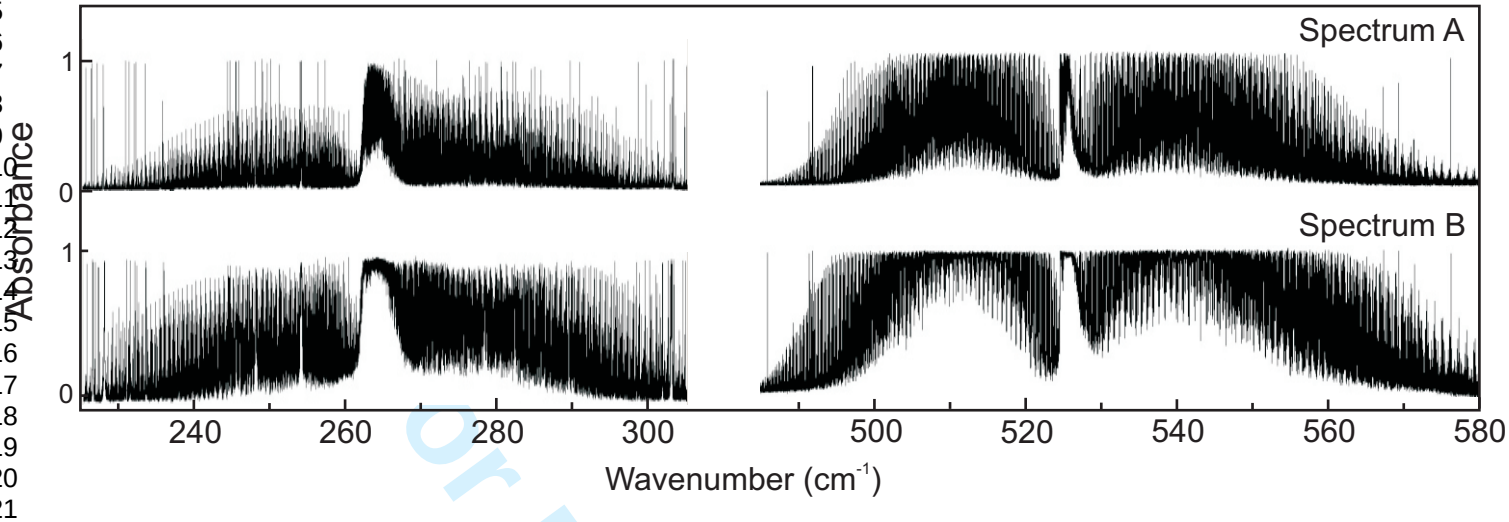

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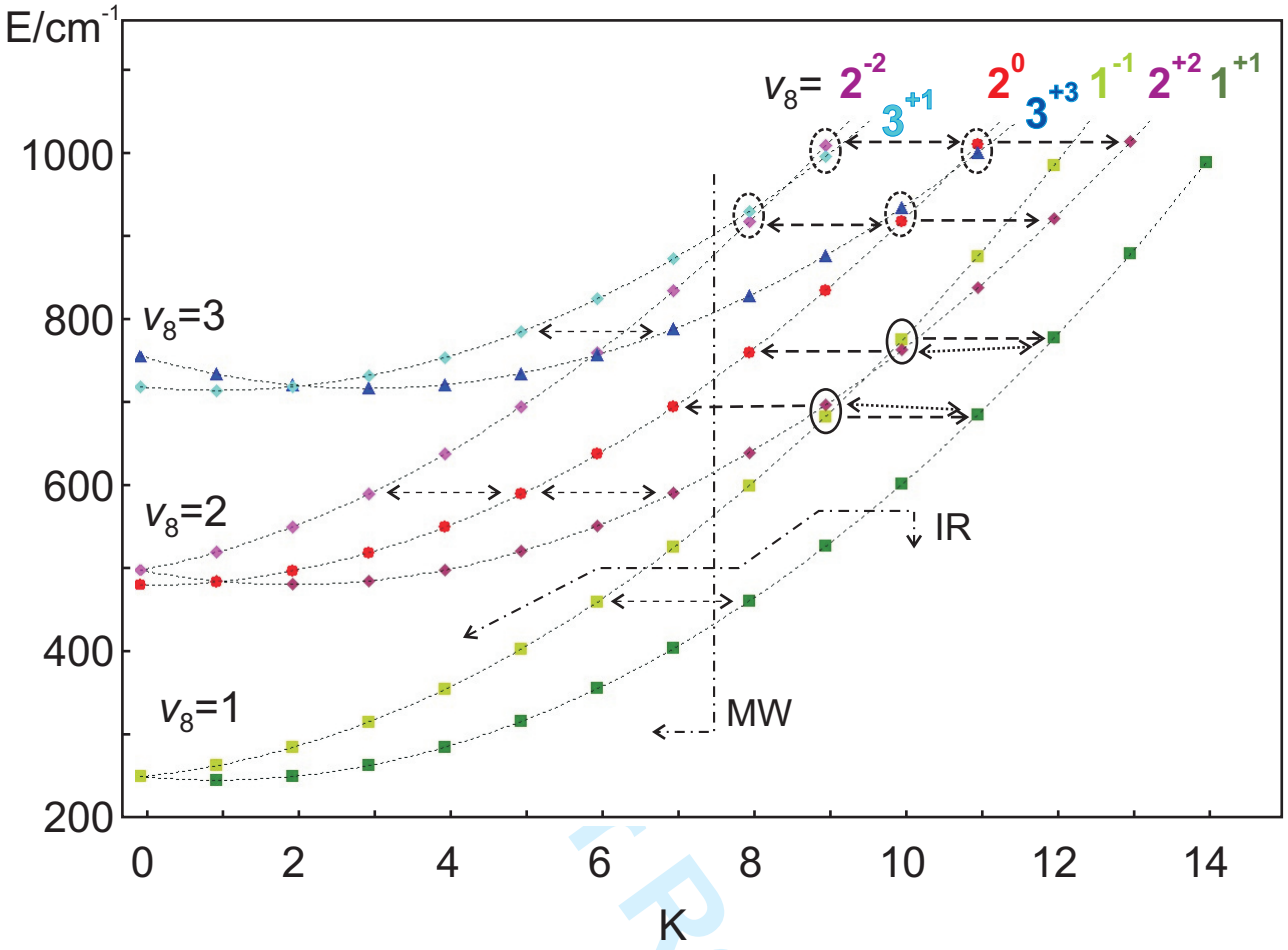

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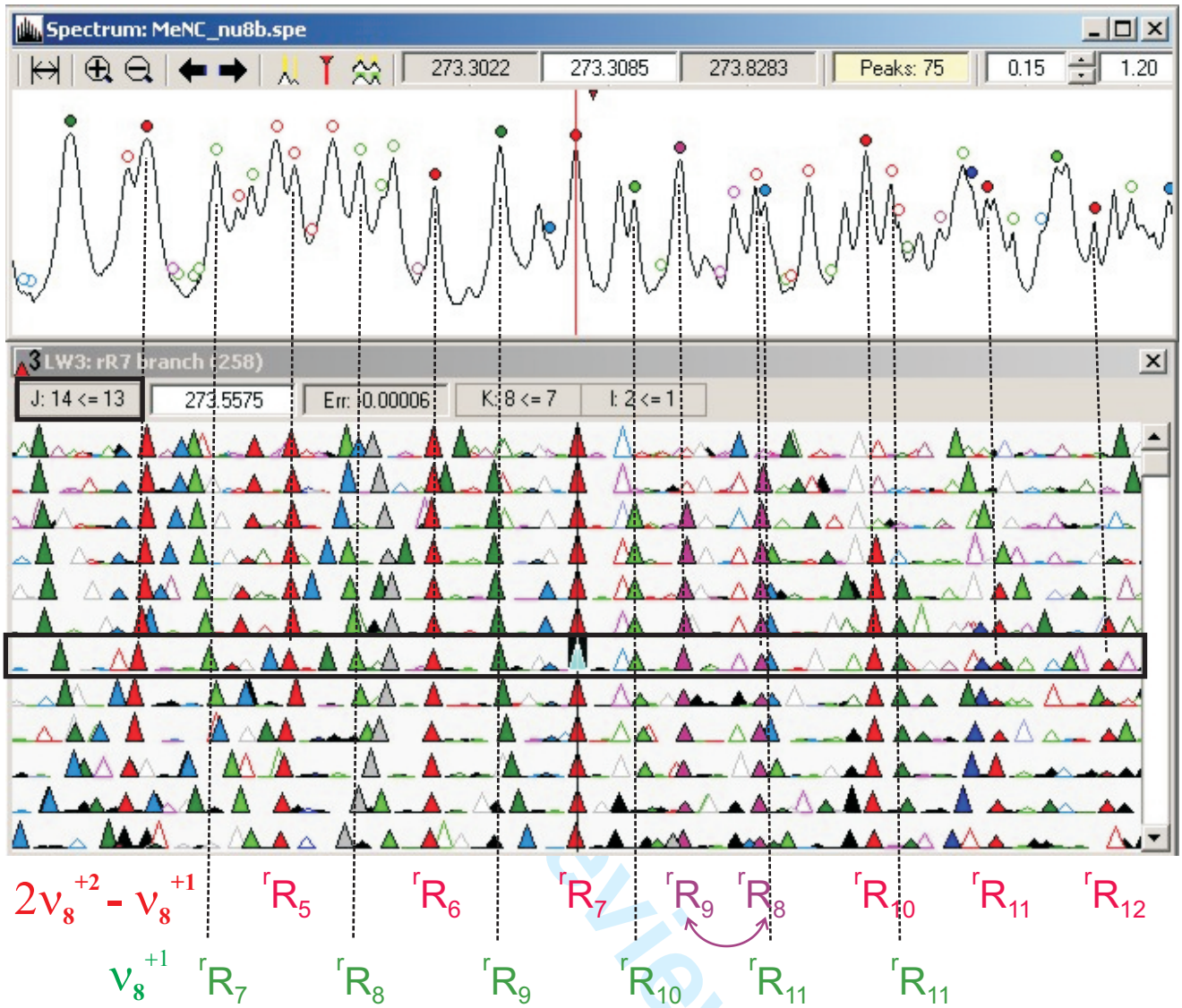
Spectrum: MeNC_nu8b.spe
273.3022
273.3085
273.8283
Peaks: 75
0.15
1.20
LW3: rR7 branch (258)
J: 14 <= 13
273.5575
Err: 0.00006
K: 8 <= 7
l: 2 <= 1
2ν8+2 - ν8+1
rR5
rR6
rR7
rR9
rR8
rR10
rR11
rR12
ν8+1
rR7
rR8
rR9
rR10
rR11
rR11

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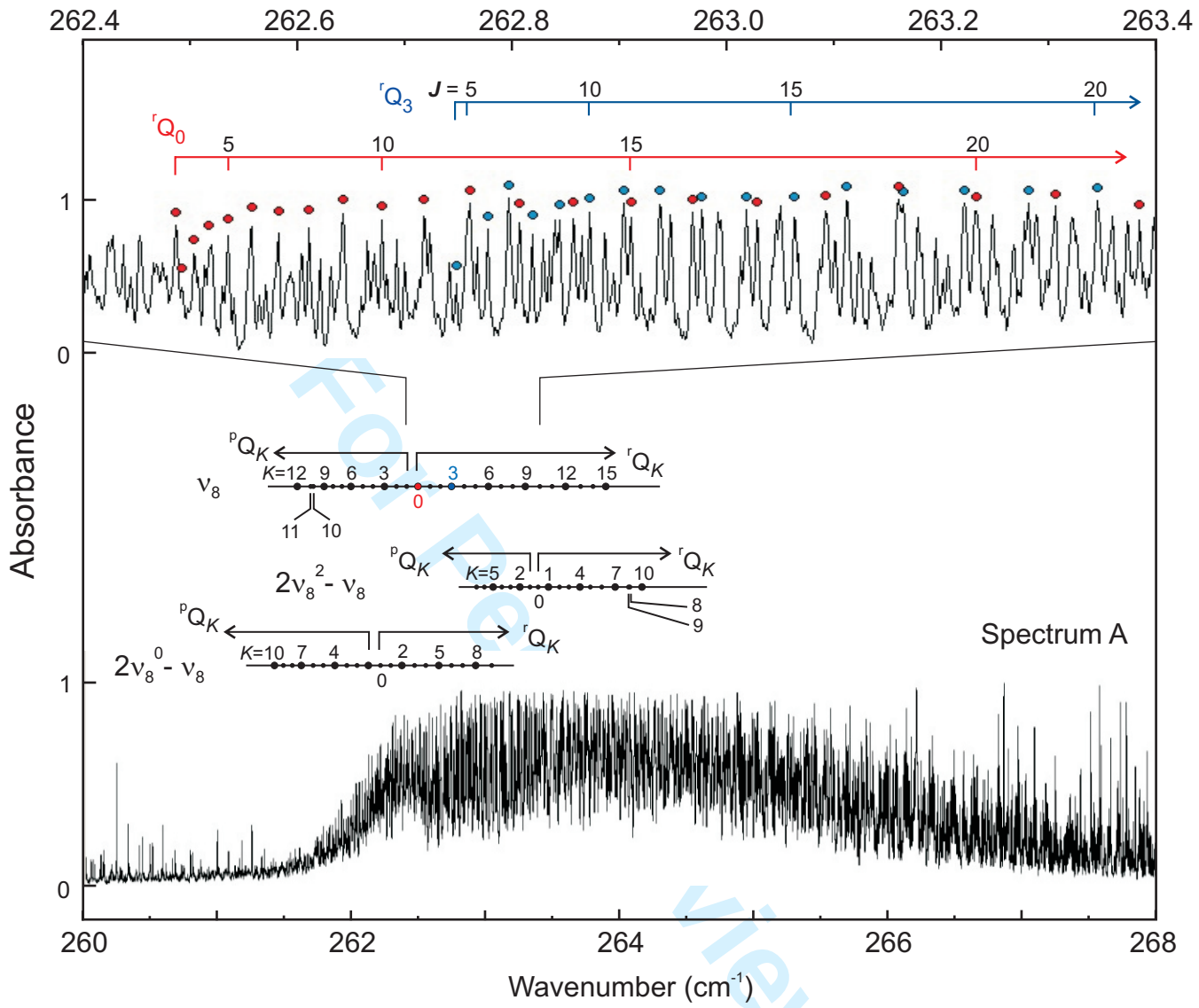

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Supplementary material to the paper

Rotational and Rovibrational Spectroscopy of the v8=1 and 2
Vibrational States of CH3NC

by

Petr Pracna, Jiøí Urban, Ondøej Votava,Zuzana Meltzerová, Štìpán Urban,
and Veli-Matti Horneman

File # 1 - rovibrational transition wavenumbers of the nu4 band
spectrum A data # 1-1769
spectrum B 1770-2705
File # 2 - rovibrational transition wavenumbers of the overtone band v8=2(0)
File # 3 - rovibrational transition wavenumbers of the hot band v8=2(0)<- 1(±1)
File # 4 - rovibrational transition wavenumbers of the hot band v8=2(±2)< 1(±1)
File # 5 - rotational transitions in the vibrational state v8=1
File # 6 - rotational transitions in the vibrational state v8=2(+2)
File # 7 - rotational transitions in the vibrational state v8=2(-2)
File # 8 - rotational transitions in the vibrational state v8=2(0)
File # 9 - rotational transitions in the vibrational state v8=1 (Ref. [16])
File #10 - rotational transitions in the vibrational state v8=2 (Ref. [16])

Format of the data output

Columns 1-3 : the spectroscopic label of a transition, i.e.
Column 1 : branch : o/p/q/r/s/t corresponding to delta_K = -2/-1/0/+1/+2/+3
P,Q,R corresponding to delta_J=-1/0/+1
Column 2-3 : Quantum numbers J,K of the lower state
Column 4 : experimental frequency (in cm-1/MHz units)
Column 5 : difference observed - calculated (in cm-1/MHz units)
Column 6 : experimental uncertainty (in cm-1/MHz units)

Semigraphical representaion of residuals (obs-calc) in units indicated in the header line for each data file. When the limit value is set e.g.to 0.2 MHz like for the file GS_fin.fre) the marker of the residual is positioned on the left edge of the semigraphical strip when obs-calc <= - 0.2 MHz
and
on the right edge of the semigraphical strip when obs-calc >= + 0.2 MHz.

The position of the marker between the center and the edge of the semigraphical strip is proportional otherwise. The marker is placed, for example, on the center line when |obs-calc| < 0.1 / 10 (which is 0.020 MHz in the current example).
The character of the marker depends on the ratio residual/uncertainty
v : residual =< uncertainty
x : residual =< uncertainty * 2
* : residual > uncertainty * 2
- : experimental value removed from the fit (given zero weight), mostly for overlapped lines

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Final reproduction of data

```
 No. Branch    l       Obs.        Obs-calc       Unc
--------------------------------------------------------------------------------

 File # 1  nu8.wn       No. data : 2705    .00200 cm-1 -> |----+----0----+----|
   1 pP  1  1  0    261.734913       .000228    .000500 |    .    .v   .    |
   2 pP  2  1  0    261.066408      -.000262    .000200 |    .   x.    .    |
   3 pP  3  1  0    260.401141      -.000111    .000200 |    .   v.    .    |
   4 pP  4  1  0    259.738269      -.000104    .000200 |    .   v.    .    |
   5 pP  5  1  0    259.077845      -.000096    .000200 |    .    v    .    |
   6 pP  6  1  0    258.419938       .000099    .000200 |    .    v    .    |
   7 pP  7  1  0    257.763854      -.000069    .000200 |    .    v    .    |
   8 pP  8  1  0    257.109975      -.000061    .000200 |    .    v    .    |
   9 pP  9  1  0    256.457895      -.000118    .000200 |    .   v.    .    |
  10 pP 10  1  0    255.807615      -.000085    .000200 |    .    v    .    |
  11 pP 11  1  0    255.158915      -.000048    .000200 |    .    v    .    |
  12 pP 12  1  0    254.511594      -.000105    .000200 |    .   v.    .    |
  13 pP 13  1  0    253.865947       .000105    .000200 |    .    .v   .    |
  14 pP 14  1  0    253.221327      -.000033    .000200 |    .    v    .    |
  15 pP 15  1  0    252.578137      -.000110    .000200 |    .   v.    .    |
  16 pP 16  1  0    251.936295      -.000224    .000200 |    .   x.    .    |
  17 pP 17  1  0    251.296168      -.000036    .000200 |    .    v    .    |
  18 pP 18  1  0    250.657260      -.000076    .000200 |    .    v    .    |
  19 pP 19  1  0    250.019685      -.000266    .000300 |    .   v.    .    |
  20 pP 20  1  0    249.384103       .000017    .000200 |    .    v    .    |
  21 pP 21  1  0    248.749722      -.000051    .000200 |    .    v    .    |
  22 pP 22  1  0    248.116932      -.000109    .000200 |    .   v.    .    |
  23 pP 23  1  0    247.485878      -.000039    .000200 |    .    v    .    |
  24 pP 24  1  0    246.856402      -.000022    .000200 |    .    v    .    |
  25 pP 25  1  0    246.228762       .000180    .000200 |    .    .v   .    |
  26 pP 26  1  0    245.602401      -.000007    .000200 |    .    v    .    |
  27 pP 27  1  0    244.977715      -.000203    .000200 |    .   x.    .    |
  28 pP 28  1  0    244.355241       .000118    .000200 |    .    .v   .    |
  29 pP 29  1  0    243.734030      -.000006    .000200 |    .    v    .    |
  30 pP 30  1  0    243.114621      -.000044    .000200 |    .    v    .    |
  31 pP 31  1  0    242.496975      -.000046    .000200 |    .    v    .    |
  32 pP 32  1  0    241.881092      -.000016    .000200 |    .    v    .    |
  33 pP 33  1  0    241.266919      -.000016    .000200 |    .    v    .    |
  34 pP 34  1  0    240.654485      -.000022    .000200 |    .    v    .    |
  35 pP 35  1  0    240.043819      -.000009    .000200 |    .    v    .    |
  36 pP 36  1  0    239.434881      -.000022    .000200 |    .    v    .    |
  37 pP 37  1  0    238.827715      -.000021    .000200 |    .    v    .    |
  38 pP 38  1  0    238.222327      -.000003    .000200 |    .    v    .    |
  39 pP 39  1  0    237.618689       .000002    .000200 |    .    v    .    |
  40 pP 40  1  0    237.016845       .000034    .000200 |    .    v    .    |
  41 pP 41  1  0    236.416694      -.000009    .000200 |    .    v    .    |
  42 pP 42  1  0    235.818366       .000001    .000200 |    .    v    .    |
  43 pP 43  1  0    235.221769      -.000030    .000200 |    .    v    .    |
  44 pP 44  1  0    234.626958      -.000049    .000200 |    .    v    .    |
  45 pP 45  1  0    234.033969      -.000020    .000200 |    .    v    .    |
  46 pP 46  1  0    233.442678      -.000068    .000200 |    .    v    .    |
  47 pP 47  1  0    232.853262      -.000018    .000200 |    .    v    .    |
  48 pP 48  1  0    232.265522      -.000068    .000200 |    .    v    .    |
  49 pP 49  1  0    231.679631      -.000046    .000200 |    .    v    .    |
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 51 pP 51  1  0   230.513151   -.000034   .000200 |   .   v   .   |
 52 pP 52  1  0   229.932549   -.000056   .000200 |   .   v   .   |
 53 pP 53  1  0   229.353721   -.000081   .000200 |   .   v   .   |
 54 pP 54  1  0   228.776708   -.000069   .000200 |   .   v   .   |
 55 pP 55  1  0   228.201451   -.000077   .000200 |   .   v   .   |
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 59 pP 59  1  0   225.918227   -.000061   .000200 |   .   v   .   |
 60 pP 60  1  0   225.351895   -.000018   .000200 |   .   v   .   |
 61 pP 61  1  0   224.787325    .000015   .000200 |   .   v   .   |
 62 pP 62  1  0   224.224355   -.000123   .000200 |   .  v.   .   |
 63 pP 63  1  0   223.663432    .000017   .000200 |   .   v   .   |
 64 pP 64  1  0   223.103923   -.000198   .000200 |   .  v.   .   |
 65 pP 65  1  0   222.546390   -.000204   .000200 |   .  x.   .   |
 66 pP 66  1  0   221.990724   -.000108   .000200 |   .  v.   .   |
 67 pP 67  1  0   221.436937    .000102   .000200 |   .   .v  .   |
 68 pP 68  1  0   220.884451   -.000148   .000200 |   .  v.   .   |
 69 pP 69  1  0   220.334281    .000157   .000200 |   .   .v  .   |
 70 pP 70  1  0   219.785213   -.000194   .000200 |   .  v.   .   |
 71 pR  1  1  0   263.755013    .000577   .001000 |   .   . v .   |
 72 pR  2  1  0   264.433728    .000924   .001000 |   .   .   v   |
 73 pR  3  1  0   265.113846    .000253   .000500 |   .   .v  .   |
 74 pR  4  1  0   265.797181    .000503   .001000 |   .   . v .   |
 75 pR  5  1  0   266.482307    .000398   .000500 |   .   . v .   |
 76 pR  6  1  0   267.169134    .000015   .000200 |   .   v   .   |
 77 pR  7  1  0   267.858051   -.000086   .000200 |   .   v   .   |
 78 pR  8  1  0   268.549147    .000347   .000500 |   .   . v .   |
 79 pR  9  1  0   269.240962   -.000007   .000200 |   .   v   .   |
 80 pR 10  1  0   269.934328   -.000204   .000200 |   .  x.   .   |
 81 pR 11  1  0   270.629423    .000008   .000200 |   .   v   .   |
 82 pR 12  1  0   271.325536   -.000043   .000200 |   .   v   .   |
 83 pR 13  1  0   272.023007   -.000005   .000200 |   .   v   .   |
 84 pR 14  1  0   272.721333   -.000387   .000500 |   . v .   .   |
 85 pR 15  1  0   273.421578   -.000146   .000200 |   .  v.   .   |
 86 pR 16  1  0   274.123142    .000089   .000200 |   .   v   .   |
 87 pR 17  1  0   274.825942    .000209   .000300 |   .   .v  .   |
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 90 pR 20  1  0   276.942141   -.000011   .000200 |   .   v   .   |
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 93 pR 23  1  0   279.071479   -.000091   .000200 |   .   v   .   |
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 98 pR 28  1  0   282.650248   -.000084   .000200 |   .   v   .   |
 99 pR 29  1  0   283.370503   -.000085   .000200 |   .   v   .   |
100 pR 30  1  0   284.092247   -.000100   .000200 |   .  v.   .   |
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105 pR 35  1  0   287.723536   -.000097   .000200 |   .   v   .   |
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106 pR 36  1  0   288.454354   -.000011   .000200 |  .   v   .  |
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117 pR 47  1  0   296.588885   -.000097   .000200 |  .   v   .  |
118 pR 48  1  0   297.337018   -.000089   .000200 |  .   v   .  |
119 pR 49  1  0   298.086529   -.000108   .000200 |  .  v.   .  |
120 pR 50  1  0   298.837448   -.000117   .000200 |  .  v.   .  |
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122 pR 52  1  0   300.343502   -.000082   .000200 |  .   v   .  |
123 pR 53  1  0   301.098564   -.000096   .000200 |  .   v   .  |
124 pR 54  1  0   301.855167    .000066   .000200 |  .   v   .  |
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127 pR 57  1  0   304.132525   -.000018   .000200 |  .   v   .  |
128 pR 58  1  0   304.894276   -.000093   .000200 |  .   v   .  |
129 pR 59  1  0   305.657373   -.000146   .000200 |  .  v.   .  |
130 pR 60  1  0   306.421848   -.000137   .000200 |  .  v.   .  |
131 pR 61  1  0   307.187768    .000010   .000200 |  .   v   .  |
132 pR 62  1  0   307.954699   -.000131   .000200 |  .  v.   .  |
133 pR 63  1  0   308.722931   -.000261   .000300 |  .  v.   .  |
134 pR 64  1  0   309.492785   -.000049   .000200 |  .   v   .  |
135 pR 65  1  0   310.263364   -.000384   .000500 |  .v .   .  |
136 pR 66  1  0   311.035907   -.000018   .000200 |  .   v   .  |
137 pR 67  1  0   311.808938   -.000416   .000500 |  .v .   .  |
138 pR 68  1  0   312.583935   -.000093   .000200 |  .   v   .  |
139 pR 69  1  0   313.360167    .000231   .000300 |  .  .v   .  |
140 pP  2  2  0   260.982653   -.000108   .000200 |  .  v.   .  |
141 pP  3  2  0   260.317348   -.000055   .000200 |  .   v   .  |
142 pP  4  2  0   259.654604   -.000025   .000200 |  .   v   .  |
143 pP  5  2  0   258.994330   -.000065   .000200 |  .   v   .  |
144 pP  6  2  0   258.336586   -.000056   .000200 |  .   v   .  |
145 pP  7  2  0   257.681223   -.000074   .000200 |  .   v   .  |
146 pP  8  2  0   257.028237   -.000033   .000200 |  .   v   .  |
147 pP  9  2  0   256.377407   -.000057   .000200 |  .   v   .  |
148 pP 10  2  0   255.728676   -.000094   .000200 |  .   v   .  |
149 pP 11  2  0   255.082004   -.000069   .000200 |  .   v   .  |
150 pP 12  2  0   254.437248   -.000011   .000200 |  .   v   .  |
151 pP 13  2  0   253.794445    .000228   .000300 |  .  .v   .  |
152 pP 14  2  0   253.152811   -.000034   .000200 |  .   v   .  |
153 pP 15  2  0   252.512985   -.000068   .000200 |  .   v   .  |
154 pP 16  2  0   251.874715   -.000053   .000200 |  .   v   .  |
155 pP 17  2  0   251.237925   -.000008   .000200 |  .   v   .  |
156 pP 18  2  0   250.602424   -.000087   .000200 |  .   v   .  |
157 pP 19  2  0   249.968407   -.000072   .000200 |  .   v   .  |
158 pP 20  2  0   249.335702   -.000129   .000200 |  .  v.   .  |
159 pP 21  2  0   248.704539   -.000031   .000200 |  .   v   .  |
160 pP 22  2  0   248.074649   -.000061   .000200 |  .   v   .  |
161 pP 23  2  0   247.446236   -.000033   .000200 |  .   v   .  |
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162	pP 24	2	0	246.819523	.000253	.000300	|	.	.v	.	|
163	pP 25	2	0	246.194010	.000271	.000300	|	.	.v	.	|
164	pP 26	2	0	245.569695	-.000006	.000200	|	.	v	.	|
165	pP 27	2	0	244.947169	-.000011	.000200	|	.	v	.	|
166	pP 28	2	0	244.326161	-.000041	.000200	|	.	v	.	|
167	pP 29	2	0	243.706764	-.000025	.000200	|	.	v	.	|
168	pP 30	2	0	243.088984	.000022	.000200	|	.	v	.	|
169	pP 31	2	0	242.472732	-.000009	.000200	|	.	v	.	|
170	pP 32	2	0	241.858134	-.000009	.000200	|	.	v	.	|
171	pP 33	2	0	241.245170	-.000014	.000200	|	.	v	.	|
172	pP 34	2	0	240.633855	-.000025	.000200	|	.	v	.	|
173	pP 35	2	0	240.024210	-.000032	.000200	|	.	v	.	|
174	pP 36	2	0	239.416255	-.000028	.000200	|	.	v	.	|
175	pP 37	2	0	238.810010	-.000002	.000200	|	.	v	.	|
176	pP 38	2	0	238.205389	-.000051	.000200	|	.	v	.	|
177	pP 39	2	0	237.602549	-.000026	.000200	|	.	v	.	|
178	pP 40	2	0	237.001403	-.000021	.000200	|	.	v	.	|
179	pP 41	2	0	236.401993	-.000001	.000200	|	.	v	.	|
180	pP 42	2	0	235.804272	-.000019	.000200	|	.	v	.	|
181	pP 43	2	0	235.208296	-.000023	.000200	|	.	v	.	|
182	pP 44	2	0	234.614074	-.000010	.000200	|	.	v	.	|
183	pP 45	2	0	234.021564	-.000026	.000200	|	.	v	.	|
184	pP 46	2	0	233.430806	-.000035	.000200	|	.	v	.	|
185	pP 47	2	0	232.841815	-.000024	.000200	|	.	v	.	|
186	pP 48	2	0	232.254536	-.000052	.000200	|	.	v	.	|
187	pP 49	2	0	231.669036	-.000053	.000200	|	.	v	.	|
188	pP 50	2	0	231.085320	-.000025	.000200	|	.	v	.	|
189	pP 51	2	0	230.503323	-.000035	.000200	|	.	v	.	|
190	pP 52	2	0	229.923055	-.000074	.000200	|	.	v	.	|
191	pP 53	2	0	229.344602	-.000058	.000200	|	.	v	.	|
192	pP 54	2	0	228.767943	-.000008	.000200	|	.	v	.	|
193	pP 55	2	0	228.192964	-.000039	.000200	|	.	v	.	|
194	pP 56	2	0	227.619907	.000091	.000200	|	.	v	.	|
195	pP 57	2	0	227.048410	.000018	.000200	|	.	v	.	|
196	pP 58	2	0	226.478612	-.000118	.000200	|	.	v.	.	|
197	pP 59	2	0	225.910824	-.000006	.000200	|	.	v	.	|
198	pP 60	2	0	225.344596	-.000096	.000200	|	.	v	.	|
199	pP 61	2	0	224.780295	-.000021	.000200	|	.	v	.	|
200	pP 62	2	0	224.217732	.000032	.000200	|	.	v	.	|
201	pP 63	2	0	223.656468	-.000377	.000500	|	.	v .	.	|
202	pP 64	2	0	223.097738	-.000012	.000200	|	.	v	.	|
203	pP 65	2	0	222.540499	.000085	.000200	|	.	v	.	|
204	pP 66	2	0	221.985047	.000212	.000200	|	.	.x	.	|
205	pP 67	2	0	221.431143	.000130	.000200	|	.	.v	.	|
206	pP 68	2	0	220.879152	.000206	.000200	|	.	.x	.	|
207	pP 69	2	0	220.330842	.002209	.003000	|	.	.	.	v
208	pR 2	2	0	264.350673	.001932	.002000	|	.	.	.	v
209	pR 3	2	0	265.028406	-.001232	.002000	|	v.	.	.	|
210	pR 4	2	0	265.712646	-.000335	.000300	|	.	x .	.	|
211	pR 5	2	0	266.399611	.000920	.001000	|	.	.	v	|
212	pR 6	2	0	267.085837	-.000834	.001000	|	.v	.	.	|
213	pR 7	2	0	267.776816	.000001	.000200	|	.	v	.	|
214	pR 8	2	0	268.468989	-.000017	.000200	|	.	v	.	|
215	pR 9	2	0	269.163051	-.000074	.000200	|	.	v	.	|
216	pR 10	2	0	269.859002	-.000045	.000200	|	.	v	.	|
217	pR 11	2	0	270.556623	-.000033	.000200	|	.	v	.	|

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218 pR 12  2  0   271.255803   -.000037   .000200 |   .   v   .   |
219 pR 13  2  0   271.956494   -.000009   .000200 |   .   v   .   |
220 pR 14  2  0   272.658390   -.000175   .000200 |   .  v.   .   |
221 pR 15  2  0   273.363657    .001697   .002000 |   .   .   . v |
222 pR 16  2  0   274.066593   -.000051   .000200 |   .   v   .   |
223 pR 17  2  0   274.772438   -.000150   .000200 |   .  v.   .   |
224 pR 18  2  0   275.479809    .000033   .000200 |   .   v   .   |
225 pR 19  2  0   276.188145   -.000061   .000200 |   .   v   .   |
226 pR 20  2  0   276.897823   -.000059   .000200 |   .   v   .   |
227 pR 21  2  0   277.608444   -.000372   .000500 |   . v .   .   |
228 pR 22  2  0   278.320880   -.000144   .000200 |   .  v.   .   |
229 pR 23  2  0   279.034633    .000110   .000200 |   .   .v  .   |
230 pR 24  2  0   279.749236   -.000095   .000200 |   .   v   .   |
231 pR 25  2  0   280.465345   -.000121   .000200 |   .  v.   .   |
232 pR 26  2  0   281.182866   -.000078   .000200 |   .   v   .   |
233 pR 27  2  0   281.901837    .000056   .000200 |   .   v   .   |
234 pR 28  2  0   282.621925   -.000066   .000200 |   .   v   .   |
235 pR 29  2  0   283.343528   -.000056   .000200 |   .   v   .   |
236 pR 30  2  0   284.066490   -.000083   .000200 |   .   v   .   |
237 pR 31  2  0   284.790860   -.000104   .000200 |   .  v.   .   |
238 pR 32  2  0   285.516734   -.000031   .000200 |   .   v   .   |
239 pR 33  2  0   286.243904   -.000077   .000200 |   .   v   .   |
240 pR 34  2  0   286.972518   -.000100   .000200 |   .   v   .   |
241 pR 35  2  0   287.702613   -.000063   .000200 |   .   v   .   |
242 pR 36  2  0   288.434090   -.000070   .000200 |   .   v   .   |
243 pR 37  2  0   289.166940   -.000128   .000200 |   .  v.   .   |
244 pR 38  2  0   289.901300   -.000102   .000200 |   .  v.   .   |
245 pR 39  2  0   290.637106   -.000054   .000200 |   .   v   .   |
246 pR 40  2  0   291.374302   -.000039   .000200 |   .   v   .   |
247 pR 41  2  0   292.112841   -.000101   .000200 |   .  v.   .   |
248 pR 42  2  0   292.852855   -.000107   .000200 |   .  v.   .   |
249 pR 43  2  0   293.594296   -.000099   .000200 |   .   v   .   |
250 pR 44  2  0   294.337122   -.000116   .000200 |   .  v.   .   |
251 pR 45  2  0   295.081394   -.000094   .000200 |   .   v   .   |
252 pR 46  2  0   295.827050   -.000089   .000200 |   .   v   .   |
253 pR 47  2  0   296.574099   -.000087   .000200 |   .   v   .   |
254 pR 48  2  0   297.322541   -.000083   .000200 |   .   v   .   |
255 pR 49  2  0   298.072370   -.000077   .000200 |   .   v   .   |
256 pR 50  2  0   298.823476   -.000173   .000200 |   .  v.   .   |
257 pR 51  2  0   299.576150   -.000074   .000200 |   .   v   .   |
258 pR 52  2  0   300.330087   -.000078   .000200 |   .   v   .   |
259 pR 53  2  0   301.085364   -.000101   .000200 |   .  v.   .   |
260 pR 54  2  0   301.842039   -.000079   .000200 |   .   v   .   |
261 pR 55  2  0   302.600047   -.000069   .000200 |   .   v   .   |
262 pR 56  2  0   303.359396   -.000056   .000200 |   .   v   .   |
263 pR 57  2  0   304.119967   -.000151   .000200 |   .  v.   .   |
264 pR 58  2  0   304.880109   -.001998   .002000 v   .   .   .   |
265 pR 59  2  0   305.645281   -.000130   .000200 |   .  v.   .   |
266 pR 60  2  0   306.409949   -.000073   .000200 |   .   v   .   |
267 pR 61  2  0   307.175819   -.000112   .000200 |   .  v.   .   |
268 pR 62  2  0   307.943070   -.000061   .000200 |   .   v   .   |
269 pR 63  2  0   308.711473   -.000140   .000200 |   .  v.   .   |
270 pR 64  2  0   309.481087   -.000282   .000200 |   .  x.   .   |
271 pR 65  2  0   310.252314   -.000075   .000200 |   .   v   .   |
272 pR 66  2  0   311.024754    .000088   .000300 |   .   v   .   |
273 pR 67  2  0   311.798179   -.000010   .000200 |   .   v   .   |
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274	pR	68	2	0	312.572887	-.000064	.000200	|	.	v	. |
275	pP	3	3	0	260.231953	-.000078	.000200	|	.	v	. |
276	pP	4	3	0	259.569283	-.000063	.000200	|	.	v	. |
277	pP	5	3	0	258.909158	-.000071	.000200	|	.	v	. |
278	pP	6	3	0	258.251584	-.000059	.000200	|	.	v	. |
279	pP	7	3	0	257.596504	-.000034	.000200	|	.	v	. |
280	pP	8	3	0	256.943783	-.000073	.000200	|	.	v	. |
281	pP	9	3	0	256.293487	-.000041	.000200	|	.	v	. |
282	pP	10	3	0	255.645334	-.000144	.000200	|	.	v.	. |
283	pP	11	3	0	254.999650	.000027	.000200	|	.	v	. |
284	pP	12	3	0	254.355783	-.000090	.000200	|	.	v	. |
285	pP	13	3	0	253.714159	.000023	.000200	|	.	v	. |
286	pP	14	3	0	253.074283	-.000037	.000200	|	.	v	. |
287	pP	15	3	0	252.436285	-.000047	.000200	|	.	v	. |
288	pP	16	3	0	251.800031	-.000054	.000200	|	.	v	. |
289	pP	17	3	0	251.165529	.000030	.000200	|	.	v	. |
290	pP	18	3	0	250.532435	-.000067	.000200	|	.	v	. |
291	pP	19	3	0	249.903002	.001968	.003000	|	.	.	. v
292	pP	20	3	0	249.270962	-.000082	.000200	|	.	v	. |
293	pP	21	3	0	248.642486	-.000010	.000200	|	.	v	. |
294	pP	22	3	0	248.015269	-.000094	.000200	|	.	v	. |
295	pP	23	3	0	247.389633	.000003	.000200	|	.	v	. |
296	pP	24	3	0	246.765276	-.000014	.000200	|	.	v	. |
297	pP	25	3	0	246.142328	-.000018	.000200	|	.	v	. |
298	pP	26	3	0	245.520776	-.000029	.000200	|	.	v	. |
299	pP	27	3	0	244.900667	-.000013	.000200	|	.	v	. |
300	pP	28	3	0	244.281993	.000005	.000200	|	.	v	. |
301	pP	29	3	0	243.664742	-.000005	.000200	|	.	v	. |
302	pP	30	3	0	243.048955	-.000021	.000200	|	.	v	. |
303	pP	31	3	0	242.434671	-.000026	.000200	|	.	v	. |
304	pP	32	3	0	241.821935	.000005	.000200	|	.	v	. |
305	pP	33	3	0	241.210692	-.000003	.000200	|	.	v	. |
306	pP	34	3	0	240.600983	-.000027	.000200	|	.	v	. |
307	pP	35	3	0	239.992893	-.000002	.000200	|	.	v	. |
308	pP	36	3	0	239.386356	-.000011	.000200	|	.	v	. |
309	pP	37	3	0	238.781416	-.000025	.000200	|	.	v	. |
310	pP	38	3	0	238.178112	-.000020	.000200	|	.	v	. |
311	pP	39	3	0	237.576425	-.000029	.000200	|	.	v	. |
312	pP	40	3	0	236.976409	-.000010	.000200	|	.	v	. |
313	pP	41	3	0	236.378023	-.000016	.000200	|	.	v	. |
314	pP	42	3	0	235.781321	-.000004	.000200	|	.	v	. |
315	pP	43	3	0	235.186294	.000008	.000200	|	.	v	. |
316	pP	44	3	0	234.592913	-.000018	.000200	|	.	v	. |
317	pP	45	3	0	234.001254	-.000013	.000200	|	.	v	. |
318	pP	46	3	0	233.411294	-.000008	.000200	|	.	v	. |
319	pP	47	3	0	232.823026	-.000015	.000200	|	.	v	. |
320	pP	48	3	0	232.236458	-.000033	.000200	|	.	v	. |
321	pP	49	3	0	231.651627	-.000031	.000200	|	.	v	. |
322	pP	50	3	0	231.068518	-.000026	.000200	|	.	v	. |
323	pP	51	3	0	230.487139	-.000016	.000200	|	.	v	. |
324	pP	52	3	0	229.907472	-.000023	.000200	|	.	v	. |
325	pP	53	3	0	229.329547	-.000019	.000200	|	.	v	. |
326	pP	54	3	0	228.753342	-.000029	.000200	|	.	v	. |
327	pP	55	3	0	228.178794	-.000119	.000200	|	.	v.	. |
328	pP	56	3	0	227.606182	-.000011	.000200	|	.	v	. |
329	pP	57	3	0	227.035167	-.000047	.000200	|	.	v	. |

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330	pP 58	3	0	226.465840	-.000137	.000200	|	.	v.	.	|
331	pP 59	3	0	225.898465	-.000018	.000200	|	.	v	.	|
332	pP 60	3	0	225.332739	.000005	.000200	|	.	v	.	|
333	pP 61	3	0	224.768578	-.000151	.000200	|	.	v.	.	|
334	pP 62	3	0	224.206329	-.000141	.000200	|	.	v.	.	|
335	pP 63	3	0	223.645930	-.000026	.000200	|	.	v	.	|
336	pP 64	3	0	223.087153	-.000035	.000200	|	.	v	.	|
337	pP 65	3	0	222.530107	-.000058	.000200	|	.	v	.	|
338	pP 66	3	0	221.975441	.000553	.001000	|	.	.	v .	|
339	pP 67	3	0	221.421078	-.000278	.000300	|	.	v.	.	|
340	pP 68	3	0	220.870905	.001338	.002000	|	.	.	. v	|
341	pP 69	3	0	220.319563	.000041	.000200	|	.	v	.	|
342	pP 70	3	0	219.771720	.000501	.000500	|	.	.	x .	|
343	pP 71	3	0	219.224939	.000281	.000300	|	.	.v	.	|
344	pP 72	3	0	218.680497	.000660	.001000	|	.	.	v .	|
345	pP 73	3	0	218.136489	-.000265	.000500	|	.	v.	.	|
346	pP 74	3	0	217.595626	.000218	.000200	|	.	.x	.	|
347	pP 75	3	0	217.056859	.001061	.001000	|	.	.	x	|
348	pP 76	3	0	216.517951	.000029	.000300	|	.	v	.	|
349	pP 77	3	0	215.981036	-.000741	.002000	|	.v	.	.	|
350	pP 78	3	0	215.448046	.000683	.001000	|	.	.	v .	|
351	pR 3	3	0	264.944545	.000756	.001000	|	.	.	v.	|
352	pR 4	3	0	265.627217	.000069	.000200	|	.	v	.	|
353	pR 5	3	0	266.313800	.000853	.001000	|	.	.	v.	|
354	pR 6	3	0	267.001098	-.000022	.000200	|	.	v	.	|
355	pR 7	3	0	267.691744	.000153	.000200	|	.	.v	.	|
356	pR 8	3	0	268.384118	-.000158	.000200	|	.	v.	.	|
357	pR 9	3	0	269.079223	.000138	.000200	|	.	.v	.	|
358	pR 10	3	0	269.775996	.000075	.000200	|	.	v	.	|
359	pR 11	3	0	270.474781	.000097	.000200	|	.	v	.	|
360	pR 12	3	0	271.175263	-.000011	.000200	|	.	v	.	|
361	pR 13	3	0	271.877482	-.000110	.000200	|	.	v.	.	|
362	pR 14	3	0	272.581588	.000046	.000200	|	.	v	.	|
363	pR 15	3	0	273.287100	.000063	.000200	|	.	v	.	|
364	pR 16	3	0	273.993996	-.000001	.000200	|	.	v	.	|
365	pR 17	3	0	274.702316	-.000039	.000200	|	.	v	.	|
366	pR 18	3	0	275.412060	.000006	.000200	|	.	v	.	|
367	pR 19	3	0	276.123026	-.000022	.000200	|	.	v	.	|
368	pR 20	3	0	276.835275	-.000029	.000200	|	.	v	.	|
369	pR 21	3	0	277.548595	-.000204	.000200	|	.	x.	.	|
370	pR 23	3	0	278.979351	-.000108	.000200	|	.	v.	.	|
371	pR 24	3	0	279.696534	-.000085	.000200	|	.	v	.	|
372	pR 25	3	0	280.414911	-.000093	.000200	|	.	v	.	|
373	pR 26	3	0	281.134544	-.000079	.000200	|	.	v	.	|
374	pR 27	3	0	281.855458	-.000030	.000200	|	.	v	.	|
375	pR 28	3	0	282.577505	-.000105	.000200	|	.	v.	.	|
376	pR 29	3	0	283.300943	-.000059	.000200	|	.	v	.	|
377	pR 30	3	0	284.025587	-.000091	.000200	|	.	v	.	|
378	pR 31	3	0	284.751559	-.000091	.000200	|	.	v	.	|
379	pR 32	3	0	285.478856	-.000074	.000200	|	.	v	.	|
380	pR 33	3	0	286.207448	-.000080	.000200	|	.	v	.	|
381	pR 34	3	0	286.937369	-.000086	.000200	|	.	v	.	|
382	pR 35	3	0	287.668630	-.000088	.000200	|	.	v	.	|
383	pR 36	3	0	288.401294	-.000031	.000200	|	.	v	.	|
384	pR 37	3	0	289.135212	-.000070	.000200	|	.	v	.	|
385	pR 38	3	0	289.870417	-.000178	.000200	|	.	v.	.	|

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386	pR 39	3	0	290.607184	-.000082	.000200	|	.	v	.	|
387	pR 40	3	0	291.345217	-.000083	.000200	|	.	v	.	|
388	pR 41	3	0	292.084613	-.000085	.000200	|	.	v	.	|
389	pR 42	3	0	292.825397	-.000064	.000200	|	.	v	.	|
390	pR 43	3	0	293.567499	-.000091	.000200	|	.	v	.	|
391	pR 44	3	0	294.311003	-.000081	.000200	|	.	v	.	|
392	pR 45	3	0	295.055856	-.000087	.000200	|	.	v	.	|
393	pR 46	3	0	295.802086	-.000078	.000200	|	.	v	.	|
394	pR 47	3	0	296.549647	-.000097	.000200	|	.	v	.	|
395	pR 48	3	0	297.298614	-.000068	.000200	|	.	v	.	|
396	pR 49	3	0	298.048919	-.000055	.000200	|	.	v	.	|
397	pR 50	3	0	298.800577	-.000038	.000200	|	.	v	.	|
398	pR 51	3	0	299.553499	-.000103	.000200	|	.	v.	.	|
399	pR 52	3	0	300.307854	-.000076	.000200	|	.	v	.	|
400	pR 53	3	0	301.063531	-.000063	.000200	|	.	v	.	|
401	pR 54	3	0	301.820563	-.000025	.000200	|	.	v	.	|
402	pR 55	3	0	302.578848	-.000059	.000200	|	.	v	.	|
403	pR 56	3	0	303.338433	-.000111	.000200	|	.	v.	.	|
404	pR 57	3	0	304.099382	-.000112	.000200	|	.	v.	.	|
405	pR 58	3	0	304.861645	-.000104	.000200	|	.	v.	.	|
406	pR 59	3	0	305.625230	-.000074	.000200	|	.	v	.	|
407	pR 60	3	0	306.390111	-.000040	.000200	|	.	v	.	|
408	pR 61	3	0	307.156255	-.000027	.000200	|	.	v	.	|
409	pR 62	3	0	307.923598	-.000093	.000200	|	.	v	.	|
410	pR 63	3	0	308.692295	-.000074	.000200	|	.	v	.	|
411	pR 64	3	0	309.462222	-.000088	.000200	|	.	v	.	|
412	pR 65	3	0	310.233423	-.000081	.000200	|	.	v	.	|
413	pR 66	3	0	311.005876	-.000068	.000200	|	.	v	.	|
414	pR 67	3	0	311.779595	-.000027	.000200	|	.	v	.	|
415	pR 68	3	0	312.554558	.000029	.000200	|	.	v	.	|
416	pR 69	3	0	313.330692	.000035	.000200	|	.	v	.	|
417	pR 70	3	0	314.108115	.000118	.000200	|	.	.v	.	|
418	pP 4	4	0	259.482483	-.000078	.000200	|	.	v	.	|
419	pP 5	4	0	258.822505	-.000059	.000200	|	.	v	.	|
420	pP 6	4	0	258.165042	-.000079	.000200	|	.	v	.	|
421	pP 7	4	0	257.510133	-.000061	.000200	|	.	v	.	|
422	pP 8	4	0	256.857920	.000179	.000300	|	.	.v	.	|
423	pP 9	4	0	256.207655	-.000055	.000200	|	.	v	.	|
424	pP 10	4	0	255.560213	.000171	.000300	|	.	.v	.	|
425	pP 11	4	0	254.914583	-.000091	.000200	|	.	v	.	|
426	pP 12	4	0	254.271383	-.000153	.000200	|	.	v.	.	|
427	pP 13	4	0	253.630426	-.000126	.000200	|	.	v.	.	|
428	pP 14	4	0	252.991556	-.000089	.000200	|	.	v	.	|
429	pP 15	4	0	252.354702	-.000034	.000200	|	.	v	.	|
430	pP 16	4	0	251.719247	-.000496	.000500	|	.	v .	.	|
431	pP 17	4	0	251.086534	-.000054	.000200	|	.	v	.	|
432	pP 18	4	0	250.455169	-.000027	.000200	|	.	v	.	|
433	pP 19	4	0	249.825454	-.000041	.000200	|	.	v	.	|
434	pP 20	4	0	249.197336	-.000085	.000200	|	.	v	.	|
435	pP 21	4	0	248.570912	-.000004	.000200	|	.	v	.	|
436	pP 22	4	0	247.945591	-.000341	.000300	|	.	x .	.	|
437	pP 23	4	0	247.322369	-.000060	.000200	|	.	v	.	|
438	pP 24	4	0	246.700286	-.000087	.000200	|	.	v	.	|
439	pP 25	4	0	246.079772	.000028	.000200	|	.	v	.	|
440	pP 26	4	0	245.460496	-.000029	.000200	|	.	v	.	|
441	pP 27	4	0	244.842724	.000016	.000200	|	.	v	.	|

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442	pP 28	4	0	244.226270	-.000023	.000200	|	.	v	.	|
443	pP 29	4	0	243.611312	.000030	.000200	|	.	v	.	|
444	pP 30	4	0	242.997648	-.000036	.000200	|	.	v	.	|
445	pP 31	4	0	242.385485	-.000025	.000200	|	.	v	.	|
446	pP 32	4	0	241.774767	-.000006	.000200	|	.	v	.	|
447	pP 33	4	0	241.165490	.000000	.000200	|	.	v	.	|
448	pP 34	4	0	240.557698	.000021	.000200	|	.	v	.	|
449	pP 35	4	0	239.951340	-.000011	.000200	|	.	v	.	|
450	pP 36	4	0	239.346541	.000011	.000200	|	.	v	.	|
451	pP 37	4	0	238.743234	.000004	.000200	|	.	v	.	|
452	pP 38	4	0	238.141446	-.000023	.000200	|	.	v	.	|
453	pP 39	4	0	237.541279	.000016	.000200	|	.	v	.	|
454	pP 40	4	0	236.942621	-.000006	.000200	|	.	v	.	|
455	pP 41	4	0	236.345593	.000017	.000200	|	.	v	.	|
456	pP 42	4	0	235.750160	.000037	.000200	|	.	v	.	|
457	pP 43	4	0	235.156265	-.000017	.000200	|	.	v	.	|
458	pP 44	4	0	234.564058	-.000006	.000200	|	.	v	.	|
459	pP 45	4	0	233.973477	-.000003	.000200	|	.	v	.	|
460	pP 46	4	0	233.384573	.000031	.000200	|	.	v	.	|
461	pP 47	4	0	232.797233	-.000024	.000200	|	.	v	.	|
462	pP 48	4	0	232.211572	-.000063	.000200	|	.	v	.	|
463	pP 49	4	0	231.627663	-.000021	.000200	|	.	v	.	|
464	pP 50	4	0	231.045353	-.000057	.000200	|	.	v	.	|
465	pP 51	4	0	230.464785	-.000037	.000200	|	.	v	.	|
466	pP 52	4	0	229.885912	-.000012	.000200	|	.	v	.	|
467	pP 53	4	0	229.308842	.000120	.000200	|	.	.v	.	|
468	pP 54	4	0	228.733219	-.000001	.000200	|	.	v	.	|
469	pP 55	4	0	228.159428	.000004	.000200	|	.	v	.	|
470	pP 56	4	0	227.587364	.000026	.000200	|	.	v	.	|
471	pP 57	4	0	227.016982	.000019	.000200	|	.	v	.	|
472	pP 58	4	0	226.448309	.000004	.000200	|	.	v	.	|
473	pP 59	4	0	225.881276	-.000089	.000200	|	.	v	.	|
474	pP 60	4	0	225.316101	-.000045	.000200	|	.	v	.	|
475	pP 61	4	0	224.752655	.000005	.000200	|	.	v	.	|
476	pP 62	4	0	224.190746	-.000132	.000200	|	.	v.	.	|
477	pP 63	4	0	223.630605	-.000227	.000200	|	.	x.	.	|
478	pP 64	4	0	223.073723	.001210	.002000	|	.	.	.v	|
479	pP 65	4	0	222.516069	.000147	.000300	|	.	.v	.	|
480	pP 66	4	0	221.961694	.000634	.001000	|	.	.	v .	|
481	pP 67	4	0	221.409531	.001605	.002000	|	.	.	. v	|
482	pP 68	4	0	220.856372	-.000150	.000200	|	.	v.	.	|
483	pP 69	4	0	220.306124	-.000722	.001000	|	.v	.	.	|
484	pP 70	4	0	219.758673	-.000227	.000200	|	.	x.	.	|
485	pR 4	4	0	265.539823	.000364	.000500	|	.	. v	.	|
486	pR 5	4	0	266.225365	.000141	.000200	|	.	.v	.	|
487	pR 6	4	0	266.912942	-.000472	.000500	|	.	v .	.	|
488	pR 7	4	0	267.605233	.001263	.002000	|	.	.	.v	|
489	pR 8	4	0	268.296825	-.000002	.000200	|	.	v	.	|
490	pR 9	4	0	268.991849	-.000063	.000200	|	.	v	.	|
491	pR 10	4	0	269.688865	-.000284	.000300	|	.	v.	.	|
492	pR 11	4	0	270.388690	.000235	.000300	|	.	.v	.	|
493	pR 12	4	0	271.089681	-.000063	.000200	|	.	v	.	|
494	pR 13	4	0	271.792838	-.000092	.000200	|	.	v	.	|
495	pR 14	4	0	272.498010	.000085	.000200	|	.	v	.	|
496	pR 15	4	0	273.204580	-.000062	.000200	|	.	v	.	|
497	pR 16	4	0	273.912848	-.000150	.000200	|	.	v.	.	|

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498 pR 17  4  0    274.622821    -.000095   .000200 |   .   v   .   |
499 pR 18  4  0    275.334229    -.000094   .000200 |   .   v   .   |
500 pR 19  4  0    276.046981    -.000173   .000200 |   .  v.   .   |
501 pR 20  4  0    276.761256    -.000096   .000200 |   .   v   .   |
502 pR 21  4  0    277.476808    -.000063   .000200 |   .   v   .   |
503 pR 22  4  0    278.193747     .000077   .000200 |   .   v   .   |
504 pR 23  4  0    278.911694    -.000025   .000200 |   .   v   .   |
505 pR 24  4  0    279.630803    -.000194   .000200 |   .  v.   .   |
506 pR 25  4  0    280.351831     .000344   .000500 |   .   . v .   |
507 pR 26  4  0    281.073101    -.000079   .000200 |   .   v   .   |
508 pR 27  4  0    281.795991    -.000082   .000200 |   .   v   .   |
509 pR 28  4  0    282.519964    -.000201   .000200 |   .  x.   .   |
510 pR 29  4  0    283.245415    -.000047   .000200 |   .   v   .   |
511 pR 30  4  0    283.971890    -.000079   .000200 |   .   v   .   |
512 pR 31  4  0    284.699684    -.000011   .000200 |   .   v   .   |
513 pR 32  4  0    285.428588    -.000059   .000200 |   .   v   .   |
514 pR 33  4  0    286.158776    -.000062   .000200 |   .   v   .   |
515 pR 34  4  0    286.890222    -.000053   .000200 |   .   v   .   |
516 pR 35  4  0    287.622879    -.000090   .000200 |   .   v   .   |
517 pR 36  4  0    288.356863    -.000066   .000200 |   .   v   .   |
518 pR 37  4  0    289.092133    -.000031   .000200 |   .   v   .   |
519 pR 38  4  0    289.828597    -.000085   .000200 |   .   v   .   |
520 pR 39  4  0    290.566454    -.000036   .000200 |   .   v   .   |
521 pR 40  4  0    291.305459    -.000136   .000200 |   .  v.   .   |
522 pR 41  4  0    292.045926    -.000074   .000200 |   .   v   .   |
523 pR 42  4  0    292.787680    -.000032   .000200 |   .   v   .   |
524 pR 43  4  0    293.530654    -.000080   .000200 |   .   v   .   |
525 pR 44  4  0    294.274999    -.000068   .000200 |   .   v   .   |
526 pR 45  4  0    295.020668    -.000048   .000200 |   .   v   .   |
527 pR 46  4  0    295.767615    -.000064   .000200 |   .   v   .   |
528 pR 47  4  0    296.515902    -.000057   .000200 |   .   v   .   |
529 pR 48  4  0    297.265492    -.000062   .000200 |   .   v   .   |
530 pR 49  4  0    298.016444    -.000021   .000200 |   .   v   .   |
531 pR 50  4  0    298.768633    -.000055   .000200 |   .   v   .   |
532 pR 51  4  0    299.522188    -.000035   .000200 |   .   v   .   |
533 pR 52  4  0    300.277028    -.000039   .000200 |   .   v   .   |
534 pR 53  4  0    301.033186    -.000030   .000200 |   .   v   .   |
535 pR 54  4  0    301.790610    -.000058   .000200 |   .   v   .   |
536 pR 55  4  0    302.549372    -.000045   .000200 |   .   v   .   |
537 pR 56  4  0    303.309285    -.000175   .000200 |   .  v.   .   |
538 pR 57  4  0    304.070699    -.000092   .000200 |   .   v   .   |
539 pR 58  4  0    304.833275    -.000132   .000200 |   .  v.   .   |
540 pR 59  4  0    305.597275    -.000025   .000200 |   .   v   .   |
541 pR 60  4  0    306.362340    -.000126   .000200 |   .  v.   .   |
542 pR 61  4  0    307.128826    -.000073   .000200 |   .   v   .   |
543 pR 62  4  0    307.896320    -.000271   .000200 |   .  x.   .   |
544 pR 63  4  0    308.665463    -.000074   .000200 |   .   v   .   |
545 pR 64  4  0    309.435574    -.000155   .000200 |   .  v.   .   |
546 pR 65  4  0    310.207110    -.000051   .000200 |   .   v   .   |
547 pR 66  4  0    310.979608    -.000216   .000200 |   .  x.   .   |
548 pR 67  4  0    311.753871     .000158   .000300 |   .  .v   .   |
549 pR 68  4  0    312.528655    -.000163   .000200 |   .  v.   .   |
550 pR 69  4  0    313.305474     .000342   .000500 |   .  . v  .   |
551 pR 70  4  0    314.082695     .000047   .000300 |   .   v   .   |
552 pP  5  5  0    258.734309    -.000085   .000200 |   .   v   .   |
553 pP  6  5  0    258.077019    -.000083   .000200 |   .   v   .   |
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554 pP  7  5  0   257.422320    -.000027   .000200 |  .   v   .  |
555 pP  8  5  0   256.770016    -.000078   .000200 |  .   v   .  |
556 pP  9  5  0   256.120220    -.000082   .000200 |  .   v   .  |
557 pP 10  5  0   255.472871    -.000055   .000200 |  .   v   .  |
558 pP 11  5  0   254.827808    -.000105   .000200 |  .  v.   .  |
559 pP 12  5  0   254.184943    -.000263   .000200 |  .  x.   .  |
560 pP 13  5  0   253.544625    -.000118   .000200 |  .  v.   .  |
561 pP 14  5  0   252.906368    -.000091   .000200 |  .   v   .  |
562 pP 15  5  0   252.270342     .000057   .000200 |  .   v   .  |
563 pP 16  5  0   251.636082    -.000070   .000200 |  .   v   .  |
564 pP 17  5  0   251.004041     .000055   .000200 |  .   v   .  |
565 pP 18  5  0   250.373763     .000044   .000200 |  .   v   .  |
566 pP 19  5  0   249.745192    -.000087   .000200 |  .   v   .  |
567 pP 20  5  0   249.118589    -.000012   .000200 |  .   v   .  |
568 pP 21  5  0   248.493590    -.000031   .000200 |  .   v   .  |
569 pP 22  5  0   247.870428     .000147   .000300 |  .  .v   .  |
570 pP 23  5  0   247.248525    -.000005   .000200 |  .   v   .  |
571 pP 24  5  0   246.628265    -.000055   .000200 |  .   v   .  |
572 pP 25  5  0   246.009590    -.000024   .000200 |  .   v   .  |
573 pP 26  5  0   245.392322    -.000056   .000200 |  .   v   .  |
574 pP 27  5  0   244.776582    -.000007   .000200 |  .   v   .  |
575 pP 28  5  0   244.162235     .000008   .000200 |  .   v   .  |
576 pP 29  5  0   243.549304     .000024   .000200 |  .   v   .  |
577 pP 30  5  0   242.937692    -.000050   .000200 |  .   v   .  |
578 pP 31  5  0   242.327609    -.000001   .000200 |  .   v   .  |
579 pP 32  5  0   241.718908     .000021   .000200 |  .   v   .  |
580 pP 33  5  0   241.111627     .000048   .000200 |  .   v   .  |
581 pP 34  5  0   240.505676    -.000019   .000200 |  .   v   .  |
582 pP 35  5  0   239.901226    -.000020   .000200 |  .   v   .  |
583 pP 36  5  0   239.298245     .000000   .000200 |  .   v   .  |
584 pP 37  5  0   238.696693    -.000013   .000200 |  .   v   .  |
585 pP 38  5  0   238.096637    -.000006   .000200 |  .   v   .  |
586 pP 39  5  0   237.498112     .000041   .000200 |  .   v   .  |
587 pP 40  5  0   236.900956    -.000050   .000200 |  .   v   .  |
588 pP 41  5  0   236.305467     .000004   .000200 |  .   v   .  |
589 pP 42  5  0   235.711445    -.000011   .000200 |  .   v   .  |
590 pP 43  5  0   235.119015     .000016   .000200 |  .   v   .  |
591 pP 44  5  0   234.528108     .000001   .000200 |  .   v   .  |
592 pP 45  5  0   233.938815     .000023   .000200 |  .   v   .  |
593 pP 46  5  0   233.351076     .000010   .000200 |  .   v   .  |
594 pP 47  5  0   232.764943     .000001   .000200 |  .   v   .  |
595 pP 48  5  0   232.180426    -.000003   .000200 |  .   v   .  |
596 pP 49  5  0   231.597538    -.000001   .000200 |  .   v   .  |
597 pP 50  5  0   231.016300     .000020   .000200 |  .   v   .  |
598 pP 51  5  0   230.436704     .000042   .000200 |  .   v   .  |
599 pP 52  5  0   229.858822     .000129   .000200 |  .  .v   .  |
600 pP 53  5  0   229.282312    -.000067   .000200 |  .   v   .  |
601 pP 54  5  0   228.707676    -.000053   .000200 |  .   v   .  |
602 pP 55  5  0   228.134661    -.000086   .000200 |  .   v   .  |
603 pP 56  5  0   227.563400    -.000041   .000200 |  .   v   .  |
604 pP 57  5  0   226.993666    -.000149   .000200 |  .  v.   .  |
605 pP 58  5  0   226.425791    -.000083   .000200 |  .   v   .  |
606 pP 59  5  0   225.859525    -.000098   .000200 |  .   v   .  |
607 pP 60  5  0   225.295164     .000100   .000200 |  .   v   .  |
608 pP 61  5  0   224.732969     .000767   .001000 |  .   .  v.  |
609 pP 62  5  0   224.171149     .000109   .000200 |  .  .v   .  |
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610 pP 63  5  0   223.611817    .000237   .000300 |   .   .v   .   |
611 pR  5  5  0   266.134588   -.001016   .001000 |   x   .   .   |
612 pR  6  5  0   266.826880    .003158   .003000 |   .   .   .   x
613 pR  7  5  0   267.514885    .000638   .001000 |   .   . v .   |
614 pR  8  5  0   268.207104   -.000019   .000200 |   .   v   .   |
615 pR  9  5  0   268.902343    .000051   .000200 |   .   v   .   |
616 pR 10  5  0   269.599752    .000063   .000200 |   .   v   .   |
617 pR 11  5  0   270.297215   -.002030   .002000 x   .   .   .   |
618 pR 12  5  0   271.000638   -.000250   .000200 |   .  x.   .   |
619 pR 13  5  0   271.705565    .001025   .002000 |   .   .   v   |
620 pR 14  5  0   272.409561   -.000564   .000500 |   . x .   .   |
621 pR 15  5  0   273.117821    .000258   .000500 |   .   .v   .   |
622 pR 16  5  0   273.826410   -.000366   .000300 |   . x .   .   |
623 pR 17  5  0   274.537507   -.000181   .000200 |   .  v.   .   |
624 pR 18  5  0   275.250568    .000344   .000500 |   .   . v .   |
625 pR 19  5  0   275.964176   -.000137   .000200 |   .  v.   .   |
626 pR 20  5  0   276.679934    .000044   .000200 |   .   v   .   |
627 pR 21  5  0   277.396617   -.000279   .000200 |   .  x.   .   |
628 pR 22  5  0   278.115602    .000325   .000500 |   .   . v .   |
629 pR 23  5  0   278.834912   -.000075   .000200 |   .   v   .   |
630 pR 24  5  0   279.555940   -.000046   .000200 |   .   v   .   |
631 pR 25  5  0   280.278072   -.000169   .000200 |   .  v.   .   |
632 pR 26  5  0   281.001780    .000053   .000200 |   .   v   .   |
633 pR 27  5  0   281.726321   -.000103   .000200 |   .  v.   .   |
634 pR 28  5  0   282.452060   -.000258   .000200 |   .  x.   .   |
635 pR 29  5  0   283.179453    .000054   .000200 |   .   v   .   |
636 pR 30  5  0   283.908033    .000370   .001000 |   .   . v .   |
637 pR 31  5  0   284.637028   -.000079   .000200 |   .   v   .   |
638 pR 32  5  0   285.367670   -.000065   .000200 |   .   v   .   |
639 pR 33  5  0   286.099203   -.000345   .000200 |   . x .   .   |
640 pR 34  5  0   286.832427   -.000126   .000200 |   . v.   .   |
641 pR 35  5  0   287.566685   -.000071   .000200 |   .   v   .   |
642 pR 36  5  0   288.302018   -.000145   .000200 |   . v.   .   |
643 pR 37  5  0   289.038719   -.000065   .000200 |   .   v   .   |
644 pR 38  5  0   289.776564   -.000061   .000200 |   .   v   .   |
645 pR 39  5  0   290.515635   -.000060   .000200 |   .   v   .   |
646 pR 40  5  0   291.255962   -.000037   .000200 |   .   v   .   |
647 pR 41  5  0   291.997493   -.000052   .000200 |   .   v   .   |
648 pR 42  5  0   292.740286   -.000054   .000200 |   .   v   .   |
649 pR 43  5  0   293.484324   -.000064   .000200 |   .   v   .   |
650 pR 44  5  0   294.229645   -.000050   .000200 |   .   v   .   |
651 pR 45  5  0   294.976222   -.000043   .000200 |   .   v   .   |
652 pR 46  5  0   295.724048   -.000053   .000200 |   .   v   .   |
653 pR 47  5  0   296.473136   -.000069   .000200 |   .   v   .   |
654 pR 48  5  0   297.223518   -.000063   .000200 |   .   v   .   |
655 pR 49  5  0   297.974866   -.000363   .000500 |   . v .   .   |
656 pR 50  5  0   298.728123   -.000026   .000200 |   .   v   .   |
657 pR 51  5  0   299.482273   -.000070   .000200 |   .   v   .   |
658 pR 52  5  0   300.237766   -.000042   .000200 |   .   v   .   |
659 pR 53  5  0   300.994581    .000036   .000200 |   .   v   .   |
660 pR 54  5  0   301.752472   -.000080   .000200 |   .   v   .   |
661 pR 55  5  0   302.511815   -.000010   .000200 |   .   v   .   |
662 pR 56  5  0   303.272244   -.000119   .000200 |   .  v.   .   |
663 pR 57  5  0   304.034114   -.000048   .000200 |   .   v   .   |
664 pR 58  5  0   304.797088   -.000131   .000200 |   .  v.   .   |
665 pR 59  5  0   305.561676    .000147   .000300 |   .   .v   .   |
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666	pR	60	5	0	306.326994	-.000094	.000200	|	.	v	. |
667	pR	61	5	0	307.093686	-.000206	.000200	|	.	x.	. |
668	pR	62	5	0	307.861898	-.000037	.000300	|	.	v	. |
669	pR	63	5	0	308.630900	-.000311	.000300	|	.	x .	. |
670	pR	64	5	0	309.401750	.000035	.000200	|	.	v	. |
671	pR	65	5	0	310.173439	-.000002	.000200	|	.	v	. |
672	pR	66	5	0	310.946718	.000335	.000500	|	.	. v	. |
673	pR	67	5	0	311.721051	.000518	.001000	|	.	. v	. |
674	pR	68	5	0	312.495784	-.000101	.000200	|	.	v.	. |
675	pR	69	5	0	313.272252	-.000180	.000200	|	.	v.	. |
676	pP	6	6	0	257.987447	-.000080	.000200	|	.	v	. |
677	pP	7	6	0	257.332884	-.000070	.000200	|	.	v	. |
678	pP	8	6	0	256.680828	-.000074	.000200	|	.	v	. |
679	pP	9	6	0	256.031262	-.000076	.000200	|	.	v	. |
680	pP	10	6	0	255.384150	-.000072	.000200	|	.	v	. |
681	pP	11	6	0	254.739439	-.000071	.000200	|	.	v	. |
682	pP	12	6	0	254.096883	-.000273	.000200	|	.	x.	. |
683	pP	13	6	0	253.457006	-.000100	.000200	|	.	v.	. |
684	pP	14	6	0	252.819311	.000006	.000200	|	.	v	. |
685	pP	15	6	0	252.183683	-.000011	.000200	|	.	v	. |
686	pP	16	6	0	251.550093	-.000118	.000200	|	.	v.	. |
687	pP	17	6	0	250.918767	-.000025	.000200	|	.	v	. |
688	pP	18	6	0	250.289299	-.000074	.000200	|	.	v	. |
689	pP	19	6	0	249.661952	.000063	.000200	|	.	v	. |
690	pP	20	6	0	249.036270	-.000007	.000200	|	.	v	. |
691	pP	21	6	0	248.412423	-.000050	.000200	|	.	v	. |
692	pP	22	6	0	247.790403	-.000014	.000200	|	.	v	. |
693	pP	23	6	0	247.169991	-.000064	.000200	|	.	v	. |
694	pP	24	6	0	246.551273	-.000060	.000200	|	.	v	. |
695	pP	25	6	0	245.934172	-.000032	.000200	|	.	v	. |
696	pP	26	6	0	245.318693	.000067	.000200	|	.	v	. |
697	pP	27	6	0	244.704549	-.000014	.000200	|	.	v	. |
698	pP	28	6	0	244.092043	.000059	.000200	|	.	v	. |
699	pP	29	6	0	243.480858	-.000006	.000200	|	.	v	. |
700	pP	30	6	0	242.871176	-.000008	.000200	|	.	v	. |
701	pP	31	6	0	242.262934	.000004	.000200	|	.	v	. |
702	pP	32	6	0	241.656051	-.000041	.000200	|	.	v	. |
703	pP	33	6	0	241.050670	.000005	.000200	|	.	v	. |
704	pP	34	6	0	240.446657	.000007	.000200	|	.	v	. |
705	pP	35	6	0	239.844053	.000005	.000200	|	.	v	. |
706	pP	36	6	0	239.242900	.000035	.000200	|	.	v	. |
707	pP	37	6	0	238.643109	.000000	.000200	|	.	v	. |
708	pP	38	6	0	238.044830	.000041	.000200	|	.	v	. |
709	pP	39	6	0	237.447930	.000013	.000200	|	.	v	. |
710	pP	40	6	0	236.852561	.000058	.000200	|	.	v	. |
711	pP	41	6	0	236.258603	.000041	.000200	|	.	v	. |
712	pP	42	6	0	235.666136	.000029	.000200	|	.	v	. |
713	pP	43	6	0	235.075167	.000016	.000200	|	.	v	. |
714	pP	44	6	0	234.485725	.000019	.000200	|	.	v	. |
715	pP	45	6	0	233.897805	.000017	.000200	|	.	v	. |
716	pP	46	6	0	233.311530	.000122	.000200	|	.	.v	. |
717	pP	47	6	0	232.726613	.000034	.000200	|	.	v	. |
718	pP	48	6	0	232.143337	.000024	.000200	|	.	v	. |
719	pP	49	6	0	231.561685	.000064	.000200	|	.	v	. |
720	pP	50	6	0	230.981548	.000033	.000200	|	.	v	. |
721	pP	51	6	0	230.402973	-.000032	.000200	|	.	v	. |

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722	pP 52	6	0	229.826094	-.000006	.000200		.	v	.	
723	pP 53	6	0	229.250833	.000023	.000200		.	v	.	
724	pP 54	6	0	228.677123	-.000020	.000200		.	v	.	
725	pP 55	6	0	228.105085	-.000022	.000200		.	v	.	
726	pP 56	6	0	227.534691	-.000018	.000200		.	v	.	
727	pP 57	6	0	226.966047	.000090	.000200		.	v	.	
728	pP 58	6	0	226.398824	-.000032	.000200		.	v	.	
729	pP 59	6	0	225.833465	.000053	.000200		.	v	.	
730	pP 60	6	0	225.269578	-.000053	.000200		.	v	.	
731	pP 61	6	0	224.707603	.000086	.000200		.	v	.	
732	pP 62	6	0	224.147098	.000023	.000200		.	v	.	
733	pR 15	6	0	273.026871	-.000029	.000200		.	v	.	
734	pR 16	6	0	273.736567	-.000067	.000200		.	v	.	
735	pR 17	6	0	274.448140	-.000035	.000200		.	v	.	
736	pR 18	6	0	275.160026	-.001424	.002000		v	.	.	
737	pR 19	6	0	275.876701	.000311	.000500		.	.	v	.
738	pR 20	6	0	276.592579	-.000349	.000500		.	v	.	
739	pR 21	6	0	277.310957	-.000043	.000200		.	v	.	
740	pR 22	6	0	278.030525	-.000021	.000200		.	v	.	
741	pR 23	6	0	278.751161	-.000351	.000300		.	x	.	
742	pR 24	6	0	279.473773	-.000075	.000200		.	v	.	
743	pR 25	6	0	280.197135	-.000375	.000300		.	x	.	
744	pR 26	6	0	280.922249	-.000212	.000200		.	x.	.	
745	pR 27	6	0	281.648625	-.000042	.000200		.	v	.	
746	pR 28	6	0	282.375666	-.000437	.000500		.	v	.	
747	pR 29	6	0	283.104848	.000101	.000200		.	.v	.	
748	pR 30	6	0	283.834569	-.000013	.000200		.	v	.	
749	pR 31	6	0	284.565587	-.000009	.000200		.	v	.	
750	pR 32	6	0	285.297729	-.000051	.000200		.	v	.	
751	pR 33	6	0	286.031175	.000044	.000200		.	v	.	
752	pR 34	6	0	286.765585	-.000061	.000200		.	v	.	
753	pR 35	6	0	287.501263	-.000061	.000200		.	v	.	
754	pR 36	6	0	288.238099	-.000071	.000200		.	v	.	
755	pR 37	6	0	288.976144	-.000041	.000200		.	v	.	
756	pR 38	6	0	289.715325	-.000050	.000200		.	v	.	
757	pR 39	6	0	290.455723	-.000022	.000200		.	v	.	
758	pR 40	6	0	291.197259	-.000042	.000200		.	v	.	
759	pR 41	6	0	291.940000	-.000050	.000200		.	v	.	
760	pR 42	6	0	292.683931	-.000065	.000200		.	v	.	
761	pR 43	6	0	293.429104	-.000042	.000200		.	v	.	
762	pR 44	6	0	294.175482	-.000023	.000200		.	v	.	
763	pR 45	6	0	294.923022	-.000056	.000200		.	v	.	
764	pR 46	6	0	295.671832	-.000038	.000200		.	v	.	
765	pR 47	6	0	296.421851	-.000035	.000200		.	v	.	
766	pR 48	6	0	297.173064	-.000063	.000200		.	v	.	
767	pR 49	6	0	297.925557	-.000041	.000200		.	v	.	
768	pR 50	6	0	298.679209	-.000092	.000200		.	v	.	
769	pR 51	6	0	299.434172	-.000064	.000200		.	v	.	
770	pR 52	6	0	300.190364	-.000042	.000200		.	v	.	
771	pR 53	6	0	300.947769	-.000042	.000200		.	v	.	
772	pR 54	6	0	301.706420	-.000030	.000200		.	v	.	
773	pR 55	6	0	302.466257	-.000066	.000200		.	v	.	
774	pR 56	6	0	303.227339	-.000090	.000200		.	v	.	
775	pR 57	6	0	303.989640	-.000127	.000200		.	v.	.	
776	pR 58	6	0	304.753357	.000024	.000200		.	v	.	
777	pR 59	6	0	305.518076	-.000049	.000200		.	v	.	

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778 pR 60  6  0    306.284049    -.000092   .000200 |   .   v   .   |
779 pR 61  6  0    307.051271    -.000105   .000200 |   .  v.   .   |
780 pP  7  7  0    257.241750    -.000087   .000200 |   .   v   .   |
781 pP  8  7  0    256.589891    -.000109   .000200 |   .  v.   .   |
782 pP  9  7  0    255.940610    -.000057   .000200 |   .   v   .   |
783 pP 10  7  0    255.293640    -.000166   .000200 |   .  v.   .   |
784 pP 11  7  0    254.649531     .000152   .000200 |   .   .v  .   |
785 pP 12  7  0    254.007031    -.000313   .000200 |   . x .   .   |
786 pP 13  7  0    253.367653    -.000005   .000200 |   .   v   .   |
787 pP 14  7  0    252.730134    -.000137   .000200 |   .  v.   .   |
788 pP 15  7  0    252.095257     .000126   .000200 |   .   .v  .   |
789 pP 16  7  0    251.462168    -.000016   .000200 |   .   v   .   |
790 pP 17  7  0    250.831381     .000007   .000200 |   .   v   .   |
791 pP 18  7  0    250.202433    -.000209   .000200 |   . x.    .   |
792 pP 19  7  0    249.575914    -.000014   .000200 |   .   v   .   |
793 pP 20  7  0    248.951156    -.000017   .000200 |   .   v   .   |
794 pP 21  7  0    248.328576     .000259   .000200 |   .   .x  .   |
795 pP 22  7  0    247.707382     .000079   .000200 |   .   v   .   |
796 pP 23  7  0    247.088085     .000011   .000200 |   .   v   .   |
797 pP 24  7  0    246.470688     .000112   .000200 |   .   .v  .   |
798 pP 25  7  0    245.854814     .000056   .000200 |   .   v   .   |
799 pP 26  7  0    245.240325    -.000248   .000200 |   . x.    .   |
800 pP 27  7  0    244.627928    -.000051   .000200 |   .   v   .   |
801 pP 28  7  0    244.016821    -.000115   .000200 |   .  v.   .   |
802 pP 29  7  0    243.407343    -.000070   .000200 |   .   v   .   |
803 pP 30  7  0    242.799230    -.000150   .000200 |   .  v.   .   |
804 pP 31  7  0    242.192706    -.000107   .000200 |   .  v.   .   |
805 pP 32  7  0    241.587705     .000012   .000200 |   .   v   .   |
806 pP 33  7  0    240.984032     .000025   .000200 |   .   v   .   |
807 pP 34  7  0    240.381714    -.000030   .000200 |   .   v   .   |
808 pP 35  7  0    239.780978     .000081   .000200 |   .   v   .   |
809 pP 36  7  0    239.181502     .000037   .000200 |   .   v   .   |
810 pP 37  7  0    238.583430    -.000017   .000200 |   .   v   .   |
811 pP 38  7  0    237.986930     .000084   .000200 |   .   v   .   |
812 pP 39  7  0    237.391686     .000017   .000200 |   .   v   .   |
813 pP 40  7  0    236.797957     .000035   .000200 |   .   v   .   |
814 pP 41  7  0    236.205561    -.000053   .000200 |   .   v   .   |
815 pP 42  7  0    235.614795     .000040   .000200 |   .   v   .   |
816 pP 43  7  0    235.025337    -.000019   .000200 |   .   v   .   |
817 pP 44  7  0    234.437486     .000058   .000200 |   .   v   .   |
818 pP 45  7  0    233.850962    -.000022   .000200 |   .   v   .   |
819 pP 46  7  0    233.266115     .000080   .000200 |   .   v   .   |
820 pP 47  7  0    232.682554    -.000039   .000200 |   .   v   .   |
821 pP 48  7  0    232.100768     .000098   .000200 |   .   v   .   |
822 pP 49  7  0    231.520270    -.000008   .000200 |   .   v   .   |
823 pP 50  7  0    230.941458     .000029   .000200 |   .   v   .   |
824 pP 51  7  0    230.364033    -.000100   .000200 |   .   v   .   |
825 pP 52  7  0    229.788587     .000186   .000200 |   .   .v  .   |
826 pP 53  7  0    229.214280     .000038   .000200 |   .   v   .   |
827 pP 54  7  0    228.641648    -.000020   .000200 |   .   v   .   |
828 pP 55  7  0    228.070524    -.000162   .000200 |   .  v.   .   |
829 pP 56  7  0    227.501343     .000037   .000200 |   .   v   .   |
830 pP 57  7  0    226.933671     .000137   .000200 |   .   .v  .   |
831 pP 58  7  0    226.367282    -.000098   .000200 |   .   v   .   |
832 pP 59  7  0    225.802836    -.000014   .000200 |   .   v   .   |
833 pP 60  7  0    225.239905    -.000044   .000200 |   .   v   .   |
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834 pP 61  7  0   224.678963    .000277   .001000 |   .   .v   .   |
835 pP 62  7  0   224.119258    .000194   .001000 |   .   .v   .   |
836 pP 63  7  0   223.560716   -.000373   .000200 |   . x .    .   |
837 pP 64  7  0   223.004313   -.000453   .000200 |   . * .    .   |
838 pR 31  7  0   284.486354   -.000066   .000200 |   .   v    .   |
839 pR 32  7  0   285.219755   -.000235   .000200 |   .  x.    .   |
840 pR 33  7  0   285.954797    .000067   .000200 |   .   v    .   |
841 pR 34  7  0   286.690517   -.000113   .000200 |   .  v.    .   |
842 pR 35  7  0   287.427652   -.000032   .000200 |   .   v    .   |
843 pR 36  7  0   288.166060    .000172   .000300 |   .   .v   .   |
844 pR 37  7  0   288.905206   -.000034   .000200 |   .   v    .   |
845 pR 38  7  0   289.646091    .000353   .000500 |   .   . v  .   |
846 pR 39  7  0   290.387294   -.000092   .000200 |   .   v    .   |
847 pR 40  7  0   291.130043   -.000141   .000200 |   .  v.    .   |
848 pR 41  7  0   291.874657    .000519   .001000 |   .   .  v .   |
849 pR 42  7  0   292.619525    .000275   .000500 |   .   .v   .   |
850 pR 43  7  0   293.365433   -.000093   .000200 |   .   v    .   |
851 pR 44  7  0   294.112936   -.000033   .000200 |   .   v    .   |
852 pR 45  7  0   294.861556   -.000029   .000200 |   .   v    .   |
853 pR 46  7  0   295.611430    .000052   .000200 |   .   v    .   |
854 pR 47  7  0   296.362275   -.000078   .000200 |   .   v    .   |
855 pR 48  7  0   297.114437   -.000076   .000200 |   .   v    .   |
856 pR 49  7  0   297.867835   -.000027   .000200 |   .   v    .   |
857 pR 50  7  0   298.622358   -.000045   .000200 |   .   v    .   |
858 pR 51  7  0   299.378201    .000063   .000200 |   .   v    .   |
859 pR 52  7  0   300.134953   -.000118   .000200 |   .  v.    .   |
860 pR 53  7  0   300.893249    .000047   .000200 |   .   v    .   |
861 pR 54  7  0   301.652522   -.000011   .000200 |   .   v    .   |
862 pR 55  7  0   302.413194    .000129   .000200 |   .   .v   .   |
863 pR 56  7  0   303.174727   -.000070   .000200 |   .   v    .   |
864 pR 57  7  0   303.937623   -.000105   .000200 |   . v.     .   |
865 pR 58  7  0   304.701690   -.000169   .000200 |   . v.     .   |
866 pR 59  7  0   305.466998   -.000190   .000200 |   . v.     .   |
867 pP  8  8  0   256.496718   -.000134   .000200 |   . v.     .   |
868 pP  9  8  0   255.847684   -.000083   .000200 |   .   v    .   |
869 pP 10  8  0   255.201186    .000016   .000200 |   .   v    .   |
870 pP 11  8  0   254.556784   -.000244   .000200 |   .  x.    .   |
871 pP 12  8  0   253.915535    .000229   .000500 |   .   .v   .   |
872 pP 13  8  0   253.275680   -.000283   .000200 |   .  x.    .   |
873 pP 14  8  0   252.638981    .000023   .000200 |   .   v    .   |
874 pP 15  8  0   252.004479    .000235   .000300 |   .   .v   .   |
875 pP 16  8  0   251.371708   -.000064   .000200 |   .   v    .   |
876 pP 17  8  0   250.741355   -.000138   .000200 |   .  v.    .   |
877 pP 18  8  0   250.113325   -.000027   .000200 |   .   v    .   |
878 pP 19  8  0   249.487137   -.000159   .000200 |   .  v.    .   |
879 pP 20  8  0   248.863327    .000057   .000200 |   .   v    .   |
880 pP 21  8  0   248.240676   -.000542   .001000 |   . v .    .   |
881 pP 22  8  0   247.620845   -.000239   .000300 |   .  v.    .   |
882 pP 23  8  0   247.003037    .000223   .000200 |   .   .x   .   |
883 pP 24  8  0   246.386653    .000299   .000300 |   .   .v   .   |
884 pP 25  8  0   245.771237   -.000417   .000500 |   . v .    .   |
885 pP 26  8  0   245.158719    .000055   .000200 |   .   v    .   |
886 pP 27  8  0   244.547665    .000327   .000300 |   .   . x  .   |
887 pP 28  8  0   243.937848    .000213   .000200 |   .   .x   .   |
888 pP 29  8  0   243.329263   -.000251   .000300 |   .  v.    .   |
889 pP 30  8  0   242.723022    .000079   .000200 |   .   v    .   |
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890	pP 31	8	0	242.117555	-.000334	.000500	|	.	v	.	. |
891	pP 32	8	0	241.514274	-.000053	.000200	|	.	v	.	. |
892	pP 33	8	0	240.912138	-.000096	.000200	|	.	v	.	. |
893	pP 34	8	0	240.311528	-.000065	.000200	|	.	v	.	. |
894	pP 35	8	0	239.712277	-.000113	.000200	|	.	v.	.	. |
895	pP 36	8	0	239.114635	.000021	.000200	|	.	v	.	. |
896	pP 37	8	0	238.518279	.000020	.000200	|	.	v	.	. |
897	pP 38	8	0	237.923310	-.000010	.000200	|	.	v	.	. |
898	pP 39	8	0	237.329771	-.000027	.000200	|	.	v	.	. |
899	pP 40	8	0	236.737684	-.000009	.000200	|	.	v	.	. |
900	pP 41	8	0	236.147016	.000006	.000200	|	.	v	.	. |
901	pP 42	8	0	235.557717	-.000037	.000200	|	.	v	.	. |
902	pP 43	8	0	234.970025	.000093	.000200	|	.	v	.	. |
903	pP 44	8	0	234.383538	-.000014	.000200	|	.	v	.	. |
904	pP 45	8	0	233.798709	.000086	.000200	|	.	v	.	. |
905	pP 46	8	0	233.215058	-.000099	.000200	|	.	v	.	. |
906	pP 47	8	0	232.633136	-.000026	.000200	|	.	v	.	. |
907	pP 48	8	0	232.052708	.000058	.000200	|	.	v	.	. |
908	pP 49	8	0	231.473794	.000163	.000200	|	.	.v	.	. |
909	pP 50	8	0	230.896280	.000163	.000200	|	.	.v	.	. |
910	pP 51	8	0	230.319965	-.000153	.000200	|	.	v.	.	. |
911	pP 52	8	0	229.745708	.000064	.000200	|	.	v	.	. |
912	pP 53	8	0	229.172759	.000051	.000200	|	.	v	.	. |
913	pP 54	8	0	228.601518	.000201	.000200	|	.	.x	.	. |
914	pP 55	8	0	228.031313	-.000169	.000200	|	.	v.	.	. |
915	pP 56	8	0	227.463393	.000181	.000200	|	.	.v	.	. |
916	pR 27	8	0	281.473719	.000153	.000200	|	.	.v	.	. |
917	pR 28	8	0	282.203040	-.000267	.000300	|	.	v.	.	. |
918	pR 29	8	0	282.934426	.000075	.000200	|	.	v	.	. |
919	pR 30	8	0	283.666560	-.000104	.000200	|	.	v.	.	. |
920	pR 31	8	0	284.400137	-.000080	.000200	|	.	v	.	. |
921	pR 32	8	0	285.134923	-.000062	.000200	|	.	v	.	. |
922	pR 33	8	0	285.870832	-.000114	.000200	|	.	v.	.	. |
923	pR 34	8	0	286.607979	-.000104	.000200	|	.	v.	.	. |
924	pR 35	8	0	287.347378	.000996	.002000	|	.	.	v	. |
925	pR 36	8	0	288.085809	-.000022	.000200	|	.	v	.	. |
926	pR 37	8	0	288.826249	-.000174	.000200	|	.	v.	.	. |
927	pR 38	8	0	289.568138	-.000014	.000200	|	.	v	.	. |
928	pR 39	8	0	290.311044	.000030	.000200	|	.	v	.	. |
929	pR 40	8	0	291.054903	-.000104	.000200	|	.	v.	.	. |
930	pR 41	8	0	291.799960	-.000171	.000200	|	.	v.	.	. |
931	pR 42	8	0	292.546547	.000159	.000300	|	.	.v	.	. |
932	pR 43	8	0	293.293615	-.000163	.000200	|	.	v.	.	. |
933	pR 44	8	0	294.042113	-.000191	.000200	|	.	v.	.	. |
934	pR 45	8	0	294.791894	-.000076	.000200	|	.	v	.	. |
935	pR 46	8	0	295.542666	-.000113	.000200	|	.	v.	.	. |
936	pR 47	8	0	296.294685	-.000050	.000200	|	.	v	.	. |
937	pR 48	8	0	297.047820	-.000019	.000200	|	.	v	.	. |
938	pR 49	8	0	297.802051	-.000047	.000200	|	.	v	.	. |
939	pR 50	8	0	298.557270	-.000242	.000200	|	.	x.	.	. |
940	pR 51	8	0	299.313880	-.000207	.000200	|	.	x.	.	. |
941	pR 52	8	0	300.071733	-.000090	.000200	|	.	v	.	. |
942	pR 53	8	0	300.830779	.000055	.000200	|	.	v	.	. |
943	pR 54	8	0	301.590761	-.000029	.000200	|	.	v	.	. |
944	pR 55	8	0	302.352041	.000016	.000200	|	.	v	.	. |
945	pR 57	8	0	303.877850	-.000150	.000200	|	.	v.	.	. |

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946 pR 58  8  0    304.642689     -.000053    .000200 |   .    v    .    |
947 pR 59  8  0    305.408274     -.000378    .000200 |   .  x .    .    |
948 pR 60  8  0    306.175523     -.000208    .000200 |   .   x.    .    |
949 pP  9  9  0    255.750449     -.000154    .000200 |   .   v.    .    |
950 pP 10  9  0    255.104099     -.000192    .000200 |   .   v.    .    |
951 pP 11  9  0    254.460301     -.000150    .000200 |   .   v.    .    |
952 pP 13  9  0    253.179902     -.000155    .000200 |   .   v.    .    |
953 pP 14  9  0    252.543285     -.000144    .000200 |   .   v.    .    |
954 pP 15  9  0    251.909063     -.000064    .000200 |   .    v    .    |
955 pP 16  9  0    251.277127      .000019    .000200 |   .    v    .    |
956 pP 17  9  0    250.648150      .000825    .002000 |   .    .   v.    |
957 pP 18  9  0    250.019685     -.000046    .000200 |   .    v    .    |
958 pP 19  9  0    249.394099     -.000176    .000200 |   .   v.    .    |
959 pP 20  9  0    248.770405     -.000503    .000500 |   . x  .    .    |
960 pP 21  9  0    248.149363     -.000214    .000200 |   .   x.    .    |
961 pP 22  9  0    247.530107     -.000122    .000200 |   .   v.    .    |
962 pP 23  9  0    246.912771     -.000043    .000200 |   .    v    .    |
963 pP 24  9  0    246.297449      .000170    .000200 |   .    .v   .    |
964 pP 25  9  0    245.683734      .000160    .000200 |   .    .v   .    |
965 pP 26  9  0    245.071488     -.000162    .000200 |   .   v.    .    |
966 pP 27  9  0    244.461357     -.000103    .000200 |   .   v.    .    |
967 pP 28  9  0    243.852934     -.000026    .000200 |   .    v    .    |
968 pP 29  9  0    243.246005     -.000102    .000200 |   .   v.    .    |
969 pP 30  9  0    242.642465      .001601    .002000 |   .    .    . v |
970 pP 31  9  0    242.037180     -.000016    .000200 |   .    v    .    |
971 pP 32  9  0    241.435002     -.000068    .000200 |   .    v    .    |
972 pP 33  9  0    240.834419     -.000039    .000200 |   .    v    .    |
973 pP 34  9  0    240.235303     -.000035    .000200 |   .    v    .    |
974 pP 35  9  0    239.637626     -.000061    .000200 |   .    v    .    |
975 pP 36  9  0    239.041615      .000125    .000200 |   .    .v   .    |
976 pP 37  9  0    238.446726     -.000008    .000200 |   .    v    .    |
977 pP 38  9  0    237.853508      .000101    .000200 |   .    .v   .    |
978 pP 39  9  0    237.261457     -.000047    .000200 |   .    v    .    |
979 pP 40  9  0    236.671050      .000031    .000200 |   .    v    .    |
980 pP 41  9  0    236.081942     -.000010    .000200 |   .    v    .    |
981 pP 42  9  0    235.494208     -.000095    .000200 |   .    v    .    |
982 pP 43  9  0    234.908066     -.000008    .000200 |   .    v    .    |
983 pP 44  9  0    234.323206     -.000065    .000200 |   .    v    .    |
984 pP 45  9  0    233.739851     -.000046    .000200 |   .    v    .    |
985 pP 46  9  0    233.158043      .000082    .000200 |   .    v    .    |
986 pP 47  9  0    232.577390     -.000081    .000200 |   .    v    .    |
987 pP 48  9  0    231.998496      .000062    .000200 |   .    v    .    |
988 pP 49  9  0    231.420844     -.000017    .000200 |   .    v    .    |
989 pP 50  9  0    230.844848      .000088    .000200 |   .    v    .    |
990 pP 51  9  0    230.270222      .000081    .000200 |   .    v    .    |
991 pP 52  9  0    229.697129      .000114    .000200 |   .    .v   .    |
992 pP 53  9  0    229.125408      .000017    .000200 |   .    v    .    |
993 pP 54  9  0    228.555138     -.000140    .000200 |   .   v.    .    |
994 pP 55  9  0    227.986579     -.000109    .000200 |   .   v.    .    |
995 pP 56  9  0    227.419687      .000059    .000200 |   .    v    .    |
996 pP 57  9  0    226.854356      .000247    .000500 |   .    .v   .    |
997 pR 27  9  0    281.375651     -.000106    .000200 |   .   v.    .    |
998 pR 28  9  0    282.106224     -.000115    .000200 |   .   v.    .    |
999 pR 29  9  0    282.838373      .000091    .000200 |   .    v    .    |
1000 pR 30  9  0   283.571341     -.000207    .000200 |   .   x.    .    |
1001 pR 31  9  0   284.304190     -.001911    .002000 v   .    .    .    |
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1002 pR 32  9  0   285.041732   -.000177   .000200 |   .  v.   .   |
1003 pR 33  9  0   285.777357   -.001588   .002000 | v .   .   .   |
1004 pR 34  9  0   286.517106   -.000080   .000200 |   .   v   .   |
1005 pR 35  9  0   287.256563   -.000047   .000200 |   .   v   .   |
1006 pR 36  9  0   287.997137   -.000063   .000200 |   .   v   .   |
1007 pR 37  9  0   288.738856   -.000085   .000200 |   .   v   .   |
1008 pR 38  9  0   289.481661   -.000163   .000200 |   .  v.   .   |
1009 pR 39  9  0   290.225713   -.000124   .000200 |   .  v.   .   |
1010 pR 40  9  0   290.970921   -.000054   .000200 |   .   v   .   |
1011 pR 41  9  0   291.717147   -.000087   .000200 |   .   v   .   |
1012 pR 42  9  0   292.464545   -.000064   .000200 |   .   v   .   |
1013 pR 43  9  0   293.213027   -.000072   .000200 |   .   v   .   |
1014 pR 44  9  0   293.962922    .000218   .000500 |   .   .v  .   |
1015 pR 45  9  0   294.713789    .000364   .000500 |   .   . v .   |
1016 pR 46  9  0   295.465476    .000213   .000500 |   .   .v  .   |
1017 pR 47  9  0   296.218230    .000011   .000200 |   .   v   .   |
1018 pR 48  9  0   296.972193   -.000102   .000200 |   .  v.   .   |
1019 pR 49  9  0   297.727434   -.000061   .000200 |   .   v   .   |
1020 pR 50  9  0   298.483740   -.000081   .000200 |   .   v   .   |
1021 pR 51  9  0   299.241192   -.000082   .000200 |   .   v   .   |
1022 pR 52  9  0   299.999829   -.000030   .000200 |   .   v   .   |
1023 pR 53  9  0   300.759553   -.000023   .000200 |   .   v   .   |
1024 pR 54  9  0   301.520376   -.000053   .000200 |   .   v   .   |
1025 pR 55  9  0   302.282304   -.000114   .000200 |   .  v.   .   |
1026 pR 56  9  0   303.045235   -.000310   .000200 |   . x .   .   |
1027 pP 10 10  0   254.985736   -.000076   .000200 |   .   v   .   |
1028 pP 11 10  0   254.342277   -.000094   .000200 |   .   v   .   |
1029 pP 12 10  0   253.700779   -.000615   .000500 |   . x .   .   |
1030 pP 14 10  0   252.425839   -.000872   .001000 |   .v  .   .   |
1031 pP 22 10  0   247.419208    .000097   .000200 |   .   v   .   |
1032 pP 23 10  0   246.801814   -.000856   .001000 |   .v  .   .   |
1033 pP 34 10  0   240.140560    .000054   .000200 |   .   v   .   |
1034 pP 35 10  0   239.544717    .000117   .000200 |   .  .v   .   |
1035 pP 36 10  0   238.950507    .000322   .000500 |   .   . v .   |
1036 pP 37 10  0   238.356969   -.000273   .000200 |   .  x.   .   |
1037 pP 38 10  0   237.765524   -.000229   .000200 |   .  x.   .   |
1038 pP 39 10  0   237.175543   -.000163   .000200 |   .  v.   .   |
1039 pP 40 10  0   236.586929   -.000161   .000200 |   .  v.   .   |
1040 pP 41 10  0   236.000309    .000411   .000500 |   .   . v .   |
1041 pP 42 10  0   235.411688   -.002437   .003000 v   .   .   .   |
1042 pP 43 10  0   234.829336   -.000431   .000500 |   . v .   .   |
1043 pP 44 10  0   234.247270    .000445   .001000 |   .   . v .   |
1044 pP 45 10  0   233.665333    .000034   .000200 |   .   v   .   |
1045 pP 46 10  0   233.085220    .000028   .000200 |   .   v   .   |
1046 pP 47 10  0   232.506188   -.000321   .000500 |   . v .   .   |
1047 pP 48 10  0   231.929138   -.000117   .000500 |   .  v.   .   |
1048 pP 49 10  0   231.353742    .000306   .000500 |   .   . v .   |
1049 pP 50 10  0   230.779455    .000396   .000500 |   .   . v .   |
1050 pP 51 10  0   230.206082   -.000052   .000200 |   .   v   .   |
1051 pP 52 10  0   229.634798    .000131   .000200 |   .   .v  .   |
1052 pP 53 10  0   229.064861    .000194   .000200 |   .   .v  .   |
1053 pP 54 10  0   228.495938   -.000206   .000200 |   .  x.   .   |
1054 pP 55 10  0   227.929046   -.000061   .000500 |   .   v   .   |
1055 pP 56 10  0   227.363511   -.000052   .000200 |   .   v   .   |
1056 pP 57 10  0   226.799425   -.000098   .000200 |   .   v   .   |
1057 pP 59 10  0   225.676226    .000239   .000500 |   .   .v  .   |
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1058 pP 60 10  0   225.116898    .000390   .001000 |   .   . v .   |
1059 pP 61 10  0   224.558442   -.000125   .000200 |   .  v.   .   |
1060 pP 62 10  0   224.002225    .000055   .000500 |   .   v   .   |
1061 pP 63 10  0   223.447285   -.000040   .000500 |   .   v   .   |
1062 pR 29 10  0   282.720728   -.000608   .001000 |   . v .   .   |
1063 pR 30 10  0   283.455291   -.000367   .001000 |   . v .   .   |
1064 pR 31 10  0   284.191491    .000167   .000200 |   .   .v  .   |
1065 pR 32 10  0   284.926990   -.001307   .002000 | v .   .   .   |
1066 pR 33 10  0   285.665462   -.001083   .002000 |   v   .   .   |
1067 pR 34 10  0   286.405561   -.000475   .001000 |   . v .   .   |
1068 pR 35 10  0   287.146833    .000088   .000200 |   .   v   .   |
1069 pR 36 10  0   287.888486   -.000161   .000500 |   .  v.   .   |
1070 pR 37 10  0   288.631726    .000005   .000200 |   .   v   .   |
1071 pR 38 10  0   289.376222    .000271   .000200 |   .   .x  .   |
1072 pR 39 10  0   290.121076   -.000245   .000500 |   .  v.   .   |
1073 pR 40 10  0   290.868024    .000205   .000200 |   .   .x  .   |
1074 pR 41 10  0   291.615920    .000485   .000500 |   .   . v .   |
1075 pR 42 10  0   292.365968    .001807   .002000 |   .   .   .  v|
1076 pR 43 10  0   293.117387    .003396   .003000 |   .   .   .  x
1077 pR 44 10  0   293.865903    .000983   .001000 |   .   .   v   |
1078 pR 45 10  0   294.617091    .000144   .000200 |   .   .v  .   |
1079 pR 46 10  0   295.369988   -.000080   .000500 |   .   v   .   |
1080 pR 47 10  0   296.124025   -.000257   .000500 |   .  v.   .   |
1081 pR 48 10  0   296.878374   -.001217   .002000 |  v.   .   .   |
1082 pR 49 10  0   297.636181    .000188   .000200 |   .   .v  .   |
1083 pR 50 10  0   298.393098   -.000394   .001000 |   . v .   .   |
1084 pR 51 10  0   299.151953   -.000133   .000200 |   .  v.   .   |
1085 pR 52 10  0   299.910345   -.001434   .002000 | v .   .   .   |
1086 pR 53 10  0   300.672581    .000009   .000200 |   .   v   .   |
1087 pR 54 10  0   301.434435   -.000032   .000200 |   .   v   .   |
1088 pR 55 10  0   302.197006   -.000458   .000500 |   . v .   .   |
1089 pR 56 10  0   302.962330    .000764   .002000 |   .   .  v.   |
1090 pP 37 11  0   238.367509   -.000550   .000500 |   . x .   .   |
1091 pP 38 11  0   237.777972    .000277   .000500 |   .   .v  .   |
1092 pP 39 11  0   237.188889    .000077   .000200 |   .   v   .   |
1093 pP 40 11  0   236.601244   -.000158   .000200 |   .  v.   .   |
1094 pP 41 11  0   236.017863    .002405   .003000 |   .   .   .   v
1095 pP 42 11  0   235.430472   -.000503   .000500 |   . x .   .   |
1096 pP 43 11  0   234.847806   -.000148   .000200 |   .  v.   .   |
1097 pP 44 11  0   234.265972   -.000423   .000500 |   . v .   .   |
1098 pP 45 11  0   233.686355    .000052   .000200 |   .   v   .   |
1099 pP 46 11  0   233.107483   -.000201   .000200 |   .  x.   .   |
1100 pP 47 11  0   232.530276   -.000272   .000200 |   .  x.   .   |
1101 pP 48 11  0   231.953616   -.001289   .005000 |  v.   .   .   |
1102 pP 49 11  0   231.381780    .001011   .001000 |   .   .   x   |
1103 pP 50 11  0   230.808147   -.000009   .000200 |   .   v   .   |
1104 pP 51 11  0   230.237475    .000391   .000500 |   .   . v .   |
1105 pP 52 11  0   229.667844    .000271   .000500 |   .   .v  .   |
1106 pP 53 11  0   229.099565   -.000083   .000200 |   .   v   .   |
1107 pP 54 11  0   228.532844   -.000490   .001000 |   . v .   .   |
1108 pP 55 11  0   227.969436    .000772   .001000 |   .   .  v.   |
1109 pP 56 11  0   227.405882    .000208   .000200 |   .   .x  .   |
1110 pP 57 11  0   226.844334   -.000072   .000200 |   .   v   .   |
1111 pP 58 11  0   226.283945   -.000967   .001000 |   v   .   .   |
1112 pP 59 11  0   225.727530    .000274   .000500 |   .   .v  .   |
1113 pP 60 11  0   225.170366   -.001148   .001000 |  x.   .   .   |
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1114 pP 61 11  0   224.617926    .000138   .001000 |  .   .v  .  |
1115 pP 62 11  0   224.064633   -.001576   .001000 | x .   .   .  |
1116 pP 14 12  0   252.295752   -.000661   .001000 |  . v .   .  |
1117 pP 15 12  0   251.662749   -.000525   .001000 |  . v .   .  |
1118 pP 17 12  0   250.404932    .000920   .001000 |  .   .   v  |
1119 pP 18 12  0   249.778046    .000230   .000200 |  .   .x  .  |
1120 pP 19 12  0   249.153521   -.000335   .001000 |  . v .   .  |
1121 pP 20 12  0   248.531719   -.000373   .001000 |  . v .   .  |
1122 pP 21 12  0   247.912747    .000266   .000200 |  .   .x  .  |
1123 pP 23 12  0   246.680109    .000569   .000500 |  .   . x .  |
1124 pP 24 12  0   246.066797    .000677   .000500 |  .   . x .  |
1125 pP 27 12  0   244.237488   -.000035   .000200 |  .   v   .  |
1126 pP 28 12  0   243.631624   -.000104   .000200 |  .  v.   .  |
1127 pP 29 12  0   243.027514   -.000217   .000200 |  .  x.   .  |
1128 pP 30 12  0   242.425748    .000259   .000200 |  .   .x  .  |
1129 rP  2  0  0   261.148011   -.000113   .000200 |  .  v.   .  |
1130 rP  3  0  0   260.480755   -.000133   .000200 |  .  v.   .  |
1131 rP  4  0  0   259.815263   -.000105   .000200 |  .  v.   .  |
1132 rP  5  0  0   259.151484   -.000083   .000200 |  .  v    .  |
1133 rP  6  0  0   258.489412   -.000076   .000200 |  .  v    .  |
1134 rP  7  0  0   257.829051   -.000083   .000200 |  .  v    .  |
1135 rP  8  0  0   257.170407   -.000103   .000200 |  .  v.   .  |
1136 rP  9  0  0   256.513522   -.000095   .000200 |  .  v    .  |
1137 rP 10  0  0   255.858362   -.000098   .000200 |  .  v    .  |
1138 rP 11  0  0   255.204945   -.000096   .000200 |  .  v    .  |
1139 rP 12  0  0   254.553277   -.000085   .000200 |  .  v    .  |
1140 rP 13  0  0   253.903605    .000178   .000300 |  .  .v   .  |
1141 rP 14  0  0   253.255194   -.000044   .000200 |  .  v    .  |
1142 rP 15  0  0   252.608710   -.000089   .000200 |  .  v    .  |
1143 rP 16  0  0   251.964059   -.000051   .000200 |  .  v    .  |
1144 rP 17  0  0   251.321093   -.000083   .000200 |  .  v    .  |
1145 rP 18  0  0   250.679847   -.000151   .000200 |  .  v.   .  |
1146 rP 19  0  0   250.040515   -.000063   .000200 |  .  v    .  |
1147 rP 20  0  0   249.402933    .000014   .000200 |  .  v    .  |
1148 rP 21  0  0   248.766911   -.000111   .000200 |  .  v.   .  |
1149 rP 22  0  0   248.132909    .000019   .000200 |  .  v    .  |
1150 rP 23  0  0   247.500504   -.000021   .000200 |  .  v    .  |
1151 rP 24  0  0   246.869915   -.000012   .000200 |  .  v    .  |
1152 rP 25  0  0   246.241057   -.000043   .000200 |  .  v    .  |
1153 rP 26  0  0   245.613815   -.000230   .000300 |  .  v.   .  |
1154 rP 27  0  0   244.988725   -.000038   .000200 |  .  v    .  |
1155 rP 28  0  0   244.364988   -.000268   .000300 |  .  v.   .  |
1156 rP 29  0  0   243.743560    .000036   .000200 |  .  v    .  |
1157 rP 30  0  0   243.123541   -.000029   .000200 |  .  v    .  |
1158 rP 31  0  0   242.505373   -.000022   .000200 |  .  v    .  |
1159 rP 32  0  0   241.888975   -.000024   .000200 |  .  v    .  |
1160 rP 33  0  0   241.274358   -.000026   .000200 |  .  v    .  |
1161 rP 34  0  0   240.661546   -.000005   .000200 |  .  v    .  |
1162 rP 35  0  0   240.050478   -.000022   .000200 |  .  v    .  |
1163 rP 36  0  0   239.441202   -.000030   .000200 |  .  v    .  |
1164 rP 37  0  0   238.833729   -.000020   .000200 |  .  v    .  |
1165 rP 38  0  0   238.228031   -.000019   .000200 |  .  v    .  |
1166 rP 39  0  0   237.624109   -.000027   .000200 |  .  v    .  |
1167 rP 40  0  0   237.021932   -.000075   .000200 |  .  v    .  |
1168 rP 41  0  0   236.421626   -.000039   .000200 |  .  v    .  |
1169 rP 42  0  0   235.823064   -.000044   .000200 |  .  v    .  |
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1170	rP 43	0	0	235.226315	-.000023	.000200		.	v	.		
1171	rP 44	0	0	234.631333	-.000021	.000200		.	v	.		
1172	rP 45	0	0	234.038143	-.000014	.000200		.	v	.		
1173	rP 46	0	0	233.446705	-.000041	.000200		.	v	.		
1174	rP 47	0	0	232.857058	-.000063	.000200		.	v	.		
1175	rP 48	0	0	232.269234	-.000048	.000200		.	v	.		
1176	rP 49	0	0	231.683208	-.000021	.000200		.	v	.		
1177	rP 50	0	0	231.098904	-.000057	.000200		.	v	.		
1178	rP 51	0	0	230.516464	-.000014	.000200		.	v	.		
1179	rP 52	0	0	229.935741	-.000039	.000200		.	v	.		
1180	rP 53	0	0	229.356784	-.000080	.000200		.	v	.		
1181	rP 54	0	0	228.779631	-.000101	.000200		.	v.	.		
1182	rP 55	0	0	228.204214	-.000168	.000200		.	v.	.		
1183	rP 56	0	0	227.630763	-.000049	.000200		.	v	.		
1184	rP 57	0	0	227.058948	-.000076	.000200		.	v	.		
1185	rP 58	0	0	226.488933	-.000081	.000200		.	v	.		
1186	rP 59	0	0	225.920815	.000033	.000200		.	v	.		
1187	rP 60	0	0	225.354969	.000641	.001000		.	.	v	.	
1188	rP 61	0	0	224.789643	-.000005	.000200		.	v	.		
1189	rP 62	0	0	224.226564	-.000179	.000200		.	v.	.		
1190	rP 63	0	0	223.665440	-.000171	.000200		.	v.	.		
1191	rP 64	0	0	223.106068	-.000183	.000300		.	v.	.		
1192	rP 65	0	0	222.548579	-.000080	.000200		.	v	.		
1193	rP 66	0	0	221.992173	-.000663	.001000		.	v	.	.	
1194	rP 67	0	0	221.438642	-.000138	.000200		.	v.	.		
1195	rP 68	0	0	220.886077	-.000410	.000300		.	x	.	.	
1196	rP 69	0	0	220.334281	-.001677	.002000	v	.	.	.		
1197	rP 70	0	0	219.787139	-.000050	.000200		.	v	.		
1198	rP 71	0	0	219.239949	-.000229	.000200		.	x.	.		
1199	rP 72	0	0	218.694975	.000051	.000500		.	v	.		
1200	rP 73	0	0	218.150844	-.000580	.000300		.	x	.	.	
1201	rP 74	0	0	217.608995	-.000681	.000500		.	x	.	.	
1202	rP 75	0	0	217.069172	-.000506	.000300		.	x	.	.	
1203	rR 0	0	0	263.161923	.001836	.002000		.	.	.	v	
1204	rR 1	0	0	263.835509	.001361	.002000		.	.	.	v	
1205	rR 2	0	0	264.509768	-.000137	.000200		.	v.	.		
1206	rR 3	0	0	265.187464	.000109	.000200		.	.v	.		
1207	rR 4	0	0	265.866021	-.000473	.000500		.	v	.	.	
1208	rR 5	0	0	266.547275	-.000042	.000200		.	v	.		
1209	rR 6	0	0	267.229741	-.000079	.000200		.	v	.		
1210	rR 7	0	0	267.913864	-.000134	.000200		.	v.	.		
1211	rR 8	0	0	268.599837	-.000011	.000200		.	v	.		
1212	rR 9	0	0	269.287293	-.000071	.000200		.	v	.		
1213	rR 10	0	0	269.976476	-.000067	.000200		.	v	.		
1214	rR 11	0	0	270.667366	-.000012	.000200		.	v	.		
1215	rR 12	0	0	271.359813	-.000053	.000200		.	v	.		
1216	rR 13	0	0	272.053855	-.000147	.000200		.	v.	.		
1217	rR 14	0	0	272.749483	-.000296	.000300		.	v.	.		
1218	rR 15	0	0	273.447147	-.000048	.000200		.	v	.		
1219	rR 16	0	0	274.146170	-.000072	.000200		.	v	.		
1220	rR 17	0	0	274.846882	-.000035	.000200		.	v	.		
1221	rR 18	0	0	275.548954	-.000259	.000300		.	v.	.		
1222	rR 19	0	0	276.253064	-.000061	.000200		.	v	.		
1223	rR 20	0	0	276.958525	-.000122	.000200		.	v.	.		
1224	rR 21	0	0	277.665834	.000059	.000200		.	v	.		
1225	rR 22	0	0	278.374406	-.000096	.000200		.	v	.		

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1226 rR 23  0  0   279.084901    .000079   .000200 |  .   v   .  |
1227 rR 24  0  0   279.796682   -.000048   .000200 |  .   v   .  |
1228 rR 25  0  0   280.510134   -.000085   .000200 |  .   v   .  |
1229 rR 26  0  0   281.225201   -.000083   .000200 |  .   v   .  |
1230 rR 27  0  0   281.941859   -.000060   .000200 |  .   v   .  |
1231 rR 28  0  0   282.660049   -.000067   .000200 |  .   v   .  |
1232 rR 29  0  0   283.379779   -.000091   .000200 |  .   v   .  |
1233 rR 30  0  0   284.101075   -.000100   .000200 |  .  v.   .  |
1234 rR 31  0  0   284.823927   -.000097   .000200 |  .   v   .  |
1235 rR 32  0  0   285.548273   -.000136   .000200 |  .  v.   .  |
1236 rR 33  0  0   286.274234   -.000092   .000200 |  .   v   .  |
1237 rR 34  0  0   287.001673   -.000093   .000200 |  .   v   .  |
1238 rR 35  0  0   287.730614   -.000110   .000200 |  .  v.   .  |
1239 rR 36  0  0   288.461160   -.000031   .000200 |  .   v   .  |
1240 rR 37  0  0   289.193066   -.000096   .000200 |  .   v   .  |
1241 rR 38  0  0   289.926533   -.000095   .000200 |  .   v   .  |
1242 rR 39  0  0   290.661481   -.000103   .000200 |  .  v.   .  |
1243 rR 40  0  0   291.397931   -.000090   .000200 |  .   v   .  |
1244 rR 41  0  0   292.135843   -.000089   .000200 |  .   v   .  |
1245 rR 42  0  0   292.875210   -.000100   .000200 |  .  v.   .  |
1246 rR 43  0  0   293.616036   -.000111   .000200 |  .  v.   .  |
1247 rR 44  0  0   294.358328   -.000108   .000200 |  .  v.   .  |
1248 rR 45  0  0   295.102052   -.000117   .000200 |  .  v.   .  |
1249 rR 46  0  0   295.847216   -.000123   .000200 |  .  v.   .  |
1250 rR 47  0  0   296.593824   -.000112   .000200 |  .  v.   .  |
1251 rR 48  0  0   297.341855   -.000100   .000200 |  .   v   .  |
1252 rR 49  0  0   298.091285   -.000100   .000200 |  .  v.   .  |
1253 rR 50  0  0   298.842146   -.000074   .000200 |  .   v   .  |
1254 rR 51  0  0   299.594360   -.000092   .000200 |  .   v   .  |
1255 rR 52  0  0   300.347979   -.000092   .000200 |  .   v   .  |
1256 rR 53  0  0   301.102983   -.000087   .000200 |  .   v   .  |
1257 rR 54  0  0   301.859729    .000289   .000500 |  .  .v   .  |
1258 rR 55  0  0   302.617078   -.000096   .000200 |  .   v   .  |
1259 rR 56  0  0   303.376152   -.000109   .000200 |  .  v.   .  |
1260 rR 57  0  0   304.136631   -.000063   .000200 |  .   v   .  |
1261 rR 58  0  0   304.898419   -.000045   .000200 |  .   v   .  |
1262 rR 59  0  0   305.661466   -.000096   .000200 |  .   v   .  |
1263 rR 60  0  0   306.425854   -.000125   .000200 |  .  v.   .  |
1264 rR 61  0  0   307.191659   -.000048   .000200 |  .   v   .  |
1265 rR 62  0  0   307.958728   -.000008   .000200 |  .   v   .  |
1266 rR 63  0  0   308.727007   -.000050   .000200 |  .   v   .  |
1267 rR 64  0  0   309.496408   -.000253   .000200 |  .  x.   .  |
1268 rR 65  0  0   310.267444   -.000096   .000200 |  .   v   .  |
1269 rR 66  0  0   311.039675   -.000007   .000200 |  .   v   .  |
1270 rR 67  0  0   311.812898   -.000182   .000200 |  .  v.   .  |
1271 rR 68  0  0   312.587596   -.000128   .000200 |  .  v.   .  |
1272 rR 69  0  0   313.363310   -.000294   .000200 |  .  x.   .  |
1273 rR 70  0  0   314.140257   -.000454   .000300 |  . x .   .  |
1274 rQ  1  0  0   262.492446    .001163   .002000 |  .   .  .v  |
1275 rQ  2  0  0   262.498273   -.000123   .000200 |  .  v.   .  |
1276 rQ  3  0  0   262.509289    .000225   .000300 |  .  .v   .  |
1277 rQ  4  0  0   262.523317    .000029   .000200 |  .   v   .  |
1278 rQ  5  0  0   262.540860   -.000205   .000200 |  .  x.   .  |
1279 rQ  6  0  0   262.562154   -.000242   .000200 |  .  x.   .  |
1280 rQ  7  0  0   262.587175   -.000103   .000200 |  .  v.   .  |
1281 rQ  8  0  0   262.615686   -.000025   .000200 |  .   v   .  |
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1282 rQ  9  0  0    262.647361    -.000330    .000300 |   . x .   .   |
1283 rQ 10  0  0    262.683203    -.000015    .000200 |   .   v   .   |
1284 rQ 11  0  0    262.722462     .000173    .000200 |   .   .v  .   |
1285 rQ 12  0  0    262.764892    -.000009    .000200 |   .   v   .   |
1286 rQ 13  0  0    262.810946    -.000106    .000200 |   .  v.   .   |
1287 rQ 14  0  0    262.860752     .000013    .000200 |   .   v   .   |
1288 rQ 15  0  0    262.913874    -.000084    .000200 |   .   v   .   |
1289 rQ 16  0  0    262.970882     .000175    .000200 |   .   .v  .   |
1290 rQ 17  0  0    263.030903    -.000078    .000200 |   .   v   .   |
1291 rQ 18  0  0    263.094579    -.000198    .000200 |   .  v.   .   |
1292 rQ 19  0  0    263.161923    -.000167    .000200 |   .  v.   .   |
1293 rQ 20  0  0    263.233660     .000742    .001000 |   .   .  v.   |
1294 rQ 21  0  0    263.307153    -.000101    .000200 |   .  v.   .   |
1295 rQ 22  0  0    263.385062    -.000032    .000200 |   .   v   .   |
1296 rQ 23  0  0    263.466399    -.000034    .000200 |   .   v   .   |
1297 rQ 24  0  0    263.551249    -.000018    .000200 |   .   v   .   |
1298 rQ 25  0  0    263.639537    -.000052    .000200 |   .   v   .   |
1299 rQ 26  0  0    263.731204    -.000190    .000200 |   .  v.   .   |
1300 rQ 27  0  0    263.826541    -.000136    .000200 |   .  v.   .   |
1301 rQ 28  0  0    263.925362    -.000069    .000200 |   .   v   .   |
1302 rQ 29  0  0    264.027547    -.000103    .000200 |   .  v.   .   |
1303 rQ 30  0  0    264.133523     .000195    .000200 |   .   .v  .   |
1304 rQ 31  0  0    264.242695     .000237    .000300 |   .   .v  .   |
1305 rQ 32  0  0    264.354933    -.000100    .000200 |   .   v   .   |
1306 rQ 33  0  0    264.471227     .000181    .000200 |   .   .v  .   |
1307 rQ 34  0  0    264.590355    -.000134    .000200 |   .  v.   .   |
1308 rQ 35  0  0    264.712785    -.000571    .000500 |   . x .   .   |
1309 rQ 36  0  0    264.839612    -.000026    .000200 |   .   v   .   |
1310 rQ 37  0  0    264.969401     .000072    .000200 |   .   v   .   |
1311 rQ 38  0  0    265.102357    -.000061    .000200 |   .   v   .   |
1312 rQ 39  0  0    265.239050     .000151    .000200 |   .   .v  .   |
1313 rQ 40  0  0    265.378659    -.000104    .000200 |   .  v.   .   |
1314 rQ 41  0  0    265.521944    -.000056    .000200 |   .   v   .   |
1315 rQ 42  0  0    265.668793     .000190    .000200 |   .   .v  .   |
1316 rQ 43  0  0    265.818439    -.000123    .000200 |   .  v.   .   |
1317 rQ 44  0  0    265.971787    -.000081    .000200 |   .   v   .   |
1318 rQ 45  0  0    266.128373    -.000138    .000200 |   .  v.   .   |
1319 rQ 46  0  0    266.288381    -.000100    .000200 |   .  v.   .   |
1320 rQ 47  0  0    266.451574    -.000196    .000200 |   .  v.   .   |
1321 rQ 48  0  0    266.618581     .000215    .000300 |   .   .v  .   |
1322 rQ 49  0  0    266.788164    -.000095    .000200 |   .   v   .   |
1323 rQ 50  0  0    266.961384    -.000056    .000200 |   .   v   .   |
1324 rQ 51  0  0    267.137775    -.000122    .000200 |   .  v.   .   |
1325 rQ 52  0  0    267.317595    -.000025    .000200 |   .   v   .   |
1326 rQ 53  0  0    267.500480    -.000117    .000200 |   .  v.   .   |
1327 rQ 54  0  0    267.686739    -.000079    .000200 |   .   v   .   |
1328 rQ 55  0  0    267.876036    -.000236    .000300 |   .  v.   .   |
1329 rQ 56  0  0    268.068909    -.000037    .000200 |   .   v   .   |
1330 rQ 57  0  0    268.264573    -.000256    .000300 |   .  v.   .   |
1331 rQ 58  0  0    268.463866    -.000044    .000200 |   .   v   .   |
1332 rQ 59  0  0    268.664641    -.001535    .002000 |v  .   .   .   |
1333 rQ 60  0  0    268.871482    -.000134    .000200 |   .  v.   .   |
1334 rQ 61  0  0    269.079223    -.000993    .001000 |   v   .   .   |
1335 rQ 62  0  0    269.291659    -.000306    .000200 |   . x .   .   |
1336 rP  5  3  0    259.399339     .000006    .000200 |   .   v   .   |
1337 rP  6  3  0    258.743624     .001334    .002000 |   .   .   . v |
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1338 rP  7  3  0    258.087954    -.000112   .000200 |   .  v.   .   |
1339 rP  8  3  0    257.436674    -.000053   .000200 |   .   v   .   |
1340 rP  9  3  0    256.788333    -.000011   .000200 |   .   v   .   |
1341 rP 10  3  0    256.143178     .000178   .000300 |   .  .v   .   |
1342 rP 11  3  0    255.500476    -.000307   .000300 |   . x .   .   |
1343 rP 12  3  0    254.861712    -.000074   .000200 |   .   v   .   |
1344 rP 13  3  0    254.225927    -.000178   .000200 |   .  v.   .   |
1345 rP 14  3  0    253.593719    -.000118   .000200 |   .  v.   .   |
1346 rP 15  3  0    252.965072    -.000005   .000200 |   .   v   .   |
1347 rP 16  3  0    252.339887    -.000029   .000200 |   .   v   .   |
1348 rP 17  3  0    251.719247     .000811   .001000 |   .   .  v.   |
1349 rP 18  3  0    251.100694    -.000018   .000200 |   .   v   .   |
1350 rP 19  3  0    250.486793    -.000014   .000200 |   .   v   .   |
1351 rP 20  3  0    249.876632    -.000139   .000200 |   .  v.   .   |
1352 rP 21  3  0    249.270962     .000318   .000500 |   .  . v  .   |
1353 rP 22  3  0    248.668491     .000037   .000200 |   .   v   .   |
1354 rP 23  3  0    248.070306     .000090   .000200 |   .   v   .   |
1355 rP 24  3  0    247.475991     .000054   .000200 |   .   v   .   |
1356 rP 25  3  0    246.888505     .002889   .003000 |   .   .   .   v
1357 rP 26  3  0    246.298965    -.000280   .000300 |   .  v.   .   |
1358 rP 27  3  0    245.716582    -.000229   .000300 |   .  v.   .   |
1359 rP 28  3  0    245.138502     .000205   .000200 |   .  .x   .   |
1360 rP 29  3  0    244.564006     .000323   .000500 |   .  . v  .   |
1361 rP 30  3  0    243.992981     .000033   .000200 |   .   v   .   |
1362 rP 31  3  0    243.426235     .000165   .000200 |   .  .v   .   |
1363 rP 32  3  0    242.863190     .000162   .000200 |   .  .v   .   |
1364 rR  6  6  0    267.713617     .000022   .000200 |   .   v   .   |
1365 rR  7  6  0    268.405264     .000021   .000200 |   .   v   .   |
1366 rR  8  6  0    269.099651    -.000045   .000200 |   .   v   .   |
1367 rR  9  6  0    269.796988    -.000004   .000200 |   .   v   .   |
1368 rR 10  6  0    270.497177    -.000001   .000200 |   .   v   .   |
1369 rR 11  6  0    271.200308     .000006   .000200 |   .   v   .   |
1370 rR 12  6  0    271.906421     .000004   .000200 |   .   v   .   |
1371 rR 13  6  0    272.615556    -.000020   .000200 |   .   v   .   |
1372 rR 14  6  0    273.327968     .000130   .000200 |   .  .v   .   |
1373 rR 15  6  0    274.043302     .000041   .000200 |   .   v   .   |
1374 rR 16  6  0    274.761884    -.000021   .000200 |   .   v   .   |
1375 rR 17  6  0    275.483817    -.000012   .000200 |   .   v   .   |
1376 rR 18  6  0    276.209080    -.000011   .000200 |   .   v   .   |
1377 rR 19  6  0    276.937837     .000089   .000200 |   .   v   .   |
1378 rR 20  6  0    277.669597    -.000256   .000200 |   .  x.   .   |
1379 rR 21  6  0    278.405579     .000122   .000200 |   .  .v   .   |
1380 rR 22  6  0    279.144556    -.000047   .000200 |   .   v   .   |
1381 rR 23  6  0    279.887155    -.000178   .000200 |   .  v.   .   |
1382 rR 24  6  0    280.633622    -.000058   .000200 |   .   v   .   |
1383 rR 25  6  0    281.383624    -.000050   .000200 |   .   v   .   |
1384 rR 26  6  0    282.137389     .000052   .000200 |   .   v   .   |
1385 rR 27  6  0    282.894636    -.000049   .000200 |   .   v   .   |
1386 rR 28  6  0    283.655675    -.000053   .000200 |   .   v   .   |
1387 rR 29  6  0    284.420395    -.000078   .000200 |   .   v   .   |
1388 rR 30  6  0    285.188930     .000012   .000200 |   .   v   .   |
1389 rR 31  6  0    285.960997    -.000062   .000200 |   .   v   .   |
1390 rR 32  6  0    286.736790    -.000097   .000200 |   .   v   .   |
1391 rR 33  6  0    287.516119    -.000270   .000200 |   .  x.   .   |
1392 rR 34  6  0    288.299568     .000020   .000200 |   .   v   .   |
1393 rR 35  6  0    289.086251    -.000096   .000200 |   .   v   .   |
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1394 rR 36  6  0   289.876647   -.000117   .000200 |   .  v.   .   |
1395 rR 37  6  0   290.670656   -.000122   .000200 |   .  v.   .   |
1396 rR 38  6  0   291.468000   -.000364   .000200 |   . x .   .   |
1397 rR 39  6  0   292.269380   -.000117   .000200 |   .  v.   .   |
1398 rR 40  6  0   293.074150   -.000002   .000200 |   .   v   .   |
1399 rR 41  6  0   293.882214   -.000089   .000200 |   .   v   .   |
1400 rR 42  6  0   294.693794   -.000130   .000200 |   .  v.   .   |
1401 rR 43  6  0   295.508845   -.000143   .000200 |   .  v.   .   |
1402 rR 44  6  0   296.327330   -.000139   .000200 |   .  v.   .   |
1403 rR 45  6  0   297.149211   -.000131   .000200 |   .  v.   .   |
1404 rR 46  6  0   297.974866    .000287   .000200 |   .   .x  .   |
1405 rR 47  6  0   298.802619   -.000536   .000500 |   . x .   .   |
1406 rR 48  6  0   299.634952   -.000093   .000200 |   .   v   .   |
1407 rR 49  6  0   300.470081   -.000143   .000200 |   .  v.   .   |
1408 rR 50  6  0   301.308531   -.000136   .000200 |   .  v.   .   |
1409 rR 51  6  0   302.149354   -.000996   .001000 |   v   .   .   |
1410 rR 53  6  0   303.843175   -.000163   .000200 |   .  v.   .   |
1411 rR 54  6  0   304.694397   -.000200   .000200 |   .  v.   .   |
1412 rR 55  6  0   305.548717   -.000284   .000200 |   .  x.   .   |
1413 rR 56  6  0   306.406337   -.000190   .000200 |   .  v.   .   |
1414 rR 57  6  0   307.267067   -.000087   .000200 |   .   v   .   |
1415 rR 58  6  0   308.130966    .000107   .000200 |   .   .v  .   |
1416 rR 59  6  0   308.997617   -.000002   .000200 |   .   v   .   |
1417 rR  7  7  0   268.474659    .000043   .000200 |   .   v   .   |
1418 rR  8  7  0   269.168837    .000026   .000200 |   .   v   .   |
1419 rR  9  7  0   269.865825    .000004   .000200 |   .   v   .   |
1420 rR 10  7  0   270.565692    .000008   .000200 |   .   v   .   |
1421 rR 11  7  0   271.268451    .000010   .000200 |   .   v   .   |
1422 rR 12  7  0   271.974176    .000037   .000200 |   .   v   .   |
1423 rR 13  7  0   272.682844    .000021   .000200 |   .   v   .   |
1424 rR 14  7  0   273.394536   -.000008   .000200 |   .   v   .   |
1425 rR 15  7  0   274.109434    .000080   .000200 |   .   v   .   |
1426 rR 16  7  0   274.825942   -.001365   .002000 | v .   .   .   |
1427 rR 17  7  0   275.548954    .000498   .000500 |   .  .v   .   |
1428 rR 18  7  0   276.273216    .000361   .000500 |   .  .v   .   |
1429 rR 19  7  0   277.000462   -.000095   .000200 |   .   v   .   |
1430 rR 20  7  0   277.731632    .000016   .000200 |   .   v   .   |
1431 rR 21  7  0   278.465665   -.000414   .001000 |   . v .   .   |
1432 rR 22  7  0   279.203924   -.000071   .000200 |   .   v   .   |
1433 rR 23  7  0   279.945389   -.000017   .000200 |   .   v   .   |
1434 rR 24  7  0   280.690371    .000018   .000200 |   .   v   .   |
1435 rR 25  7  0   281.438862   -.000007   .000200 |   .   v   .   |
1436 rR 26  7  0   282.191006    .000020   .000200 |   .   v   .   |
1437 rR 27  7  0   282.946777    .000049   .000200 |   .   v   .   |
1438 rR 28  7  0   283.706038   -.000077   .000200 |   .   v   .   |
1439 rR 29  7  0   284.469131   -.000031   .000200 |   .   v   .   |
1440 rR 30  7  0   285.235876   -.000002   .000200 |   .   v   .   |
1441 rR 31  7  0   286.006233   -.000034   .000200 |   .   v   .   |
1442 rR 32  7  0   286.780270   -.000061   .000200 |   .   v   .   |
1443 rR 33  7  0   287.557526   -.000538   .000500 |   . x .   .   |
1444 rR 34  7  0   288.339606    .000146   .000200 |   .   .v  .   |
1445 rR 35  7  0   289.124465   -.000041   .000200 |   .   v   .   |
1446 rR 36  7  0   289.913002   -.000187   .000200 |   .  v.   .   |
1447 rR 37  7  0   290.705379   -.000113   .000200 |   .  v.   .   |
1448 rR 38  7  0   291.501285   -.000110   .000200 |   .  v.   .   |
1449 rR 39  7  0   292.300719   -.000159   .000200 |   .  v.   .   |
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1450 rR 40  7  0   293.104221    .000302   .000500 |   .   . v  .   |
1451 rR 41  7  0   293.910278   -.000216   .000200 |   .  x.   .   |
1452 rR 42  7  0   294.720366   -.000213   .000200 |   .  x.   .   |
1453 rR 43  7  0   295.533991   -.000157   .000200 |   .  v.   .   |
1454 rR 44  7  0   296.350970   -.000207   .000200 |   .  x.   .   |
1455 rR 45  7  0   297.171520   -.000120   .000200 |   .  v.   .   |
1456 rR 46  7  0   297.995346   -.000165   .000200 |   .  v.   .   |
1457 rR 47  7  0   298.823476    .000713   .001000 |   .   .  v.   |
1458 rR 48  7  0   299.653342   -.000029   .000200 |   .   v   .   |
1459 rR 49  7  0   300.487298   -.000011   .000200 |   .   v   .   |
1460 rR 50  7  0   301.324416   -.000136   .000200 |   .  v.   .   |
1461 rR 51  7  0   302.164956   -.000118   .000200 |   .  v.   .   |
1462 rQ 21  9  0   263.799144   -.000201   .000200 |   .  x.   .   |
1463 rQ 22  9  0   263.863305   -.000095   .000200 |   .   v   .   |
1464 rQ 23  9  0   263.929628   -.001209   .002000 |  v.   .   .   |
1465 rQ 24  9  0   264.001235   -.000467   .000500 |   . v .   .   |
1466 rQ 25  9  0   264.075900   -.000141   .000200 |   .  v.   .   |
1467 rQ 26  9  0   264.154204    .000308   .000500 |   .   . v  .   |
1468 rQ 27  9  0   264.235181   -.000126   .000200 |   .  v.   .   |
1469 rQ 28  9  0   264.320154   -.000156   .000200 |   .  v.   .   |
1470 rQ 29  9  0   264.408482   -.000458   .000500 |   . v .   .   |
1471 rQ 30  9  0   264.502199    .000973   .002000 |   .   .   v   |
1472 rQ 31  9  0   264.596178   -.001015   .001000 |   x   .   .   |
1473 rQ 32  9  0   264.697908    .001044   .002000 |   .   .   v   |
1474 rQ 33  9  0   264.800156   -.000099   .000200 |   .   v   .   |
1475 rQ 34  9  0   264.907343   -.000039   .000200 |   .   v   .   |
1476 rQ 35  9  0   265.017508   -.000744   .001000 |  .v   .   .   |
1477 rQ 36  9  0   265.132604   -.000269   .000300 |   .  v.   .   |
1478 rQ 37  9  0   265.251161   -.000086   .000200 |   .   v   .   |
1479 rQ 38  9  0   265.373437    .000063   .000200 |   .   v   .   |
1480 rQ 39  9  0   265.499389    .000141   .000200 |   .  .v   .   |
1481 rQ 40  9  0   265.628844   -.000019   .000200 |   .   v   .   |
1482 rQ 41  9  0   265.762045   -.000166   .000200 |   .  v.   .   |
1483 rQ 42  9  0   265.899183   -.000095   .000200 |   .   v   .   |
1484 rQ 43  9  0   266.040627    .000574   .001000 |   .   . v .   |
1485 rQ 44  9  0   266.184684    .000166   .000200 |   .  .v   .   |
1486 rQ 45  9  0   266.332733    .000074   .000200 |   .   v   .   |
1487 rQ 46  9  0   266.485771    .001315   .002000 |   .   .   . v |
1488 rQ 47  9  0   266.638903   -.000988   .001000 |   v   .   .   |
1489 rQ 48  9  0   266.798125   -.000819   .001000 |  .v   .   .   |
1490 rQ 49  9  0   266.961384   -.000210   .000200 |   .  x.   .   |
1491 rQ 50  9  0   267.127901    .000080   .000200 |   .   v   .   |
1492 rQ 51  9  0   267.296984   -.000619   .001000 |   . v .   .   |
1493 rQ 52  9  0   267.470831   -.000087   .000200 |   .   v   .   |
1494 rQ 53  9  0   267.647620   -.000125   .000200 |   .  v.   .   |
1495 rQ 54  9  0   267.826344   -.001718   .002000 |v   .   .   .   |
1496 rQ 55  9  0   268.011356   -.000490   .000500 |   . v .   .   |
1497 rQ 56  9  0   268.199165    .000088   .000200 |   .   v   .   |
1498 rQ 57  9  0   268.388658   -.001074   .002000 |   v   .   .   |
1499 rQ 58  9  0   268.583808    .000019   .000200 |   .   v   .   |
1500 rQ 59  9  0   268.780608   -.000619   .001000 |   . v .   .   |
1501 rQ 60  9  0   268.981940   -.000084   .000300 |   .   v   .   |
1502 rQ 61  9  0   269.186276    .000116   .000200 |   .  .v   .   |
1503 rQ 62  9  0   269.393388   -.000225   .001000 |   .  v.   .   |
1504 rQ 63  9  0   269.605049    .000687   .001000 |   .   . v .   |
1505 rQ 64  9  0   269.818800    .000413   .000300 |   .   . x  .   |
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1506 rQ 65  9  0    270.035090    -.000576   .002000 |   . v .   .   |
1507 rQ 66  9  0    270.256976     .000796   .001000 |   .   .  v.   |
1508 rR  9  9  0    269.997902     .000065   .000200 |   .   v   .   |
1509 rR 10  9  0    270.697119     .000051   .000200 |   .   v   .   |
1510 rR 11  9  0    271.399197     .000060   .000200 |   .   v   .   |
1511 rR 12  9  0    272.104109     .000032   .000200 |   .   v   .   |
1512 rR 13  9  0    272.811984     .000058   .000200 |   .   v   .   |
1513 rR 14  9  0    273.522914     .000191   .000200 |   .   .v  .   |
1514 rR 15  9  0    274.236441    -.000067   .000200 |   .   v   .   |
1515 rR 16  9  0    274.953353     .000028   .000200 |   .   v   .   |
1516 rR 17  9  0    275.673206    -.000012   .000200 |   .   v   .   |
1517 rR 18  9  0    276.396262     .000030   .000200 |   .   v   .   |
1518 rR 19  9  0    277.122487     .000074   .000200 |   .   v   .   |
1519 rR 20  9  0    277.851914     .000108   .000200 |   .   .v  .   |
1520 rR 21  9  0    278.584415    -.000042   .000200 |   .   v   .   |
1521 rR 22  9  0    279.320383    -.000028   .000200 |   .   v   .   |
1522 rR 23  9  0    280.059890     .000180   .000300 |   .   .v  .   |
1523 rR 24  9  0    280.802370    -.000026   .000200 |   .   v   .   |
1524 rR 25  9  0    281.548391    -.000118   .000200 |   .  v.   .   |
1525 rR 26  9  0    282.297938    -.000145   .000200 |   .  v.   .   |
1526 rR 27  9  0    283.051136    -.000017   .000200 |   .   v   .   |
1527 rR 28  9  0    283.807698    -.000050   .000200 |   .   v   .   |
1528 rR 29  9  0    284.567649    -.000245   .000200 |   .  x.   .   |
1529 rR 30  9  0    285.331491    -.000122   .000200 |   .  v.   .   |
1530 rR 31  9  0    286.099203     .000280   .000500 |   .   .v  .   |
1531 rR 32  9  0    286.869672    -.000167   .000200 |   .  v.   .   |
1532 rR 33  9  0    287.644129    -.000241   .000200 |   .  x.   .   |
1533 rR 34  9  0    288.422406    -.000116   .000200 |   .  v.   .   |
1534 rR 35  9  0    289.204044    -.000255   .000200 |   .  x.   .   |
1535 rR 36  9  0    289.989601    -.000097   .000200 |   .   v   .   |
1536 rR 37  9  0    290.778672    -.000044   .000200 |   .   v   .   |
1537 rR 38  9  0    291.571027    -.000317   .000300 |   . x .   .   |
1538 rR 39  9  0    292.366184    -.001388   .002000 | v .   .   .   |
1539 rR 40  9  0    293.167332    -.000055   .000200 |   .   v   .   |
1540 rR 41  9  0    293.970451    -.000323   .000300 |   . x .   .   |
1541 rR 42  9  0    294.777555    -.000161   .000200 |   .  v.   .   |
1542 rR 43  9  0    295.588650     .000457   .001000 |   .   . v .   |
1543 rR 44  9  0    296.402064    -.000122   .000200 |   .  v.   .   |
1544 rR 45  9  0    297.219585    -.000087   .000200 |   .   v   .   |
1545 rR 46  9  0    298.040525    -.000104   .000200 |   .  v.   .   |
1546 rR 47  9  0    298.864938    -.000096   .000200 |   .   v   .   |
1547 rR 48  9  0    299.692723    -.000139   .000200 |   .  v.   .   |
1548 rR 49  9  0    300.524035    -.000054   .000200 |   .   v   .   |
1549 rR 50  9  0    301.358640    -.000049   .000200 |   .   v   .   |
1550 rR 51  9  0    302.197031     .000393   .001000 |   .   . v .   |
1551 rR 52  9  0    303.037672    -.000237   .000200 |   .  x.   .   |
1552 rR 53  9  0    303.882400    -.000078   .000200 |   .   v   .   |
1553 rR 54  9  0    304.730304    -.000014   .000200 |   .   v   .   |
1554 rR 55  9  0    305.581194    -.000211   .000200 |   .  x.   .   |
1555 rR 56  9  0    306.435541    -.000171   .000200 |   .  v.   .   |
1556 rR 57  9  0    307.293144    -.000070   .000200 |   .   v   .   |
1557 rR 58  9  0    308.153932     .000045   .000200 |   .   v   .   |
1558 rR 59  9  0    309.017710     .000006   .000200 |   .   v   .   |
1559 rR 60  9  0    309.884975     .000334   .000200 |   .   . x .   |
1560 rR 61  9  0    310.755168     .000495   .000500 |   .   . v .   |
1561 rR 62  9  0    311.627855     .000080   .000200 |   .   v   .   |
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1562 rR 10 10  0   270.759960    .000083   .000200 |   .   v   .   |
1563 rR 11 10  0   271.461637    .000045   .000200 |   .   v   .   |
1564 rR 12 10  0   272.166176    .000022   .000200 |   .   v   .   |
1565 rR 13 10  0   272.873585   -.000009   .000200 |   .   v   .   |
1566 rR 14 10  0   273.584044    .000097   .000200 |   .   v   .   |
1567 rR 15 10  0   274.297314    .000065   .000200 |   .   v   .   |
1568 rR 16 10  0   275.013687    .000149   .000200 |   .   .v  .   |
1569 rR 17 10  0   275.732796   -.000058   .000200 |   .   v   .   |
1570 rR 18 10  0   276.455225   -.000014   .000200 |   .   v   .   |
1571 rR 19 10  0   277.180799    .000066   .000200 |   .   v   .   |
1572 rR 20 10  0   277.909230   -.000149   .000200 |   .   v.  .   |
1573 rR 21 10  0   278.641101   -.000118   .000200 |   .   v.  .   |
1574 rR 22 10  0   279.377465    .001169   .001000 |   .   .   .x  |
1575 rR 23 10  0   280.114467   -.000183   .000200 |   .   v.  .   |
1576 rR 24 10  0   280.857367    .001045   .001000 |   .   .   x   |
1577 rR 25 10  0   281.601080   -.000272   .000300 |   .   v.  .   |
1578 rR 26 10  0   282.349691   -.000084   .000200 |   .   v   .   |
1579 rR 27 10  0   283.101944    .000317   .000300 |   .   . x .   |
1580 rR 28 10  0   283.856979    .000040   .000200 |   .   v   .   |
1581 rR 29 10  0   284.615863    .000122   .000200 |   .   .v  .   |
1582 rR 30 10  0   285.378399    .000340   .000500 |   .   . v .   |
1583 rR 31 10  0   286.143662   -.000254   .000200 |   .   x.  .   |
1584 rR 32 10  0   286.913262   -.000068   .000200 |   .   v   .   |
1585 rR 33 10  0   287.686031   -.000286   .000200 |   .   x.  .   |
1586 rR 34 10  0   288.461160   -.001730   .002000 |v  .   .   .   |
1587 rR 35 10  0   289.243006   -.000050   .000200 |   .   v   .   |
1588 rR 36 10  0   290.026646   -.000175   .000200 |   .   v.  .   |
1589 rR 37 10  0   290.814113   -.000074   .000200 |   .   v   .   |
1590 rR 38 10  0   291.605089   -.000061   .000200 |   .   v   .   |
1591 rR 39 10  0   292.399722    .000014   .000200 |   .   v   .   |
1592 rR 40 10  0   293.197706   -.000146   .000200 |   .   v.  .   |
1593 rR 41 10  0   293.999380   -.000191   .000200 |   .   v.  .   |
1594 rR 42 10  0   294.804679   -.000176   .000200 |   .   v.  .   |
1595 rR 43 10  0   295.613428   -.000259   .000200 |   .   x.  .   |
1596 rR 44 10  0   296.425843   -.000208   .000200 |   .   x.  .   |
1597 rR 45 10  0   297.241958    .000029   .000200 |   .   v   .   |
1598 rR 46 10  0   298.061046   -.000256   .000200 |   .   x.  .   |
1599 rR 47 10  0   298.884117   -.000030   .000200 |   .   v   .   |
1600 rR 48 10  0   299.710282   -.000162   .000200 |   .   v.  .   |
1601 rR 49 10  0   300.540129   -.000040   .000200 |   .   v   .   |
1602 rR 50 10  0   301.373307    .000008   .000200 |   .   v   .   |
1603 rR 51 10  0   302.209780   -.000029   .000200 |   .   v   .   |
1604 rR 52 10  0   303.049706    .000031   .000200 |   .   v   .   |
1605 rR 53 10  0   303.892865   -.000006   .000200 |   .   v   .   |
1606 rR 54 10  0   304.740070    .000697   .000500 |   .   . x .   |
1607 rR 55 10  0   305.589385    .000231   .000200 |   .   .x  .   |
1608 rR 56 10  0   306.442572    .000382   .000200 |   .   . x .   |
1609 rR 57 10  0   307.299329    .000875   .000200 |   .   .   *.  |
1610 rR 11 11  0   271.522147    .000038   .000200 |   .   v   .   |
1611 rR 12 11  0   272.226287   -.000023   .000200 |   .   v   .   |
1612 rR 13 11  0   272.933472    .000093   .000200 |   .   v   .   |
1613 rR 14 11  0   273.643265   -.000083   .000200 |   .   v   .   |
1614 rR 15 11  0   274.356191   -.000063   .000200 |   .   v   .   |
1615 rR 16 11  0   275.070107   -.002025   .002000 x   .   .   .   |
1616 rR 17 11  0   275.790726   -.000295   .000300 |   .   v.  .   |
1617 rR 18 11  0   276.513003    .000043   .000200 |   .   v   .   |
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1618 rR 19 11  0   277.238124    .000134   .000200 |   .   .v   .   |
1619 rR 20 11  0   277.966304    .000153   .000200 |   .   .v   .   |
1620 rR 21 11  0   278.697643    .000157   .000200 |   .   .v   .   |
1621 rR 22 11  0   279.429509   -.002525   .003000 v   .   .   .   |
1622 rR 23 11  0   280.169708   -.000130   .000200 |   .   v.   .   |
1623 rR 24 11  0   280.910944    .000008   .000200 |   .   v    .   |
1624 rR 25 11  0   281.656644    .001277   .002000 |   .   .   .v   |
1625 rR 26 11  0   282.405352    .002184   .003000 |   .   .   .   v
1626 rR 27 11  0   283.154454    .000080   .000200 |   .   v    .   |
1627 rR 28 11  0   283.908033   -.000986   .002000 |   v   .   .   |
1628 rR 29 11  0   284.667252    .000121   .000200 |   .   .v   .   |
1629 rR 30 11  0   285.428588   -.000151   .000200 |   .   v.   .   |
1630 rR 31 11  0   286.193795   -.000071   .000200 |   .   v    .   |
1631 rR 32 11  0   286.962594    .000061   .000200 |   .   v    .   |
1632 rR 34 11  0   288.510845    .000289   .000300 |   .   .v   .   |
1633 rR 35 11  0   289.290150    .000213   .000200 |   .   .x   .   |
1634 rR 36 11  0   290.072638   -.000270   .000300 |   .   v.   .   |
1635 rR 37 11  0   290.859485    .000013   .000200 |   .   v    .   |
1636 rR 38 11  0   291.649431   -.000201   .000200 |   .   x.   .   |
1637 rR 39 11  0   292.443330   -.000055   .000200 |   .   v    .   |
1638 rR 40 11  0   293.242509    .001784   .002000 |   .   .   .   v|
1639 rR 41 11  0   294.042113    .000467   .001000 |   .   . v  .   |
1640 rR 42 11  0   294.846103   -.000034   .000200 |   .   v    .   |
1641 rR 43 11  0   295.654180   -.000005   .000200 |   .   v    .   |
1642 rR 44 11  0   296.465704   -.000072   .000200 |   .   v    .   |
1643 rR 45 11  0   297.280809   -.000086   .000200 |   .   v    .   |
1644 rR 46 11  0   298.099025   -.000498   .000500 |   . v .    .   |
1645 rR 47 11  0   298.921567   -.000075   .000200 |   .   v    .   |
1646 rR 48 11  0   299.747321    .000090   .000200 |   .   v    .   |
1647 rR 49 11  0   300.576208   -.000061   .000200 |   .   v    .   |
1648 rR 50 11  0   301.408605   -.000129   .000200 |   .   v.   .   |
1649 rR 51 11  0   302.244405   -.000200   .000200 |   .   v.   .   |
1650 rR 52 11  0   303.085064    .001207   .002000 |   .   .   .v   |
1651 rR 53 11  0   303.926508    .000041   .000200 |   .   v    .   |
1652 rR 54 11  0   304.772833    .000421   .000500 |   .   . v  .   |
1653 rR 55 11  0   305.621685    .000016   .000200 |   .   v    .   |
1654 rR 56 11  0   306.474568    .000355   .000500 |   .   . v  .   |
1655 rR 57 11  0   307.329930   -.000091   .000200 |   .   v    .   |
1656 rR 58 11  0   308.189008   -.000061   .000200 |   .   v    .   |
1657 rR 59 11  0   309.051397    .000062   .000200 |   .   v    .   |
1658 rR 60 11  0   309.916801    .000005   .000200 |   .   v    .   |
1659 rQ 29 12  0   264.584044    .000337   .000200 |   .   . x  .   |
1660 rQ 34 12  0   265.069031   -.000099   .000200 |   .   v    .   |
1661 rQ 39 12  0   265.645038   -.000366   .000200 |   . x .    .   |
1662 rQ 40 12  0   265.772056    .000333   .000500 |   .   . v  .   |
1663 rQ 41 12  0   265.901635   -.000108   .000200 |   .   v.   .   |
1664 rQ 42 12  0   266.035531    .000067   .000200 |   .   v    .   |
1665 rQ 43 12  0   266.172623   -.000261   .000200 |   .   x.   .   |
1666 rQ 45 12  0   266.458701   -.000096   .000200 |   .   v    .   |
1667 rQ 47 12  0   266.759303   -.000113   .000200 |   .   v.   .   |
1668 rR 12 12  0   272.284486    .000042   .000200 |   .   v    .   |
1669 rR 13 12  0   272.991089    .000000   .000200 |   .   v    .   |
1670 rR 14 12  0   273.700422   -.000189   .000300 |   .   v.   .   |
1671 rR 15 12  0   274.413164    .000125   .000200 |   .   .v   .   |
1672 rR 16 12  0   275.128430    .000022   .000200 |   .   v    .   |
1673 rR 17 12  0   275.846741   -.000011   .000200 |   .   v    .   |
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1674 rR 18 12  0   276.568183    .000077   .000200 |   .   v   .   |
1675 rR 19 12  0   277.292514    .000006   .000200 |   .   v   .   |
1676 rR 20 12  0   278.020202    .000209   .000200 |   .   .x  .   |
1677 rR 21 12  0   278.751161    .000559   .001000 |   .   . v .   |
1678 rR 22 12  0   279.484717    .000346   .000500 |   .   . v .   |
1679 rR 23 12  0   280.221443    .000105   .000200 |   .   .v  .   |
1680 rR 24 12  0   280.961755    .000213   .000200 |   .   .x  .   |
1681 rR 25 12  0   281.705076    .000057   .000200 |   .   v   .   |
1682 rR 26 12  0   282.452060    .000256   .000300 |   .   .v  .   |
1683 rR 27 12  0   283.201831   -.000102   .000200 |   .   v.  .   |
1684 rR 28 12  0   283.955498    .000061   .000200 |   .   v   .   |
1685 rR 29 12  0   284.712535    .000188   .000200 |   .   .v  .   |
1686 rR 30 12  0   285.472739    .000047   .000200 |   .   v   .   |
1687 rR 31 12  0   286.236331   -.000166   .000200 |   .   v.  .   |
1688 rR 32 12  0   287.001673   -.002113   .003000 v   .   .   .   |
1689 rR 33 12  0   287.774497   -.000082   .000200 |   .   v   .   |
1690 rR 34 12  0   288.548770   -.000122   .000200 |   .   v.  .   |
1691 rR 35 12  0   289.326864    .000123   .000200 |   .   .v  .   |
1692 rR 36 12  0   290.108197    .000061   .000200 |   .   v   .   |
1693 rR 37 12  0   290.892937   -.000149   .000200 |   .   v.  .   |
1694 rR 38 12  0   291.681322   -.000273   .000300 |   .   v.  .   |
1695 rR 39 12  0   292.473564   -.000102   .000200 |   .   v.  .   |
1696 rR 40 12  0   293.269257   -.000041   .000200 |   .   v   .   |
1697 rR 41 12  0   294.068553    .000067   .000200 |   .   v   .   |
1698 rR 42 12  0   294.871173   -.000053   .000200 |   .   v   .   |
1699 rR 43 12  0   295.677407   -.000101   .000200 |   .   v.  .   |
1700 rR 44 12  0   296.487062   -.000259   .000200 |   .   x.  .   |
1701 rR 45 12  0   297.300460   -.000193   .000200 |   .   v.  .   |
1702 rR 46 12  0   298.117557    .000067   .000300 |   .   v   .   |
1703 rR 47 12  0   298.937628   -.000186   .000200 |   .   v.  .   |
1704 rR 48 12  0   299.761489   -.000117   .000200 |   .   v.  .   |
1705 rR 49 12  0   300.589283    .000433   .000500 |   .   . v .   |
1706 rR 50 12  0   301.419125   -.000398   .000500 |   . v .   .   |
1707 rR 51 12  0   302.253544   -.000061   .000200 |   .   v   .   |
1708 rR 52 12  0   303.091187    .000114   .000200 |   .   .v  .   |
1709 rR 53 12  0   303.932150    .000246   .000500 |   .   .v  .   |
1710 rR 54 12  0   304.776137    .000063   .000200 |   .   v   .   |
1711 rR 55 12  0   305.623522   -.000038   .000200 |   .   v   .   |
1712 rR 56 12  0   306.474568    .000232   .000500 |   .   .v  .   |
1713 rR 57 12  0   307.328324   -.000054   .000200 |   .   v   .   |
1714 rR 58 12  0   308.185494   -.000167   .000200 |   .   v.  .   |
1715 rR 59 12  0   309.045772   -.000387   .000200 |   . x .   .   |
1716 rR 13 13  0   273.046858    .000037   .000200 |   .   v   .   |
1717 rR 14 13  0   273.755669   -.000225   .000200 |   .   x.  .   |
1718 rR 15 13  0   274.467798   -.000056   .000200 |   .   v   .   |
1719 rR 16 13  0   275.182651   -.000080   .000200 |   .   v   .   |
1720 rR 17 13  0   275.900415   -.000141   .000200 |   .   v.  .   |
1721 rR 18 13  0   276.621430    .000066   .000200 |   .   v   .   |
1722 rR 19 13  0   277.345194    .000008   .000200 |   .   v   .   |
1723 rR 20 13  0   278.072104    .000045   .000200 |   .   v   .   |
1724 rR 21 13  0   278.800615   -.001403   .002000 | v .   .   .   |
1725 rR 22 13  0   279.535148    .000049   .000200 |   .   v   .   |
1726 rR 23 13  0   280.270638   -.000699   .000500 |   . x .   .   |
1727 rR 24 13  0   281.010350   -.000418   .000200 |   . * .   .   |
1728 rR 25 13  0   281.756150    .002722   .003000 |   .   .   .   v
1729 rR 26 13  0   282.499417    .000066   .000200 |   .   v   .   |
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1730 rR 27 13  0   283.245415   -.003155   .003000 x   .   .   .   |
1731 rR 28 13  0   284.001340    .000221   .000200 |   .   .x  .   |
1732 rR 14 14  0   273.809436    .000264   .000200 |   .   .x  .   |
1733 rR 15 14  0   274.521137    .000485   .001000 |   .   . v .   |

1734 rR 16 14  0   275.235607    .000577   .000500 |   .   . x .   |
1735 rR 17 14  0   275.952873    .000539   .000500 |   .   . x .   |
1736 rR 18 14  0   276.673229    .000632   .000500 |   .   . x .   |
1737 rR 19 14  0   277.396617    .000768   .001000 |   .   .  v.   |
1738 rR 20 14  0   278.120516   -.001606   .002000 | v .   .   .   |
1739 rR 21 14  0   278.850907   -.000543   .001000 |   . v .   .   |
1740 rR 22 14  0   279.584068    .000201   .000200 |   .   .x  .   |
1741 rR 23 14  0   280.319391   -.000015   .000200 |   .   v   .   |
1742 rR 24 14  0   281.057431   -.000671   .001000 |   . v .   .   |
1743 rR 25 14  0   281.799692   -.000296   .000500 |   .  v.   .   |
1744 rR 26 14  0   282.545289    .000192   .000200 |   .   .v  .   |
1745 rR 28 14  0   284.045269    .000153   .000200 |   .   .v  .   |
1746 rR 29 14  0   284.800105    .000018   .000200 |   .   v   .   |
1747 rR 30 14  0   285.557967   -.000438   .000500 |   . v .   .   |
1748 rR 31 14  0   286.319296   -.000802   .001000 |   .v  .   .   |
1749 rR 32 14  0   287.085089   -.000100   .000200 |   .  v.   .   |
1750 rR 33 14  0   287.853530   -.000173   .000200 |   .  v.   .   |
1751 rR 15 15  0   274.571231   -.000202   .000200 |   .  x.   .   |
1752 rR 16 15  0   275.283200   -.002098   .002000 x   .   .   .   |
1753 rR 17 15  0   276.002202    .000130   .000200 |   .   .v  .   |
1754 rR 18 15  0   276.721752   -.000032   .000200 |   .   v   .   |
1755 rR 19 15  0   277.443936   -.000525   .001000 |   . v .   .   |
1756 rR 20 15  0   278.170105   -.000031   .000200 |   .   v   .   |
1757 rR 21 15  0   278.898440   -.000399   .000500 |   . v .   .   |
1758 rR 22 15  0   279.630803    .000201   .000200 |   .   .x  .   |
1759 rR 23 15  0   280.365405   -.000052   .000200 |   .   v   .   |
1760 rR 24 15  0   281.103516    .000080   .000200 |   .   v   .   |
1761 rR 25 15  0   281.844650    .000079   .000200 |   .   v   .   |
1762 rR 26 15  0   282.588511   -.000384   .000500 |   . v .   .   |
1763 rR 27 15  0   283.335998   -.000441   .000500 |   . v .   .   |
1764 rR 29 15  0   284.841256   -.000053   .000200 |   .   v   .   |
1765 rR 30 15  0   285.598495   -.000199   .000200 |   .  v.   .   |
1766 rR 31 15  0   286.357702   -.001712   .002000 |v  .   .   .   |
1767 rR 32 15  0   287.123507    .000011   .000200 |   .   v   .   |
1768 rR 33 15  0   287.890660   -.000305   .001000 |   . v .   .   |
1769 rR 34 15  0   288.662718    .000878   .001000 |   .   .  v.   |
1770 rP 51  0  0   230.516501    .000023   .000200 |   .   v   .   |
1771 rP 52  0  0   229.935806    .000026   .000200 |   .   v   .   |
1772 rP 53  0  0   229.356866    .000002   .000200 |   .   v   .   |
1773 rP 54  0  0   228.779714   -.000018   .000200 |   .   v   .   |
1774 rP 55  0  0   228.204357   -.000025   .000200 |   .   v   .   |
1775 rP 56  0  0   227.630812    .000000   .000200 |   .   v   .   |
1776 rP 57  0  0   227.059077    .000053   .000200 |   .   v   .   |
1777 rP 58  0  0   226.489000   -.000014   .000200 |   .   v   .   |
1778 rP 59  0  0   225.920827    .000045   .000200 |   .   v   .   |
1779 rP 60  0  0   225.354626    .000298   .000500 |   .   .v  .   |
1780 rP 61  0  0   224.789607   -.000041   .000200 |   .   v   .   |
1781 rP 62  0  0   224.226672   -.000071   .000200 |   .   v   .   |
1782 rP 63  0  0   223.665702    .000091   .000200 |   .   v   .   |
1783 rP 64  0  0   223.106214   -.000037   .000200 |   .   v   .   |
1784 rP 65  0  0   222.548675    .000016   .000200 |   .   v   .   |
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1785 rP 66  0  0   221.992926    .000090   .000200 |   .   v   .   |
1786 rP 67  0  0   221.438729   -.000051   .000200 |   .   v   .   |
1787 rP 68  0  0   220.886395   -.000092   .000200 |   .   v   .   |
1788 rP 69  0  0   220.335958    .000000   .000200 |   .   v   .   |
1789 rP 70  0  0   219.787417    .000228   .000300 |   .   .v  .   |
1790 rP 71  0  0   219.240359    .000181   .000200 |   .   .v  .   |
1791 rP 72  0  0   218.695054    .000130   .000200 |   .   .v  .   |
1792 rP 73  0  0   218.151127   -.000297   .000200 |   .  x.   .   |
1793 rP 74  0  0   217.610009    .000333   .000500 |   .   . v .   |
1794 rP 75  0  0   217.069954    .000276   .000200 |   .   .x  .   |
1795 rP 76  0  0   216.530357   -.001070   .001000 |  x   .   .    |
1796 rP 77  0  0   215.994863   -.000058   .000200 |   .   v   .   |
1797 rP 78  0  0   215.459565   -.000592   .001000 |  . v .   .    |
1798 rP 79  0  0   214.926288   -.000845   .001000 |  .v  .   .    |
1799 rP 80  0  0   214.395187   -.000658   .001000 |  . v .   .    |
1800 rP 81  0  0   213.866503    .000212   .000200 |   .   .x  .   |
1801 rP 82  0  0   213.339319    .000850   .001000 |   .   .  v.   |
1802 rP 83  0  0   212.811863   -.000512   .000500 |  . x .   .    |
1803 rP 84  0  0   212.287949   -.000057   .000200 |   .   v   .   |
1804 rR 48  0  0   297.341863   -.000092   .000200 |   .   v   .   |
1805 rR 49  0  0   298.091291   -.000094   .000200 |   .   v   .   |
1806 rR 50  0  0   298.842192   -.000028   .000200 |   .   v   .   |
1807 rR 51  0  0   299.594378   -.000074   .000200 |   .   v   .   |
1808 rR 52  0  0   300.347996   -.000075   .000200 |   .   v   .   |
1809 rR 53  0  0   301.103011   -.000059   .000200 |   .   v   .   |
1810 rR 54  0  0   301.860010    .000570   .001000 |   .   . v .   |
1811 rR 55  0  0   302.617109   -.000065   .000200 |   .   v   .   |
1812 rR 56  0  0   303.376150   -.000111   .000200 |   .  v.   .   |
1813 rR 57  0  0   304.136655   -.000039   .000200 |   .   v   .   |
1814 rR 58  0  0   304.898389   -.000075   .000200 |   .   v   .   |
1815 rR 59  0  0   305.661471   -.000091   .000200 |   .   v   .   |
1816 rR 60  0  0   306.425914   -.000065   .000200 |   .   v   .   |
1817 rR 61  0  0   307.191630   -.000077   .000200 |   .   v   .   |
1818 rR 62  0  0   307.958673   -.000063   .000200 |   .   v   .   |
1819 rR 63  0  0   308.726975   -.000082   .000200 |   .   v   .   |
1820 rR 64  0  0   309.496609   -.000052   .000200 |   .   v   .   |
1821 rR 65  0  0   310.267416   -.000124   .000200 |   .  v.   .   |
1822 rR 66  0  0   311.039567   -.000115   .000200 |   .  v.   .   |
1823 rR 67  0  0   311.812934   -.000146   .000200 |   .  v.   .   |
1824 rR 68  0  0   312.587637   -.000087   .000200 |   .   v   .   |
1825 rR 69  0  0   313.363446   -.000158   .000200 |   .  v.   .   |
1826 rR 70  0  0   314.140698   -.000013   .000200 |   .   v   .   |
1827 rR 71  0  0   314.919080    .000046   .000200 |   .   v   .   |
1828 rR 72  0  0   315.698593    .000028   .000200 |   .   v   .   |
1829 rR 73  0  0   316.479196   -.000098   .000200 |   .   v   .   |
1830 rR 74  0  0   317.261006   -.000204   .000200 |   .  x.   .   |
1831 rR 75  0  0   318.043813   -.000490   .000500 |   . v .   .   |
1832 rR 76  0  0   318.828633    .000068   .000200 |   .   v   .   |
1833 rR 77  0  0   319.614041    .000057   .000200 |   .   v   .   |
1834 rR 78  0  0   320.397949   -.002602   .003000 v   .   .   .   |
1835 rR 79  0  0   321.188344    .000089   .000200 |   .   v   .   |
1836 rR 80  0  0   321.976860   -.000226   .000500 |   .  v.   .   |
1837 rR 81  0  0   322.767463    .000429   .000500 |   .   . v .   |
1838 rR 82  0  0   323.557845   -.000244   .000500 |   .  v.   .   |
1839 rR 83  0  0   324.350423    .000183   .000200 |   .   .v  .   |
1840 rR 84  0  0   325.144413    .000937   .001000 |   .   .   v   |
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1841	rP 50	3	0	233.362758	.000446	.000500	. . v .
1842	rP 51	3	0	232.868379	-.000370	.000200	. x . .
1843	rP 52	3	0	232.379982	.001275	.002000	. . .v
1844	rP 54	3	0	231.408573	-.000574	.000500	. x . .
1845	rP 55	3	0	230.929835	.000229	.000500	. .v .
1846	rP 56	3	0	230.453028	-.000517	.000500	. x . .
1847	rP 57	3	0	229.980664	-.000289	.000200	. x. .
1848	rP 58	3	0	229.511357	-.000461	.000500	. v . .
1849	rP 59	3	0	229.047312	.001180	.002000	. . .v
1850	rP 60	3	0	228.583844	-.000039	.000200	. v .
1851	rP 61	3	0	228.125572	.000512	.001000	. . v .
1852	rP 62	3	0	227.669109	-.000546	.000500	. x . .
1853	rP 63	3	0	227.217362	-.000293	.000200	. x. .
1854	rP 64	3	0	226.770137	.001086	.002000	. . v
1855	rP 65	3	0	226.322770	-.001062	.001000	x . .
1856	rP 66	3	0	225.881370	-.000618	.001000	. v . .
1857	rP 67	3	0	225.442654	-.000853	.001000	.v . .
1858	rP 68	3	0	225.008092	-.000288	.000200	. x. .
1859	rR 49	3	0	300.430333	-.000234	.000200	. x. .
1860	rR 50	3	0	301.271729	-.000098	.000200	. v .
1861	rR 51	3	0	302.116367	.000154	.000300	. .v .
1862	rR 52	3	0	302.964723	.001017	.002000	. . v
1863	rR 53	3	0	303.814245	-.000043	.000200	. v .
1864	rR 54	3	0	304.667802	-.000138	.000200	. v. .
1865	rR 55	3	0	305.524679	.000034	.000200	. v .
1866	rR 56	3	0	306.384266	-.000119	.000200	. v. .
1867	rR 57	3	0	307.247008	-.000134	.000200	. v. .
1868	rR 58	3	0	308.112962	.000064	.000200	. v .
1869	rR 59	3	0	308.981362	-.000273	.000200	. x. .
1870	rR 60	3	0	309.853124	-.000212	.000200	. x. .
1871	rR 61	3	0	310.727932	-.000049	.000200	. v .
1872	rR 62	3	0	311.605431	-.000123	.000200	. v. .
1873	rR 63	3	0	312.485771	-.000265	.000200	. x. .
1874	rR 64	3	0	313.369481	.000072	.000200	. v .
1875	rR 65	3	0	314.255613	-.000043	.000200	. v .
1876	rR 66	3	0	315.143799	-.000958	.001000	v . .
1877	rR 67	3	0	316.036539	-.000156	.000200	. v. .
1878	rR 68	3	0	316.929825	-.001627	.002000	v . . .
1879	rR 69	3	0	317.828811	-.000198	.000200	. v. .
1880	rR 70	3	0	318.729609	.000262	.000500	. .v .
1881	rR 71	3	0	319.632638	.000189	.000200	. .v .
1882	rR 72	3	0	320.538227	-.000068	.000200	. v .
1883	rR 73	3	0	321.446669	-.000198	.000500	. v. .
1884	rR 50	4	0	301.281968	.000061	.000300	. v .
1885	rR 51	4	0	302.126891	.001342	.002000	. . . v
1886	rR 52	4	0	302.972928	.000598	.001000	. . v .
1887	rR 53	4	0	303.821991	-.000240	.000200	. x. .
1888	rR 54	4	0	304.675108	-.000124	.000200	. v. .
1889	rR 55	4	0	305.531209	-.000104	.000200	. v. .
1890	rR 56	4	0	306.390123	-.000331	.000300	. x . .
1891	rR 57	4	0	307.252643	.000007	.000200	. v .
1892	rR 58	4	0	308.117747	-.000092	.000200	. v .
1893	rR 59	4	0	308.985997	-.000048	.000200	. v .
1894	rR 60	4	0	309.857169	-.000066	.000200	. v .
1895	rR 61	4	0	310.731274	-.000114	.000300	. v. .
1896	rR 62	4	0	311.608584	.000097	.000200	. v .

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1897 rR 50  5  0   301.294483    .000172   .000500 |   .   .v   .   |
1898 rR 51  5  0   302.138498    .001456   .002000 |   .   .    . v |
1899 rR 52  5  0   302.983487    .000536   .001000 |   .   . v .    |
1900 rR 53  5  0   303.832086    .000072   .000300 |   .   v    .   |
1901 rR 54  5  0   304.684011   -.000199   .000200 |   .  v.    .   |
1902 rR 55  5  0   305.539332   -.000185   .000200 |   .  v.    .   |
1903 rR 56  5  0   306.398019    .000104   .000200 |   .   .v   .   |
1904 rR 57  5  0   307.259192   -.000190   .000200 |   .  v.    .   |
1905 rR 58  5  0   308.123854   -.000043   .000200 |   .   v    .   |
1906 rR 59  5  0   308.991392   -.000048   .000200 |   .   v    .   |
1907 rR 60  5  0   309.862126    .000136   .000200 |   .   .v   .   |
1908 rR 50  6  0   301.308567   -.000100   .000200 |   .  v.    .   |
1909 rR 51  6  0   302.149562   -.000788   .001000 |  .v   .    .   |
1910 rR 52  6  0   302.994661   -.000587   .000500 |  . x  .    .   |
1911 rR 53  6  0   303.843234   -.000104   .000200 |   .  v.    .   |
1912 rR 54  6  0   304.694552   -.000045   .000200 |   .   v    .   |
1913 rR 55  6  0   305.548951   -.000050   .000200 |   .   v    .   |
1914 rR 56  6  0   306.406458   -.000069   .000200 |   .   v    .   |
1915 rR 57  6  0   307.267120   -.000034   .000200 |   .   v    .   |
1916 rR 58  6  0   308.130890    .000031   .000200 |   .   v    .   |
1917 rR 59  6  0   308.997703    .000084   .000200 |   .   v    .   |
1918 rR 60  6  0   309.867459    .000047   .000200 |   .   v    .   |
1919 rR 61  6  0   310.739686   -.000532   .001000 |  . v  .    .   |
1920 rR 62  6  0   311.616156    .000141   .000200 |   .   .v   .   |
1921 rR 63  6  0   312.495685    .000904   .001000 |   .   .    v   |
1922 rR 64  6  0   313.376694    .000200   .000200 |   .   .v   .   |
1923 rR 65  6  0   314.261072   -.000063   .000500 |   .   v    .   |
1924 rR 66  6  0   315.149224    .000543   .001000 |   .   . v .    |
1925 rR 67  6  0   316.039378    .000265   .000200 |   .   .x   .   |
1926 rR 50  7  0   301.324329   -.000223   .000200 |   .  x.    .   |
1927 rR 51  7  0   302.164875   -.000199   .000200 |   .  v.    .   |
1928 rR 52  7  0   303.006255   -.002594   .003000 v   .    .    .   |
1929 rR 53  7  0   303.855685   -.000169   .000200 |   .  v.    .   |
1930 rR 54  7  0   304.705996   -.000067   .000200 |   .   v    .   |
1931 rR 55  7  0   305.559430   -.000023   .000200 |   .   v    .   |
1932 rR 56  7  0   306.415980   -.000018   .000200 |   .   v    .   |
1933 rR 57  7  0   307.275841    .000166   .000200 |   .   .v   .   |
1934 rR 58  7  0   308.138627    .000167   .000200 |   .   .v   .   |
1935 rR 59  7  0   309.004221   -.000110   .000200 |   .  v.    .   |
1936 rR 60  7  0   309.873146   -.000118   .000200 |   .  v.    .   |
1937 rR 61  7  0   310.745240    .000004   .000200 |   .   v    .   |
1938 rR 62  7  0   311.620461    .000237   .000200 |   .   .x   .   |
1939 rR 63  7  0   312.498021   -.000186   .000200 |   .  v.    .   |
1940 rR 64  7  0   313.379476    .000316   .000500 |   .   . v  .   |
1941 rR 65  7  0   314.263059   -.000005   .000200 |   .   v    .   |
1942 rR 66  7  0   315.149224   -.000670   .001000 |  . v  .    .   |
1943 rR 67  7  0   316.039378   -.000252   .000500 |   .  v.    .   |
1944 rR 50  8  0   301.341467   -.000002   .000200 |   .   v    .   |
1945 rR 51  8  0   302.180751    .000009   .000200 |   .   v    .   |
1946 rR 52  8  0   303.022952   -.000353   .000500 |   . v .    .   |
1947 rR 53  8  0   303.868691   -.000441   .000500 |   . v .    .   |
1948 rR 54  8  0   304.718266    .000068   .000200 |   .   v    .   |
1949 rR 55  8  0   305.570450   -.000028   .000200 |   .   v    .   |
1950 rR 56  8  0   306.425914   -.000032   .000200 |   .   v    .   |
1951 rR 57  8  0   307.284673    .000094   .000200 |   .   v    .   |
1952 rR 58  8  0   308.146381    .000030   .000200 |   .   v    .   |
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1953 rR 59  8  0   309.011355    .000116   .000200 |   .   .v   .   |
1954 rR 60  8  0   309.879890    .000673   .000500 |   .   . x .   |
1955 rR 61  8  0   310.750540    .000278   .000200 |   .   .x   .   |
1956 rR 62  8  0   311.624755    .000405   .000200 |   .   . *  .   |
1957 rR 63  8  0   312.502110    .000652   .001000 |   .   . v .   |
1958 rR 64  8  0   313.383750    .002188   .003000 |   .   .   .   v
1959 rR 65  8  0   314.265561    .000921   .001000 |   .   .   v   |
1960 rR 50  9  0   301.358671   -.000018   .000200 |   .   v   .   |
1961 rR 51  9  0   302.197006    .000368   .000500 |   .   . v .   |
1962 rR 52  9  0   303.037825   -.000084   .000200 |   .   v   .   |
1963 rR 53  9  0   303.882334   -.000144   .000200 |   .  v.   .   |
1964 rR 54  9  0   304.730271   -.000047   .000200 |   .   v   .   |
1965 rR 55  9  0   305.581370   -.000035   .000200 |   .   v   .   |
1966 rR 56  9  0   306.435869    .000157   .000200 |   .   .v   .   |
1967 rR 57  9  0   307.293367    .000153   .000300 |   .   .v   .   |
1968 rR 58  9  0   308.154028    .000141   .000500 |   .   .v   .   |
1969 rR 59  9  0   309.017748    .000044   .001000 |   .   v   .   |
1970 rR 60  9  0   309.885083    .000442   .001000 |   .   . v .   |
1971 rR 61  9  0   310.755232    .000559   .001000 |   .   . v .   |
1972 rR 62  9  0   311.627936    .000161   .002000 |   .   .v   .   |
1973 rR 50 10  0   301.373478    .000179   .000200 |   .   .v   .   |
1974 rR 51 10  0   302.209546   -.000263   .000200 |   .  x.   .   |
1975 rR 52 10  0   303.049818    .000143   .000200 |   .   .v   .   |
1976 rR 53 10  0   303.892525   -.000346   .000500 |   . v .   .   |
1977 rR 54 10  0   304.739339   -.000034   .000200 |   .   v   .   |
1978 rR 55 10  0   305.589262    .000108   .000200 |   .   .v   .   |
1979 rR 56 10  0   306.442110   -.000080   .000500 |   .   v   .   |
1980 rR 57 10  0   307.298493    .000039   .000500 |   .   v   .   |
1981 rR 58 10  0   308.158464    .000543   .001000 |   .   . v .   |
1982 rR 59 10  0   309.021623    .001058   .002000 |   .   .   v   |
1983 rR 60 10  0   309.886854    .000494   .000500 |   .   . v .   |
1984 rR 61 10  0   310.755232   -.000050   .000200 |   .   v   .   |
1985 rR 62 10  0   311.627936    .000632   .000500 |   .   . x .   |
1986 rR 63 10  0   312.502110   -.000292   .000500 |   . v.   .   |
1987 rR 64 10  0   313.381319    .000769   .000500 |   .   .  x.   |
1988 rR 65 10  0   314.261072   -.000651   .001000 |   . v .   .   |
1989 rR 66 10  0   315.146068    .000170   .000200 |   .   .v   .   |
1990 rR 67 10  0   316.033464    .000416   .000200 |   .   . *  .   |
1991 rR 68 10  0   316.923601    .000452   .000200 |   .   . *  .   |
1992 rR 69 10  0   317.816272    .000094   .000200 |   .   v   .   |
1993 rR 50 11  0   301.408862    .000128   .000200 |   .   .v   .   |
1994 rR 51 11  0   302.244800    .000195   .000500 |   .   .v   .   |
1995 rR 52 11  0   303.083911    .000054   .000200 |   .   v   .   |
1996 rR 53 11  0   303.926329   -.000138   .000200 |   .  v.   .   |
1997 rR 54 11  0   304.771866   -.000546   .001000 |   . v .   .   |
1998 rR 55 11  0   305.622041    .000372   .000200 |   .   . x .   |
1999 rR 56 11  0   306.474411    .000198   .000200 |   .   .v   .   |
2000 rR 57 11  0   307.330154    .000133   .000200 |   .   .v   .   |
2001 rR 58 11  0   308.189118    .000049   .000200 |   .   v   .   |
2002 rR 59 11  0   309.051295   -.000040   .000200 |   .   v   .   |
2003 rR 60 11  0   309.916950    .000154   .000200 |   .   .v   .   |
2004 rR 61 11  0   310.785615    .000186   .000200 |   .   .v   .   |
2005 rQ 41 12  0   265.901586   -.000157   .000200 |   .  v.   .   |
2006 rR 12 12  0   272.284542    .000098   .000200 |   .   v   .   |
2007 rR 13 12  0   272.991194    .000105   .000200 |   .   .v   .   |
2008 rR 14 12  0   273.700518   -.000093   .000200 |   .   v   .   |
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2009 rR 15 12  0   274.413275    .000236   .000200 |   .   .x   .   |
2010 rR 16 12  0   275.128428    .000020   .000200 |   .   v    .   |
2011 rR 17 12  0   275.846434   -.000318   .000500 |   . v .    .   |
2012 rR 18 12  0   276.568221    .000115   .000200 |   .   .v   .   |
2013 rR 19 12  0   277.292609    .000101   .000200 |   .   .v   .   |
2014 rR 20 12  0   278.020234    .000241   .000200 |   .   .x   .   |
2015 rR 21 12  0   278.751083    .000481   .000500 |   .   . v  .   |
2016 rR 22 12  0   279.484914    .000543   .001000 |   .   .  v .   |
2017 rR 24 12  0   280.962528    .000986   .001000 |   .   .    v   |
2018 rR 25 12  0   281.705406    .000387   .000500 |   .   . v  .   |
2019 rR 26 12  0   282.451909    .000105   .000200 |   .   .v   .   |
2020 rR 27 12  0   283.201909   -.000024   .000200 |   .   v    .   |
2021 rR 28 12  0   283.955496    .000059   .000200 |   .   v    .   |
2022 rR 29 12  0   284.712583    .000236   .000200 |   .   .x   .   |
2023 rR 30 12  0   285.473185    .000493   .001000 |   .   . v  .   |
2024 rR 31 12  0   286.236506    .000009   .000200 |   .   v    .   |
2025 rR 32 12  0   287.001733   -.002053   .002000 x   .   .    .   |
2026 rR 33 12  0   287.774755    .000176   .000200 |   .   .v   .   |
2027 rR 34 12  0   288.548855   -.000037   .000200 |   .   v    .   |
2028 rR 35 12  0   289.327274    .000533   .001000 |   .   .  v .   |
2029 rR 36 12  0   290.107840   -.000296   .000200 |   .  x.    .   |
2030 rR 37 12  0   290.892734   -.000352   .000500 |   . v .    .   |
2031 rR 38 12  0   291.679808   -.001787   .002000 |v   .   .    .   |
2032 rR 39 12  0   292.473799    .000133   .000200 |   .   .v   .   |
2033 rR 40 12  0   293.269063   -.000235   .000200 |   .  x.    .   |
2034 rR 41 12  0   294.068789    .000303   .000500 |   .   . v  .   |
2035 rR 42 12  0   294.871448    .000222   .000500 |   .   .v   .   |
2036 rR 43 12  0   295.677327   -.000181   .000200 |   .  v.    .   |
2037 rR 44 12  0   296.487234   -.000087   .000200 |   .   v    .   |
2038 rR 45 12  0   297.298662   -.001991   .002000 v   .   .    .   |
2039 rR 46 12  0   298.117337   -.000153   .000200 |   . v.     .   |
2040 rR 47 12  0   298.937513   -.000301   .000200 |   . x .    .   |
2041 rR 48 12  0   299.761547   -.000059   .000200 |   .   v    .   |
2042 rR 49 12  0   300.589352    .000502   .000500 |   .   .  x .   |
2043 rR 50 12  0   301.419586    .000063   .000200 |   .   v    .   |
2044 rR 51 12  0   302.253691    .000086   .000200 |   .   v    .   |
2045 rR 52 12  0   303.088721   -.002352   .003000 v   .   .    .   |
2046 rR 53 12  0   303.932030    .000126   .000200 |   .   .v   .   |
2047 rR 54 12  0   304.776216    .000142   .000200 |   .   .v   .   |
2048 rR 55 12  0   305.625242    .001682   .002000 |   .   .    . v |
2049 rR 56 12  0   306.474411    .000075   .000200 |   .   v    .   |
2050 rR 57 12  0   307.328501    .000123   .000200 |   .   .v   .   |
2051 rR 58 12  0   308.185543   -.000118   .000200 |   .  v.    .   |
2052 rR 59 12  0   309.045509   -.000650   .001000 |   . v .    .   |
2053 rR 60 12  0   309.910075    .000229   .000200 |   .   .x   .   |
2054 rR 61 12  0   310.777249    .000551   .000500 |   .   .  x .   |
2055 rR 62 12  0   311.647449    .000761   .000500 |   .   .  x.    |
2056 pP 52  1  0   229.932634    .000029   .000200 |   .   v    .   |
2057 pP 53  1  0   229.353857    .000055   .000200 |   .   v    .   |
2058 pP 54  1  0   228.776816    .000039   .000200 |   .   v    .   |
2059 pP 55  1  0   228.201581    .000053   .000200 |   .   v    .   |
2060 pP 56  1  0   227.628140    .000085   .000200 |   .   v    .   |
2061 pP 57  1  0   227.056373    .000015   .000200 |   .   v    .   |
2062 pP 58  1  0   226.486478    .000042   .000200 |   .   v    .   |
2063 pP 59  1  0   225.918341    .000053   .000200 |   .   v    .   |
2064 pP 60  1  0   225.351993    .000080   .000200 |   .   v    .   |
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2065	pP 61	1	0	224.787327	.000017	.000200	. v .
2066	pP 62	1	0	224.224525	.000047	.000200	. v .
2067	pP 63	1	0	223.663543	.000128	.000200	. .v .
2068	pP 64	1	0	223.104123	.000002	.000200	. v .
2069	pP 65	1	0	222.546600	.000006	.000200	. v .
2070	pP 66	1	0	221.990830	-.000002	.000200	. v .
2071	pP 67	1	0	221.435590	-.001245	.002000	v. . .
2072	pP 68	1	0	220.884703	.000104	.000200	. .v .
2073	pP 69	1	0	220.334304	.000180	.000200	. .v .
2074	pP 70	1	0	219.785182	-.000225	.000200	. x. .
2075	pP 71	1	0	219.238428	-.000019	.000200	. v .
2076	pP 72	1	0	218.693220	-.000021	.000200	. v .
2077	pP 73	1	0	218.149442	-.000346	.000200	. x . .
2078	pP 74	1	0	217.608158	.000073	.000200	. v .
2079	pP 75	1	0	217.066341	-.001789	.002000	v . . .
2080	pP 76	1	0	216.530357	.000436	.000500	. . v .
2081	pP 77	1	0	215.993028	-.000428	.000500	. v . .
2082	pP 78	1	0	215.458244	-.000487	.000500	. v . .
2083	pP 79	1	0	214.926288	.000544	.000500	. . x .
2084	pP 80	1	0	214.395187	.000694	.001000	. . v .
2085	pP 81	1	0	213.864760	-.000215	.000200	. x. .
2086	pP 82	1	0	213.337581	.000395	.000500	. . v .
2087	pR 50	1	0	298.837428	-.000137	.000200	. v. .
2088	pR 51	1	0	299.589802	-.000082	.000200	. v .
2089	pR 52	1	0	300.343537	-.000047	.000200	. v .
2090	pR 53	1	0	301.098599	-.000061	.000200	. v .
2091	pR 54	1	0	301.855592	.000491	.001000	. . v .
2092	pR 55	1	0	302.612895	-.000006	.000200	. v .
2093	pR 56	1	0	303.371925	-.000126	.000200	. v. .
2094	pR 57	1	0	304.132499	-.000044	.000200	. v .
2095	pR 58	1	0	304.894280	-.000089	.000200	. v .
2096	pR 59	1	0	305.657454	-.000065	.000200	. v .
2097	pR 60	1	0	306.421964	-.000021	.000200	. v .
2098	pR 61	1	0	307.187717	-.000041	.000200	. v .
2099	pR 62	1	0	307.954763	-.000067	.000200	. v .
2100	pR 63	1	0	308.723146	-.000046	.000200	. v .
2101	pR 64	1	0	309.492770	-.000064	.000200	. v .
2102	pR 65	1	0	310.263636	-.000112	.000200	. v. .
2103	pR 66	1	0	311.035802	-.000123	.000200	. v. .
2104	pR 67	1	0	311.809372	.000018	.000200	. v .
2105	pR 68	1	0	312.583998	-.000030	.000200	. v .
2106	pR 69	1	0	313.359701	-.000235	.000200	. x. .
2107	pR 70	1	0	314.137058	-.000011	.000200	. v .
2108	pR 71	1	0	314.915366	-.000051	.000200	. v .
2109	pR 72	1	0	315.694597	-.000374	.000500	. v . .
2110	pR 73	1	0	316.475526	-.000195	.000200	. v. .
2111	pR 74	1	0	317.257629	-.000029	.000200	. v .
2112	pR 75	1	0	318.040892	.000121	.000200	. .v .
2113	pR 76	1	0	318.824710	-.000340	.000500	. v . .
2114	pR 77	1	0	319.610445	-.000041	.000200	. v .
2115	pR 78	1	0	320.396824	-.000245	.000500	. v. .
2116	pR 79	1	0	321.184976	.000188	.000200	. .v .
2117	pR 80	1	0	321.973732	.000099	.000200	. v .
2118	pR 81	1	0	322.763174	-.000420	.000500	. v . .
2119	pR 82	1	0	323.556148	.001487	.001000	. . . x
2120	pR 83	1	0	324.346865	.000042	.000200	. v .

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2121 pR 84  1  0   325.140829    .000759   .000500 |   .   .  x.   |
2122 pP 52  2  0   229.923177    .000048   .000200 |   .   v   .   |
2123 pP 53  2  0   229.344651   -.000009   .000200 |   .   v   .   |
2124 pP 54  2  0   228.767905   -.000046   .000200 |   .   v   .   |
2125 pP 55  2  0   228.192996   -.000007   .000200 |   .   v   .   |
2126 pP 56  2  0   227.619923    .000107   .000200 |   .   .v  .   |
2127 pP 57  2  0   227.048450    .000058   .000200 |   .   v   .   |
2128 pP 58  2  0   226.478692   -.000038   .000200 |   .   v   .   |
2129 pP 59  2  0   225.910894    .000064   .000200 |   .   v   .   |
2130 pP 60  2  0   225.344716    .000024   .000200 |   .   v   .   |
2131 pP 61  2  0   224.780284   -.000032   .000200 |   .   v   .   |
2132 pP 62  2  0   224.217597   -.000103   .000200 |   .  v.   .   |
2133 pP 63  2  0   223.656879    .000034   .000200 |   .   v   .   |
2134 pP 64  2  0   223.097780    .000030   .000200 |   .   v   .   |
2135 pP 65  2  0   222.540439    .000025   .000200 |   .   v   .   |
2136 pP 66  2  0   221.983324   -.001511   .003000 |v  .   .   .   |
2137 pP 67  2  0   221.431087    .000074   .000200 |   .   v   .   |
2138 pP 68  2  0   220.879128    .000182   .000200 |   .   .v  .   |
2139 pP 69  2  0   220.328659    .000026   .000200 |   .   v   .   |
2140 pP 70  2  0   219.780279    .000206   .000300 |   .   .v  .   |
2141 pP 71  2  0   219.233423    .000160   .000200 |   .   .v  .   |
2142 pP 72  2  0   218.688291    .000089   .000200 |   .   v   .   |
2143 pP 73  2  0   218.145096    .000207   .000200 |   .   .x  .   |
2144 pP 74  2  0   217.603739    .000419   .000200 |   .   . * .   |
2145 pP 75  2  0   217.064002    .000506   .000500 |   .   . x .   |
2146 pP 76  2  0   216.525267   -.000145   .001000 |   .  v.   .   |
2147 pP 77  2  0   215.989925    .000858   .001000 |   .   .  v.   |
2148 pR  2  2  0   264.350781    .002040   .002000 |   .   .   .   x
2149 pR  3  2  0   265.029102   -.000536   .001000 | .v  .   .     |
2150 pR  4  2  0   265.713372    .000391   .000500 |   .   .v  .   |
2151 pR  5  2  0   266.399617    .000926   .001000 |   .   .   v   |
2152 pR  6  2  0   267.086119   -.000552   .001000 |  .v  .   .    |
2153 pR  7  2  0   267.777179    .000364   .000300 |   .   .x  .   |
2154 pR  8  2  0   268.470006    .001000   .001000 |   .   .   v   |
2155 pR  9  2  0   269.163048   -.000077   .000200 |   .   v   .   |
2156 pR 10  2  0   269.859136    .000089   .000200 |   .   v   .   |
2157 pR 11  2  0   270.556600   -.000056   .000200 |   .   v   .   |
2158 pR 12  2  0   271.255859    .000019   .000200 |   .   v   .   |
2159 pR 13  2  0   271.956471   -.000032   .000200 |   .   v   .   |
2160 pR 14  2  0   272.658805    .000240   .000200 |   .   .x  .   |
2161 pR 15  2  0   273.362970    .001010   .001000 |   .   .   x   |
2162 pR 16  2  0   274.066379   -.000265   .000300 |   .  v.   .   |
2163 pR 17  2  0   274.773078    .000490   .000500 |   .   . v .   |
2164 pR 18  2  0   275.479404   -.000372   .000500 |  . v .   .    |
2165 pR 19  2  0   276.188854    .000648   .001000 |   .   . v .   |
2166 pR 20  2  0   276.897995    .000113   .000200 |   .   .v  .   |
2167 pR 21  2  0   277.608782   -.000034   .000200 |   .   v   .   |
2168 pR 22  2  0   278.320463   -.000561   .001000 |  . v .   .    |
2169 pR 23  2  0   279.034666    .000143   .000200 |   .   .v  .   |
2170 pR 24  2  0   279.749270   -.000061   .000200 |   .   v   .   |
2171 pR 25  2  0   280.465423   -.000043   .000200 |   .   v   .   |
2172 pR 26  2  0   281.183007    .000063   .000200 |   .   v   .   |
2173 pR 27  2  0   281.902222    .000441   .000500 |   .   . v .   |
2174 pR 28  2  0   282.621971   -.000020   .000200 |   .   v   .   |
2175 pR 29  2  0   283.343579   -.000005   .000200 |   .   v   .   |
2176 pR 30  2  0   284.066519   -.000054   .000200 |   .   v   .   |
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2177 pR 31  2  0   284.790854   -.000110   .000200 |   .  v.   .   |
2178 pR 32  2  0   285.516774    .000009   .000200 |   .  v    .   |
2179 pR 33  2  0   286.243906   -.000075   .000200 |   .  v    .   |
2180 pR 34  2  0   286.972509   -.000109   .000200 |   .  v.   .   |
2181 pR 35  2  0   287.702619   -.000057   .000200 |   .  v    .   |
2182 pR 36  2  0   288.434117   -.000043   .000200 |   .  v    .   |
2183 pR 37  2  0   289.166811   -.000257   .000300 |   .  v.   .   |
2184 pR 38  2  0   289.901360   -.000042   .000200 |   .  v    .   |
2185 pR 39  2  0   290.637298    .000138   .000200 |   .  .v   .   |
2186 pR 40  2  0   291.374278   -.000063   .000200 |   .  v    .   |
2187 pR 41  2  0   292.112861   -.000081   .000200 |   .  v    .   |
2188 pR 42  2  0   292.852789   -.000173   .000200 |   .  v.   .   |
2189 pR 43  2  0   293.594307   -.000088   .000200 |   .  v    .   |
2190 pR 44  2  0   294.337157   -.000081   .000200 |   .  v    .   |
2191 pR 45  2  0   295.081413   -.000075   .000200 |   .  v    .   |
2192 pR 46  2  0   295.827071   -.000068   .000200 |   .  v    .   |
2193 pR 47  2  0   296.574112   -.000074   .000200 |   .  v    .   |
2194 pR 48  2  0   297.322562   -.000062   .000200 |   .  v    .   |
2195 pR 49  2  0   298.072372   -.000075   .000200 |   .  v    .   |
2196 pR 50  2  0   298.823513   -.000136   .000200 |   .  v.   .   |
2197 pR 51  2  0   299.576167   -.000057   .000200 |   .  v    .   |
2198 pR 52  2  0   300.330102   -.000063   .000200 |   .  v    .   |
2199 pR 53  2  0   301.085420   -.000045   .000200 |   .  v    .   |
2200 pR 54  2  0   301.842088   -.000030   .000200 |   .  v    .   |
2201 pR 55  2  0   302.600073   -.000043   .000200 |   .  v    .   |
2202 pR 56  2  0   303.359380   -.000072   .000200 |   .  v    .   |
2203 pR 57  2  0   304.120052   -.000066   .000200 |   .  v    .   |
2204 pR 58  2  0   304.879515   -.002592   .003000 v   .  .    .   |
2205 pR 59  2  0   305.645339   -.000072   .000200 |   .  v    .   |
2206 pR 60  2  0   306.409924   -.000098   .000200 |   .  v    .   |
2207 pR 61  2  0   307.175830   -.000101   .000200 |   .  v.   .   |
2208 pR 62  2  0   307.943075   -.000056   .000200 |   .  v    .   |
2209 pR 63  2  0   308.711591   -.000022   .000200 |   .  v    .   |
2210 pR 64  2  0   309.481214   -.000155   .000200 |   .  v.   .   |
2211 pR 65  2  0   310.252297   -.000092   .000200 |   .  v    .   |
2212 pR 66  2  0   311.024570   -.000096   .000200 |   .  v    .   |
2213 pR 67  2  0   311.798114   -.000075   .000200 |   .  v    .   |
2214 pR 68  2  0   312.572814   -.000137   .000200 |   .  v.   .   |
2215 pR 69  2  0   313.348801   -.000141   .000200 |   .  v.   .   |
2216 pR 70  2  0   314.125984   -.000170   .000200 |   .  v.   .   |
2217 pR 71  2  0   314.904633    .000057   .000200 |   .  v    .   |
2218 pR 72  2  0   315.683975   -.000224   .000200 |   .  x.   .   |
2219 pR 73  2  0   316.464631   -.000383   .000300 |   . x .   .   |
2220 pR 74  2  0   317.247232    .000220   .000200 |   .  .x   .   |
2221 pR 75  2  0   318.030218    .000036   .000200 |   .  v    .   |
2222 pR 76  2  0   318.814643    .000128   .000300 |   .  .v   .   |
2223 pR 77  2  0   319.599289   -.000713   .001000 |  .v  .    .   |
2224 pR 78  2  0   320.386460   -.000172   .000200 |   .  v.   .   |
2225 pR 79  2  0   321.174793    .000398   .000500 |   .  . v  .   |
2226 pR 80  2  0   321.963483    .000202   .000200 |   .  .x   .   |
2227 pR 81  2  0   322.753563    .000282   .000200 |   .  .x   .   |
2228 pR 82  2  0   323.544350   -.000034   .000200 |   .  v    .   |
2229 pR 83  2  0   324.337299    .000719   .000500 |   .  .   x.   |
2230 pR 84  2  0   325.129626   -.000232   .000500 |   .  v.   .   |
2231 pP 52  3  0   229.907542    .000047   .000200 |   .  v    .   |
2232 pP 53  3  0   229.329619    .000053   .000200 |   .  v    .   |
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2233 pP 54  3  0   228.753392    .000021   .000200 |   .   v   .   |
2234 pP 55  3  0   228.178937    .000024   .000200 |   .   v   .   |
2235 pP 56  3  0   227.606266    .000073   .000200 |   .   v   .   |
2236 pP 57  3  0   227.035262    .000048   .000200 |   .   v   .   |
2237 pP 58  3  0   226.466006    .000029   .000200 |   .   v   .   |
2238 pP 59  3  0   225.898514    .000031   .000200 |   .   v   .   |
2239 pP 60  3  0   225.332754    .000020   .000200 |   .   v   .   |
2240 pP 61  3  0   224.768780    .000051   .000200 |   .   v   .   |
2241 pP 62  3  0   224.206479    .000009   .000200 |   .   v   .   |
2242 pP 63  3  0   223.645990    .000034   .000200 |   .   v   .   |
2243 pP 64  3  0   223.087275    .000087   .000200 |   .   v   .   |
2244 pP 65  3  0   222.530147   -.000018   .000200 |   .   v   .   |
2245 pP 66  3  0   221.974909    .000021   .000200 |   .   v   .   |
2246 pP 67  3  0   221.421214   -.000142   .000200 |   .  v.   .   |
2247 pP 68  3  0   220.870977    .001410   .002000 |   .   .   . v |
2248 pP 69  3  0   220.319668    .000146   .000200 |   .  .v   .   |
2249 pP 70  3  0   219.771105   -.000114   .000200 |   .  v.   .   |
2250 pP 71  3  0   219.224560   -.000098   .000200 |   .   v   .   |
2251 pP 72  3  0   218.679958    .000121   .000300 |   .  .v   .   |
2252 pP 73  3  0   218.136581   -.000173   .000200 |   .  v.   .   |
2253 pP 74  3  0   217.595238   -.000170   .000200 |   .  v.   .   |
2254 pP 75  3  0   217.056013    .000215   .000200 |   .  .x   .   |
2255 pP 76  3  0   216.518072    .000150   .000200 |   .  .v   .   |
2256 pP 77  3  0   215.981729   -.000048   .000200 |   .   v   .   |
2257 pP 78  3  0   215.446707   -.000656   .001000 |  . v  .   .   |
2258 pP 79  3  0   214.914162   -.000514   .000500 |  . x  .   .   |
2259 pP 80  3  0   214.384079    .000364   .000500 |   .   . v .   |
2260 pP 81  3  0   213.853702   -.000776   .001000 |  .v   .   .   |
2261 pP 82  3  0   213.328769    .001807   .002000 |   .   .   .  v|
2262 pP 83  3  0   212.801184    .000020   .000200 |   .   v   .   |
2263 pP 84  3  0   212.276837   -.000245   .000500 |   .  v.   .   |
2264 pP 85  3  0   211.755510    .000796   .000500 |   .   .  x.   |
2265 pR 50  3  0   298.800625    .000010   .000200 |   .   v   .   |
2266 pR 51  3  0   299.553541   -.000061   .000200 |   .   v   .   |
2267 pR 52  3  0   300.307884   -.000046   .000200 |   .   v   .   |
2268 pR 53  3  0   301.063574   -.000020   .000200 |   .   v   .   |
2269 pR 54  3  0   301.820763    .000175   .000200 |   .  .v   .   |
2270 pR 55  3  0   302.578891   -.000016   .000200 |   .   v   .   |
2271 pR 56  3  0   303.338472   -.000072   .000200 |   .   v   .   |
2272 pR 57  3  0   304.099438   -.000056   .000200 |   .   v   .   |
2273 pR 58  3  0   304.861706   -.000043   .000200 |   .   v   .   |
2274 pR 59  3  0   305.625242   -.000062   .000200 |   .   v   .   |
2275 pR 60  3  0   306.390123   -.000028   .000200 |   .   v   .   |
2276 pR 61  3  0   307.156239   -.000043   .000200 |   .   v   .   |
2277 pR 62  3  0   307.923635   -.000056   .000200 |   .   v   .   |
2278 pR 63  3  0   308.692371    .000002   .000200 |   .   v   .   |
2279 pR 64  3  0   309.462222   -.000088   .000200 |   .   v   .   |
2280 pR 65  3  0   310.233473   -.000031   .000200 |   .   v   .   |
2281 pR 66  3  0   311.005877   -.000067   .000200 |   .   v   .   |
2282 pR 67  3  0   311.779573   -.000049   .000200 |   .   v   .   |
2283 pR 68  3  0   312.554411   -.000118   .000200 |   .  v.   .   |
2284 pR 69  3  0   313.330643   -.000014   .000200 |   .   v   .   |
2285 pR 70  3  0   314.107830   -.000167   .000200 |   .  v.   .   |
2286 pR 71  3  0   314.886422   -.000117   .000200 |   .  v.   .   |
2287 pR 72  3  0   315.666187   -.000089   .000200 |   .   v   .   |
2288 pR 73  3  0   316.447256    .000058   .000200 |   .   v   .   |
2289 pR 74  3  0   317.229143   -.000153   .000200 |   .  v.   .   |
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2290 pR 75  3  0   318.012289   -.000271   .000300 |   .  v.   .  |
2291 pR 76  3  0   318.797175    .000193   .000200 |   .   .v  .  |
2292 pR 77  3  0   319.582691    .000140   .000200 |   .   .v  .  |
2293 pR 78  3  0   320.369538    .000279   .000200 |   .   .x  .  |
2294 pR 79  3  0   321.156733   -.000362   .000500 |   . v .   .  |
2295 pR 80  3  0   321.945907   -.000143   .000200 |   .  v.   .  |
2296 pR 81  3  0   322.736931    .000818   .001000 |   .   .  v.  |
2297 pR 82  3  0   323.525309   -.001967   .002000 v   .   .   .  |
2298 pR 83  3  0   324.319555    .000028   .000200 |   .   v   .  |
2299 pR 84  3  0   325.113453    .000596   .000500 |   .   . x .  |
2300 pP 52  4  0   229.886010    .000086   .000200 |   .   v   .  |
2301 pP 53  4  0   229.308839    .000117   .000200 |   .   .v  .  |
2302 pP 54  4  0   228.733343    .000123   .000200 |   .   .v  .  |
2303 pP 55  4  0   228.159568    .000144   .000200 |   .   .v  .  |
2304 pP 56  4  0   227.587470    .000132   .000200 |   .   .v  .  |
2305 pP 58  4  0   226.448356    .000051   .000200 |   .   v   .  |
2306 pP 59  4  0   225.881370    .000005   .000200 |   .   v   .  |
2307 pP 60  4  0   225.316220    .000074   .000200 |   .   v   .  |
2308 pP 61  4  0   224.752644   -.000006   .000200 |   .   v   .  |
2309 pP 62  4  0   224.190960    .000082   .000200 |   .   v   .  |
2310 pP 63  4  0   223.630973    .000141   .000200 |   .   .v  .  |
2311 pP 64  4  0   223.072595    .000082   .000200 |   .   v   .  |
2312 pP 65  4  0   222.515989    .000067   .000200 |   .   v   .  |
2313 pP 66  4  0   221.960773   -.000287   .000300 |   .  v.   .  |
2314 pP 67  4  0   221.407950    .000024   .000200 |   .   v   .  |
2315 pP 68  4  0   220.856281   -.000241   .000200 |   .  x.   .  |
2316 pP 69  4  0   220.307145    .000299   .001000 |   .   .v  .  |
2317 pP 70  4  0   219.758439   -.000461   .000500 |   . v .   .  |
2318 pP 71  4  0   219.212972    .000291   .000200 |   .   .x  .  |
2319 pP 72  4  0   218.667170   -.001021   .001000 | x   .   .  |
2320 pP 73  4  0   218.125235   -.000192   .000200 |   .  v.   .  |
2321 pP 74  4  0   217.584964    .000574   .000500 |   .   . x .  |
2322 pP 75  4  0   217.045646    .000569   .000500 |   .   . x .  |
2323 pP 76  4  0   216.507851    .000363   .000200 |   .   . x .  |
2324 pP 77  4  0   215.972400    .000778   .001000 |   .   .  v.  |
2325 pP 78  4  0   215.437684    .000208   .000200 |   .   .x  .  |
2326 pP 79  4  0   214.904972   -.000077   .000200 |   .   v   .  |
2327 pP 80  4  0   214.375096    .000756   .001000 |   .   .  v.  |
2328 pP 81  4  0   213.845492    .000146   .000200 |   .   .v  .  |
2329 pR 50  4  0   298.768697    .000009   .000200 |   .   v   .  |
2330 pR 51  4  0   299.522184   -.000039   .000200 |   .   v   .  |
2331 pR 52  4  0   300.277052   -.000015   .000200 |   .   v   .  |
2332 pR 53  4  0   301.033235    .000019   .000200 |   .   v   .  |
2333 pR 54  4  0   301.790631   -.000037   .000200 |   .   v   .  |
2334 pR 55  4  0   302.549400   -.000017   .000200 |   .   v   .  |
2335 pR 56  4  0   303.309385   -.000075   .000200 |   .   v   .  |
2336 pR 57  4  0   304.070766   -.000025   .000200 |   .   v   .  |
2337 pR 58  4  0   304.833368   -.000039   .000200 |   .   v   .  |
2338 pR 59  4  0   305.597298   -.000002   .000200 |   .   v   .  |
2339 pR 60  4  0   306.362377   -.000089   .000200 |   .   v   .  |
2340 pR 61  4  0   307.128865   -.000034   .000200 |   .   v   .  |
2341 pR 62  4  0   307.896579   -.000012   .000200 |   .   v   .  |
2342 pR 63  4  0   308.665468   -.000069   .000200 |   .   v   .  |
2343 pR 64  4  0   309.435752    .000023   .000200 |   .   v   .  |
2344 pR 65  4  0   310.207001   -.000160   .000200 |   .  v.   .  |
2345 pR 66  4  0   310.979710   -.000114   .000200 |   .  v.   .  |
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2346 pR 67  4  0   311.753700   -.000013   .000200 |  .   v   .  |
2347 pR 68  4  0   312.528792   -.000026   .000200 |  .   v   .  |
2348 pR 69  4  0   313.305087   -.000045   .000200 |  .   v   .  |
2349 pR 70  4  0   314.082610   -.000038   .000200 |  .   v   .  |
2350 pR 71  4  0   314.861328   -.000028   .000200 |  .   v   .  |
2351 pR 72  4  0   315.640173   -.001075   .001000 |  x   .   .  |
2352 pR 73  4  0   316.422547    .000230   .000500 |  .   .v  .  |
2353 pR 74  4  0   317.204463   -.000089   .000200 |  .   v   .  |
2354 pR 75  4  0   317.987051   -.000895   .001000 |  .v  .   .  |
2355 pR 76  4  0   318.772418   -.000071   .000200 |  .   v   .  |
2356 pR 77  4  0   319.557818   -.000354   .000500 |  . v .   .  |
2357 pR 78  4  0   320.344558   -.000429   .000500 |  . v .   .  |
2358 pR 79  4  0   321.133077    .000154   .000200 |  .   .v  .  |
2359 pR 80  4  0   321.922196    .000225   .000200 |  .   .x  .  |
2360 pR 81  4  0   322.713312    .001189   .001000 |  .   .   .x |
2361 pR 82  4  0   323.503933    .000566   .000500 |  .   . x .  |
2362 pR 83  4  0   324.295596   -.000099   .000500 |  .   v   .  |
2363 pR 84  4  0   325.089179    .000083   .000200 |  .   v   .  |
2364 pP 52  5  0   229.858825    .000132   .000200 |  .   .v  .  |
2365 pP 53  5  0   229.282427    .000048   .000200 |  .   v   .  |
2366 pP 54  5  0   228.707760    .000031   .000200 |  .   v   .  |
2367 pP 55  5  0   228.134709   -.000038   .000200 |  .   v   .  |
2368 pP 56  5  0   227.563574    .000133   .000200 |  .   .v  .  |
2369 pP 57  5  0   226.993926    .000111   .000200 |  .   .v  .  |
2370 pP 58  5  0   226.425959    .000085   .000200 |  .   v   .  |
2371 pP 59  5  0   225.859788    .000165   .000200 |  .   .v  .  |
2372 pP 60  5  0   225.295117    .000053   .000200 |  .   v   .  |
2373 pP 61  5  0   224.732466    .000264   .000200 |  .   .x  .  |
2374 pP 62  5  0   224.171055    .000015   .000200 |  .   v   .  |
2375 pP 63  5  0   223.611686    .000106   .000200 |  .   .v  .  |
2376 pP 64  5  0   223.053954    .000130   .000200 |  .   .v  .  |
2377 pP 65  5  0   222.497924    .000149   .000200 |  .   .v  .  |
2378 pP 66  5  0   221.943469    .000035   .000200 |  .   v   .  |
2379 pP 67  5  0   221.390461   -.000342   .000500 |  . v .   .  |
2380 pP 68  5  0   220.840130    .000248   .000200 |  .   .x  .  |
2381 pP 69  5  0   220.290765    .000092   .000200 |  .   v   .  |
2382 pP 70  5  0   219.742731   -.000445   .000500 |  . v .   .  |
2383 pP 71  5  0   219.197896    .000505   .000500 |  .   . x .  |
2384 pP 72  5  0   218.654056    .000737   .001000 |  .   .   v. |
2385 pP 73  5  0   218.110262   -.000698   .001000 |  . v .   .  |
2386 pP 74  5  0   217.570932    .000619   .000500 |  .   . x .  |
2387 pP 75  5  0   217.031312   -.000066   .000200 |  .   v   .  |
2388 pR 50  5  0   298.728140   -.000009   .000200 |  .   v   .  |
2389 pR 51  5  0   299.482332   -.000011   .000200 |  .   v   .  |
2390 pR 52  5  0   300.237794   -.000014   .000200 |  .   v   .  |
2391 pR 53  5  0   300.994621    .000076   .000200 |  .   v   .  |
2392 pR 54  5  0   301.752579    .000027   .000200 |  .   v   .  |
2393 pR 55  5  0   302.511799   -.000026   .000200 |  .   v   .  |
2394 pR 56  5  0   303.272284   -.000079   .000200 |  .   v   .  |
2395 pR 57  5  0   304.034159   -.000003   .000200 |  .   v   .  |
2396 pR 58  5  0   304.797179   -.000040   .000200 |  .   v   .  |
2397 pR 59  5  0   305.561474   -.000055   .000200 |  .   v   .  |
2398 pR 60  5  0   306.327012   -.000076   .000200 |  .   v   .  |
2399 pR 61  5  0   307.093843   -.000049   .000200 |  .   v   .  |
2400 pR 62  5  0   307.861902   -.000033   .000200 |  .   v   .  |
2401 pR 63  5  0   308.631213    .000002   .000200 |  .   v   .  |
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2402 pR 64  5  0   309.401709   -.000006   .000200 |   .   v   .   |
2403 pR 65  5  0   310.173410   -.000031   .000200 |   .   v   .   |
2404 pR 66  5  0   310.946358   -.000025   .000200 |   .   v   .   |
2405 pR 67  5  0   311.720397   -.000136   .000200 |   .  v.   .   |
2406 pR 68  5  0   312.495685   -.000200   .000200 |   .  x.   .   |
2407 pR 69  5  0   313.272391   -.000041   .000200 |   .   v   .   |
2408 pR 70  5  0   314.050130   -.000037   .000200 |   .   v   .   |
2409 pR 71  5  0   314.828714   -.000368   .000500 |   . v .   .   |
2410 pR 72  5  0   315.608561   -.000607   .001000 |   .v  .   .   |
2411 pR 73  5  0   316.391459    .001039   .001000 |   .   .   x   |
2412 pR 74  5  0   317.172540   -.000287   .000500 |   .  v.   .   |
2413 pR 75  5  0   317.956870    .000487   .000500 |   .   . v .   |
2414 pR 76  5  0   318.740613   -.000465   .000500 |   . v .   .   |
2415 pR 77  5  0   319.526864   -.000040   .000200 |   .   v   .   |
2416 pR 78  5  0   320.314064    .000211   .000200 |   .   .x  .   |
2417 pR 79  5  0   321.102966    .001051   .001000 |   .   .   x   |
2418 pR 80  5  0   321.890977   -.000104   .000200 |   .  v.   .   |
2419 pP 52  6  0   229.826169    .000069   .000200 |   .   v   .   |
2420 pP 53  6  0   229.250924    .000114   .000200 |   .   .v  .   |
2421 pP 54  6  0   228.677224    .000081   .000200 |   .   v   .   |
2422 pP 55  6  0   228.105164    .000057   .000200 |   .   v   .   |
2423 pP 56  6  0   227.534775    .000066   .000200 |   .   v   .   |
2424 pP 57  6  0   226.966044    .000087   .000200 |   .   v   .   |
2425 pP 58  6  0   226.398954    .000098   .000200 |   .   v   .   |
2426 pP 59  6  0   225.833574    .000162   .000200 |   .   .v  .   |
2427 pP 60  6  0   225.269721    .000090   .000200 |   .   v   .   |
2428 pP 61  6  0   224.707598    .000081   .000200 |   .   v   .   |
2429 pP 62  6  0   224.147190    .000115   .000200 |   .   .v  .   |
2430 pP 63  6  0   223.588382    .000074   .000200 |   .   v   .   |
2431 pP 64  6  0   223.031324    .000103   .000200 |   .   .v  .   |
2432 pP 65  6  0   222.478045    .002229   .003000 |   .   .   .   v
2433 pP 66  6  0   221.922088   -.000008   .000200 |   .   v   .   |
2434 pP 67  6  0   221.368046   -.002017   .002000 x   .   .   .   |
2435 pP 68  6  0   220.820101    .000381   .000500 |   .   . v .   |
2436 pP 69  6  0   220.271096    .000028   .000200 |   .   v   .   |
2437 pP 70  6  0   219.724219    .000110   .000200 |   .   .v  .   |
2438 pP 71  6  0   219.177545   -.001300   .002000 |  v.   .   .   |
2439 pP 72  6  0   218.635420    .000145   .000200 |   .   .v  .   |
2440 pP 73  6  0   218.093917    .000516   .000500 |   .   .  x .  |
2441 pP 74  6  0   217.553740    .000517   .000500 |   .   .  x .  |
2442 pP 75  6  0   217.015415    .000673   .001000 |   .   .  v .  |
2443 pP 76  6  0   216.478548    .000591   .001000 |   .   .  v .  |
2444 pP 77  6  0   215.942867   -.000001   .000200 |   .   v   .   |
2445 pP 78  6  0   215.409604    .000129   .000200 |   .   .v  .   |
2446 pP 79  6  0   214.876032   -.001746   .002000 |v  .   .   .   |
2447 pP 80  6  0   214.346906   -.000868   .001000 |   .v  .   .   |
2448 pP 81  6  0   213.819637    .000173   .000200 |   .   .v  .   |
2449 pP 82  6  0   213.293300    .000453   .000500 |   .   . v .   |
2450 pP 83  6  0   212.767243   -.000677   .001000 |   . v .   .   |
2451 pP 84  6  0   212.244553   -.000131   .000200 |   .  v.   .   |
2452 pP 85  6  0   211.723478    .000343   .000500 |   .   . v .   |
2453 pR 50  6  0   298.679248   -.000053   .000200 |   .   v   .   |
2454 pR 51  6  0   299.434225   -.000011   .000200 |   .   v   .   |
2455 pR 52  6  0   300.190397   -.000009   .000200 |   .   v   .   |
2456 pR 53  6  0   300.947829    .000018   .000200 |   .   v   .   |
2457 pR 54  6  0   301.706460    .000010   .000200 |   .   v   .   |
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2458 pR 55  6  0   302.466299   -.000024   .000200 |   .   v   .   |
2459 pR 56  6  0   303.227398   -.000031   .000200 |   .   v   .   |
2460 pR 57  6  0   303.989782    .000015   .000200 |   .   v   .   |
2461 pR 58  6  0   304.753314   -.000019   .000200 |   .   v   .   |
2462 pR 59  6  0   305.518092   -.000033   .000200 |   .   v   .   |
2463 pR 60  6  0   306.284143    .000002   .000200 |   .   v   .   |
2464 pR 61  6  0   307.051326   -.000050   .000200 |   .   v   .   |
2465 pR 62  6  0   307.819779   -.000048   .000200 |   .   v   .   |
2466 pR 63  6  0   308.589482   -.000008   .000200 |   .   v   .   |
2467 pR 64  6  0   309.360355   -.000004   .000200 |   .   v   .   |
2468 pR 65  6  0   310.132349   -.000081   .000200 |   .   v   .   |
2469 pR 66  6  0   310.905627   -.000070   .000200 |   .   v   .   |
2470 pR 67  6  0   311.680068   -.000087   .000200 |   .   v   .   |
2471 pR 68  6  0   312.455813    .000015   .000200 |   .   v   .   |
2472 pR 69  6  0   313.231791   -.000828   .001000 |  .v   .   .   |
2473 pR 70  6  0   314.010566   -.000047   .000200 |   .   v   .   |
2474 pR 71  6  0   314.789817    .000046   .000200 |   .   v   .   |
2475 pR 72  6  0   315.569974   -.000114   .000200 |   .  v.   .   |
2476 pR 73  6  0   316.351221   -.000335   .000500 |   . v .   .   |
2477 pR 74  6  0   317.133495   -.000673   .001000 |   . v .   .   |
2478 pR 75  6  0   317.918304    .000389   .000500 |   .   . v .   |
2479 pR 76  6  0   318.702325   -.000466   .000500 |   . v .   .   |
2480 pR 77  6  0   319.488813    .000026   .000200 |   .   v   .   |
2481 pR 78  6  0   320.276282    .000388   .000500 |   .   . v .   |
2482 pR 79  6  0   321.063965   -.000141   .000200 |   .  v.   .   |
2483 pR 80  6  0   321.853411   -.000001   .000200 |   .   v   .   |
2484 pR 81  6  0   322.644131    .000326   .000500 |   .   . v .   |
2485 pP 52  7  0   229.788469    .000068   .000200 |   .   v   .   |
2486 pP 53  7  0   229.214254    .000012   .000200 |   .   v   .   |
2487 pP 54  7  0   228.641740    .000072   .000200 |   .   v   .   |
2488 pP 55  7  0   228.070350   -.000336   .000500 |   . v .   .   |
2489 pP 56  7  0   227.501444    .000138   .000200 |   .  .v   .   |
2490 pP 57  7  0   226.933805    .000271   .000200 |   .  .x   .   |
2491 pP 58  7  0   226.367264   -.000116   .000200 |   . v.    .   |
2492 pP 59  7  0   225.802961    .000111   .000200 |   .  .v   .   |
2493 pP 60  7  0   225.240115    .000166   .000200 |   .  .v   .   |
2494 pP 61  7  0   224.678783    .000097   .000200 |   .   v   .   |
2495 pP 62  7  0   224.119380    .000316   .000300 |   .   . x .   |
2496 pP 63  7  0   223.560639   -.000450   .001000 |   . v .   .   |
2497 pP 64  7  0   223.004978    .000212   .000200 |   .  .x   .   |
2498 pP 65  7  0   222.450296    .000197   .000200 |   .  .v   .   |
2499 pP 66  7  0   221.896829   -.000263   .000500 |   . v.    .   |
2500 pP 67  7  0   221.345908    .000160   .000200 |   .  .v   .   |
2501 pP 68  7  0   220.795992   -.000078   .000200 |   .   v   .   |
2502 pP 69  7  0   220.248871    .000809   .001000 |   .   .  v.   |
2503 pP 70  7  0   219.701544   -.000181   .000200 |   . v.    .   |
2504 pP 71  7  0   219.156977   -.000085   .000200 |   .   v   .   |
2505 pP 72  7  0   218.613744   -.000330   .000200 |   . x .   .   |
2506 pP 73  7  0   218.072595   -.000168   .000200 |   . v.    .   |
2507 pP 74  7  0   217.533011   -.000119   .000200 |   . v.    .   |
2508 pP 75  7  0   216.994789   -.000387   .000200 |   . x .   .   |
2509 pP 76  7  0   216.458765   -.000137   .000200 |   . v.    .   |
2510 pR 50  7  0   298.622444    .000041   .000200 |   .   v   .   |
2511 pR 51  7  0   299.378206    .000068   .000200 |   .   v   .   |
2512 pR 52  7  0   300.135050   -.000021   .000200 |   .   v   .   |
2513 pR 53  7  0   300.893299    .000097   .000200 |   .   v   .   |
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2514	pR 54	7	0	301.652504	-.000029	.000200		.	v	.	
2515	pR 55	7	0	302.413159	.000094	.000200		.	v	.	
2516	pR 56	7	0	303.174628	-.000169	.000200		.	v.	.	
2517	pR 57	7	0	303.937653	-.000075	.000200		.	v	.	
2518	pR 58	7	0	304.701879	.000020	.000200		.	v	.	
2519	pR 59	7	0	305.467234	.000046	.000200		.	v	.	
2520	pR 60	7	0	306.233666	-.000046	.000200		.	v	.	
2521	pR 61	7	0	307.001453	.000023	.000200		.	v	.	
2522	pR 62	7	0	307.770453	.000114	.000200		.	.v	.	
2523	pR 63	7	0	308.540542	.000107	.000200		.	.v	.	
2524	pR 64	7	0	309.311563	-.000152	.000200		.	v.	.	
2525	pR 65	7	0	310.084163	-.000012	.000200		.	v	.	
2526	pR 66	7	0	310.857795	-.000015	.000200		.	v	.	
2527	pR 67	7	0	311.632342	-.000275	.000300		.	v.	.	
2528	pR 68	7	0	312.408557	-.000032	.000200		.	v	.	
2529	pR 69	7	0	313.185605	-.000117	.000200		.	v.	.	
2530	pR 70	7	0	313.963923	-.000086	.000200		.	v	.	
2531	pR 71	7	0	314.743529	.000083	.000200		.	v	.	
2532	pR 72	7	0	315.524058	.000033	.000200		.	v	.	
2533	pR 73	7	0	316.305672	-.000069	.000200		.	v	.	
2534	pR 74	7	0	317.088644	.000059	.000200		.	v	.	
2535	pP 52	8	0	229.745906	.000262	.000200		.	.x	.	
2536	pP 53	8	0	229.172735	.000027	.000200		.	v	.	
2537	pP 54	8	0	228.601078	-.000239	.000200		.	x.	.	
2538	pP 55	8	0	228.031672	.000190	.000200		.	.v	.	
2539	pP 56	8	0	227.463436	.000224	.000200		.	.x	.	
2540	pP 57	8	0	226.896468	-.000049	.000200		.	v	.	
2541	pP 58	8	0	226.331255	-.000149	.000200		.	v.	.	
2542	pP 59	8	0	225.768157	.000276	.000200		.	.x	.	
2543	pP 60	8	0	225.205787	-.000169	.000200		.	v.	.	
2544	pP 61	8	0	224.645778	.000142	.000200		.	.v	.	
2545	pP 62	8	0	224.086870	-.000057	.000200		.	v	.	
2546	pP 63	8	0	223.530043	.000207	.000200		.	.x	.	
2547	pP 64	8	0	222.974431	.000063	.000200		.	v	.	
2548	pP 65	8	0	222.420353	-.000175	.000200		.	v.	.	
2549	pP 66	8	0	221.868327	.000006	.000200		.	v	.	
2550	pP 67	8	0	221.317670	-.000082	.000200		.	v	.	
2551	pP 68	8	0	220.768299	-.000526	.000500		.	x	.	
2552	pP 69	8	0	220.221677	.000134	.000200		.	.v	.	
2553	pP 70	8	0	219.675382	-.000528	.000500		.	x	.	
2554	pP 71	8	0	219.132322	.000394	.000500		.	. v	.	
2555	pP 72	8	0	218.589953	.000353	.000500		.	. v	.	
2556	pP 73	8	0	218.049112	.000183	.000500		.	.v	.	
2557	pP 74	8	0	217.509480	-.000437	.000500		.	v	.	
2558	pP 75	8	0	216.971022	-.001542	.002000	v	.	.	.	
2559	pP 76	8	0	216.437228	.000355	.000200		.	. x	.	
2560	pP 77	8	0	215.902889	.000044	.000200		.	v	.	
2561	pR 50	8	0	298.557343	-.000169	.000200		.	v.	.	
2562	pR 51	8	0	299.313887	-.000200	.000200		.	v.	.	
2563	pR 52	8	0	300.072097	.000274	.000200		.	.x	.	
2564	pR 53	8	0	300.830755	.000031	.000200		.	v	.	
2565	pR 54	8	0	301.589419	-.001371	.002000	v	.	.	.	
2566	pR 55	8	0	302.351977	-.000048	.000200		.	v	.	
2567	pR 56	8	0	303.114652	.000224	.000200		.	.x	.	
2568	pR 57	8	0	303.878083	.000083	.000200		.	v	.	
2569	pR 58	8	0	304.642752	.000010	.000200		.	v	.	

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2570 pR 59  8  0   305.408555   -.000097   .000200 |   .   v   .   |
2571 pR 60  8  0   306.175913    .000182   .000200 |   .   .v  .   |
2572 pR 61  8  0   306.943810   -.000165   .000200 |   .   v.  .   |
2573 pR 62  8  0   307.713172   -.000213   .000200 |   .   x.  .   |
2574 pR 63  8  0   308.483671   -.000287   .000300 |   .   v.  .   |
2575 pR 64  8  0   309.255716    .000026   .000200 |   .   v   .   |
2576 pR 65  8  0   310.028567   -.000013   .000200 |   .   v   .   |
2577 pP 52  9  0   229.697292    .000277   .000200 |   .   .x  .   |
2578 pP 53  9  0   229.125561    .000170   .000200 |   .   .v  .   |
2579 pP 54  9  0   228.555336    .000058   .000200 |   .   v   .   |
2580 pP 55  9  0   227.986826    .000138   .000200 |   .   .v  .   |
2581 pP 56  9  0   227.419893    .000265   .000200 |   .   .x  .   |
2582 pP 57  9  0   226.854383    .000274   .000200 |   .   .x  .   |
2583 pP 59  9  0   225.727530   -.000196   .000500 |   .   v.  .   |
2584 pP 60  9  0   225.166886    .000007   .000200 |   .   v   .   |
2585 pP 61  9  0   224.607995    .000391   .000500 |   .   . v .   |
2586 pP 62  9  0   224.048225   -.001686   .002000 | v .   .   .   |
2587 pP 63  9  0   223.493884    .000079   .000200 |   .   v   .   |
2588 pP 64  9  0   222.939753    .000461   .000500 |   .   . v .   |
2589 pP 65  9  0   222.386866    .000486   .000500 |   .   . v .   |
2590 pP 66  9  0   221.835020   -.000053   .000200 |   .   v   .   |
2591 pP 67  9  0   221.285673    .000296   .000500 |   .   .v  .   |
2592 pP 68  9  0   220.736780   -.000516   .000500 |   . x .   .   |
2593 pP 69  9  0   220.192151    .001315   .002000 |   .   .   . v |
2594 pP 70  9  0   219.646211    .000212   .000500 |   .   .v  .   |
2595 pP 71  9  0   219.102058   -.000733   .000500 |   .x  .   .   |
2596 pP 72  9  0   218.561290    .000076   .000200 |   .   v   .   |
2597 pP 73  9  0   218.021432    .000160   .000500 |   .   .v  .   |
2598 pP 74  9  0   217.482621   -.000345   .000200 |   . x .   .   |
2599 pP 75  9  0   216.947445    .001145   .002000 |   .   .   .v  |
2600 pP 76  9  0   216.411261   -.000015   .000200 |   .   v   .   |
2601 pP 77  9  0   215.877789   -.000107   .000200 |   .   v.  .   |
2602 pP 78  9  0   215.345933   -.000227   .000200 |   .   x.  .   |
2603 pR 50  9  0   298.483880    .000059   .000200 |   .   v   .   |
2604 pR 51  9  0   299.241248   -.000026   .000200 |   .   v   .   |
2605 pR 52  9  0   299.999814   -.000045   .000200 |   .   v   .   |
2606 pR 53  9  0   300.759634    .000058   .000200 |   .   v   .   |
2607 pR 54  9  0   301.520472    .000043   .000200 |   .   v   .   |
2608 pR 55  9  0   302.282392   -.000026   .000200 |   .   v   .   |
2609 pR 56  9  0   303.045304   -.000241   .000500 |   .   v.  .   |
2610 pR 57  9  0   303.809789   -.000022   .000200 |   .   v   .   |
2611 pR 58  9  0   304.575276    .000058   .000200 |   .   v   .   |
2612 pR 59  9  0   305.341758   -.000007   .000200 |   .   v   .   |
2613 pR 60  9  0   306.107786   -.001665   .002000 | v .   .   .   |
2614 pR 61  9  0   306.878298    .000020   .000200 |   .   v   .   |
2615 pR 62  9  0   307.648082   -.000161   .000200 |   .   v.  .   |
2616 pR 63  9  0   308.419096   -.000249   .000500 |   .   v.  .   |
2617 pR 64  9  0   309.191409   -.000174   .000200 |   .   v.  .   |
2618 pR 65  9  0   309.965087    .000133   .000200 |   .   .v  .   |
2619 pR 66  9  0   310.739686    .000230   .000200 |   .   .x  .   |
2620 pR 67  9  0   311.515123    .000037   .000500 |   .   v   .   |
2621 pR 68  9  0   312.291899    .000059   .000500 |   .   v   .   |
2622 pR 69  9  0   313.069582   -.000133   .001000 |   .   v.  .   |
2623 pR 70  9  0   313.848762    .000055   .000500 |   .   v   .   |
2624 pR 71  9  0   314.628511   -.000301   .001000 |   . v .   .   |
2625 pR 72  9  0   315.410504    .000480   .000500 |   .   . v .   |
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2626 pR 73  9  0   316.192033   -.000306   .000200 |  . x .   .  |
2627 pR 74  9  0   316.975815    .000064   .000200 |  .   v   .  |
2628 pR 75  9  0   317.759178   -.001077   .001000 |  x   .   .  |
2629 pR 76  9  0   318.545188   -.000657   .000500 |  . x .   .  |
2630 pR 77  9  0   319.332277   -.000237   .000200 |  .  x.   .  |
2631 pP 52 10  0   229.634798    .000131   .000200 |  .   .v  .  |
2632 pP 53 10  0   229.064861    .000194   .000200 |  .   .v  .  |
2633 pP 54 10  0   228.495938   -.000206   .000200 |  .  x.   .  |
2634 pP 55 10  0   227.929046   -.000061   .000500 |  .   v   .  |
2635 pP 56 10  0   227.363511   -.000052   .000200 |  .   v   .  |
2636 pP 57 10  0   226.799425   -.000098   .000200 |  .   v   .  |
2637 pP 59 10  0   225.676226    .000239   .000200 |  .   .x  .  |
2638 pP 60 10  0   225.116898    .000390   .000500 |  .   . v .  |
2639 pP 61 10  0   224.558442   -.000125   .000200 |  .  v.   .  |
2640 pP 62 10  0   224.002225    .000055   .002000 |  .   v   .  |
2641 pP 63 10  0   223.447285   -.000040   .000500 |  .   v   .  |
2642 pP 64 10  0   222.893202   -.000838   .001000 |  .v  .   .  |
2643 pP 65 10  0   222.342330    .000009   .000200 |  .   v   .  |
2644 pP 66 10  0   221.792481    .000307   .000500 |  .   . v .  |
2645 pP 67 10  0   221.244077    .000471   .001000 |  .   . v .  |
2646 pP 68 10  0   220.696652    .000031   .000200 |  .   v   .  |
2647 pP 69 10  0   220.151305    .000079   .000200 |  .   v   .  |
2648 pP 70 10  0   219.606170   -.001256   .001000 |  x.  .   .  |
2649 pP 71 10  0   219.065043   -.000181   .000200 |  .  v.   .  |
2650 pP 72 10  0   218.524368   -.000258   .000200 |  .  x.   .  |
2651 pP 73 10  0   217.984866   -.000768   .000500 |  .x  .   .  |
2652 pR 51 10  0   299.151953   -.000133   .000200 |  .  v.   .  |
2653 pR 52 10  0   299.910345   -.001434   .002000 | v .  .   .  |
2654 pR 53 10  0   300.672581    .000009   .000200 |  .   v   .  |
2655 pR 54 10  0   301.434435   -.000032   .000200 |  .   v   .  |
2656 pR 55 10  0   302.197006   -.000458   .000500 |  . v .   .  |
2657 pR 56 10  0   302.962330    .000764   .001000 |  .   . v.   |
2658 pR 57 10  0   303.726048   -.000726   .001000 |  .v  .   .  |
2659 pR 58 10  0   304.493210    .000122   .000200 |  .   .v  .  |
2660 pR 59 10  0   305.260943    .000433   .000500 |  .   . v .  |
2661 pR 60 10  0   306.028632   -.000407   .000500 |  . v .   .  |
2662 pR 61 10  0   306.799258    .000581   .001000 |  .   . v .  |
2663 pR 62 10  0   307.568599   -.000823   .001000 |  .v  .   .  |
2664 pR 63 10  0   308.341229   -.000045   .000200 |  .   v   .  |
2665 pR 64 10  0   309.114321    .000089   .000200 |  .   v   .  |
2666 pR 65 10  0   309.886854   -.001441   .002000 | v .  .   .  |
2667 pR 66 10  0   310.663510    .000050   .000200 |  .   v   .  |
2668 pR 67 10  0   311.438836   -.000890   .001000 |  .v  .   .  |
2669 pR 68 10  0   312.216877   -.000213   .000200 |  .  x.   .  |
2670 pR 69 10  0   312.994714   -.000836   .001000 |  .v  .   .  |
2671 pR 70 10  0   313.775569    .000468   .001000 |  .   . v .  |
2672 pR 71 10  0   314.555692   -.000049   .000200 |  .   v   .  |
2673 pR 72 10  0   315.335676   -.001790   .002000 |v  .  .   .  |
2674 pR 73 10  0   316.120086   -.000185   .000200 |  .  v.   .  |
2675 pR 74 10  0   316.903745   -.000407   .000200 |  . * .   .  |
2676 pP 52 11  0   229.667844    .000271   .000200 |  .   .x  .  |
2677 pP 53 11  0   229.099565   -.000083   .000200 |  .   v   .  |
2678 pP 54 11  0   228.532844   -.000490   .001000 |  . v .   .  |
2679 pP 55 11  0   227.969436    .000772   .001000 |  .   . v.   |
2680 pP 56 11  0   227.405882    .000208   .000200 |  .   .x  .  |
2681 pP 57 11  0   226.844334   -.000072   .000200 |  .   v   .  |
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2682 pP 58 11  0    226.283945     -.000967    .001000 |   v    .    .    |
2683 pP 59 11  0    225.727530      .000274    .000200 |   .    .x   .    |
2684 pP 60 11  0    225.170366     -.001148    .001000 |  x.    .    .    |
2685 pP 61 11  0    224.617926      .000138    .001000 |   .    .v   .    |
2686 pP 62 11  0    224.064633     -.001576    .002000 | v .    .    .    |
2687 pP 12 12  0    253.569429     -.000448    .001000 |   .  v .    .    |
2688 pP 13 12  0    252.931299     -.000638    .001000 |   . v .    .    |
2689 pP 14 12  0    252.295752     -.000661    .001000 |   . v .    .    |
2690 pP 15 12  0    251.662749     -.000525    .001000 |   . v .    .    |
2691 pP 17 12  0    250.404932      .000920    .001000 |   .    .    v   |
2692 pP 18 12  0    249.778046      .000230    .000200 |   .    .x   .    |
2693 pP 19 12  0    249.153521     -.000335    .000500 |   .  v .    .    |
2694 pP 20 12  0    248.531719     -.000373    .001000 |   .  v .    .    |
2695 pP 21 12  0    247.912747      .000266    .000200 |   .    .x   .    |
2696 pP 22 12  0    247.293479     -.001499    .002000 | v .    .    .    |
2697 pP 23 12  0    246.680109      .000569    .000500 |   .    .  x .    |
2698 pP 24 12  0    246.066797      .000677    .000500 |   .    .  x .    |
2699 pP 27 12  0    244.237488     -.000035    .000200 |   .    v    .    |
2700 pP 28 12  0    243.631624     -.000104    .000500 |   .   v.    .    |
2701 pP 29 12  0    243.027514     -.000217    .000500 |   .   v.    .    |
2702 pP 30 12  0    242.425748      .000259    .000200 |   .    .x   .    |
2703 pP 36 12  0    238.846678     -.000139    .000200 |   .   v.    .    |
2704 pP 37 12  0    238.255657     -.000215    .000200 |   .   x.    .    |
2705 pP 38 12  0    237.666362     -.000067    .000200 |   .    v    .    |

File # 2  2nu80_a.wn   No. data : 1202    .00500 cm-1 -> |----+----0----+----|
2706 qP  1  0  0    523.957972     -.000135    .000200 |   .    v    .    |
2707 qP  2  0  0    523.291906     -.000779    .001000 |   .  v .    .    |
2708 qP  3  0  0    522.631627     -.000857    .001000 |   .  v .    .    |
2709 qP  4  0  0    521.976659     -.000819    .001000 |   .  v .    .    |
2710 qP  5  0  0    521.326895     -.000725    .000500 |   . x.    .    |
2711 qP  7  0  0    520.041382     -.001718    .002000 |   . v .    .    |
2712 qP  9  0  0    518.777306     -.000953    .001000 |   . v .    .    |
2713 qP 10  0  0    518.152785     -.000161    .000200 |   .    v    .    |
2714 qP 11  0  0    517.531703     -.000495    .000500 |   .   v.    .    |
2715 qP 12  0  0    516.914343     -.001530    .002000 |   . v .    .    |
2716 qP 13  0  0    516.301839     -.001976    .002000 |   .v   .    .    |
2717 qP 14  0  0    515.696004      .000139    .001000 |   .    v    .    |
2718 qP 15  0  0    515.090206     -.001651    .002000 |   . v .    .    |
2719 qP 16  0  0    514.490950     -.000674    .000500 |   .   x.    .    |
2720 qP 17  0  0    513.895073      .000070    .001000 |   .    v    .    |
2721 qP 18  0  0    513.302170      .000337    .001000 |   .    .v   .    |
2722 qP 19  0  0    512.711099     -.000867    .000500 |   . x .    .    |
2723 qP 20  0  0    512.123900     -.001364    .001000 |   . x .    .    |
2724 qP 21  0  0    511.541502     -.000101    .000500 |   .    v    .    |
2725 qP 22  0  0    510.961218      .000342    .001000 |   .    .v   .    |
2726 qP 23  0  0    510.382532     -.000463    .000500 |   .   v.    .    |
2727 qP 24  0  0    509.808348      .000461    .001000 |   .    .v   .    |
2728 qP 25  0  0    509.234600     -.000900    .001000 |   . v .    .    |
2729 qP 26  0  0    508.662907     -.002889    .003000 |  v.    .    .    |
2730 qP 27  0  0    508.097732     -.001020    .001000 |   . x .    .    |
2731 qP 28  0  0    507.534138     -.000222    .000200 |   .    x    .    |
2732 qP 29  0  0    506.972479     -.000142    .000200 |   .    v    .    |
2733 qP 30  0  0    506.412721     -.000826    .001000 |   . v .    .    |
2734 qP 31  0  0    505.856479     -.000677    .001000 |   .   v.    .    |
2735 qP 32  0  0    505.303301     -.000171    .000200 |   .    v    .    |
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2736 qP 33  0  0    504.752511    -.000012   .000200 |   .   v   .   |
2737 qP 34  0  0    504.204327    -.000012   .000200 |   .   v   .   |
2738 qP 35  0  0    503.658951     .000000   .000200 |   .   v   .   |
2739 qP 36  0  0    503.116447     .000055   .000200 |   .   v   .   |
2740 qP 37  0  0    502.576695     .000001   .000200 |   .   v   .   |
2741 qP 38  0  0    502.039755    -.000132   .000200 |   .   v   .   |
2742 qP 39  0  0    501.506022     .000021   .000200 |   .   v   .   |
2743 qP 40  0  0    500.975021    -.000044   .000200 |   .   v   .   |
2744 qP 41  0  0    500.447203     .000099   .000200 |   .   v   .   |
2745 qP 42  0  0    499.922253     .000108   .000200 |   .   v   .   |
2746 qP 43  0  0    499.400312     .000103   .000200 |   .   v   .   |
2747 qP 44  0  0    498.881363     .000044   .000200 |   .   v   .   |
2748 qP 45  0  0    498.365550     .000057   .000200 |   .   v   .   |
2749 qP 46  0  0    497.852820     .000070   .000200 |   .   v   .   |
2750 qP 47  0  0    497.343150     .000046   .000200 |   .   v   .   |
2751 qP 48  0  0    496.836606     .000035   .000200 |   .   v   .   |
2752 qP 49  0  0    496.333196     .000032   .000200 |   .   v   .   |
2753 qP 50  0  0    495.832981     .000088   .000200 |   .   v   .   |
2754 qP 51  0  0    495.335781     .000013   .000200 |   .   v   .   |
2755 qP 52  0  0    494.841835     .000036   .000200 |   .   v   .   |
2756 qP 53  0  0    494.350997     .000004   .000200 |   .   v   .   |
2757 qP 54  0  0    493.863337    -.000019   .000200 |   .   v   .   |
2758 qP 55  0  0    493.378855    -.000039   .000200 |   .   v   .   |
2759 qP 56  0  0    492.897452    -.000159   .000200 |   .   v   .   |
2760 qP 57  0  0    492.419469    -.000041   .000200 |   .   v   .   |
2761 qP 58  0  0    491.944490    -.000104   .000200 |   .   v   .   |
2762 qP 59  0  0    491.472788    -.000078   .000200 |   .   v   .   |
2763 qP 60  0  0    491.004283    -.000042   .000200 |   .   v   .   |
2764 qP 61  0  0    490.538882    -.000090   .000200 |   .   v   .   |
2765 qP 62  0  0    490.076723    -.000084   .000200 |   .   v   .   |
2766 qP 63  0  0    489.617784    -.000045   .000200 |   .   v   .   |
2767 qP 64  0  0    489.162048     .000011   .000200 |   .   v   .   |
2768 qP 65  0  0    488.709343    -.000084   .000200 |   .   v   .   |
2769 qP 66  0  0    488.259947    -.000051   .000200 |   .   v   .   |
2770 qP 67  0  0    487.813814     .000068   .000200 |   .   v   .   |
2771 qP 68  0  0    487.370710     .000042   .000200 |   .   v   .   |
2772 qP 69  0  0    486.930755    -.000005   .000200 |   .   v   .   |
2773 qP 70  0  0    486.494468     .000451   .000500 |   .   .v  .   |
2774 qP 71  0  0    486.060374    -.000059   .000200 |   .   v   .   |
2775 qP 72  0  0    485.630841     .000837   .001000 |   .   . v .   |
2776 qP 73  0  0    485.202979     .000254   .000200 |   .   .x  .   |
2777 qP 74  0  0    484.778926     .000338   .000200 |   .   .x  .   |
2778 qP 75  0  0    484.358170     .000583   .000500 |   .   .x  .   |
2779 qP 76  0  0    483.940029     .000313   .000500 |   .   .v  .   |
2780 qP 77  0  0    483.525929     .000961   .001000 |   .   . v .   |
2781 qP 78  0  0    483.114255     .000921   .001000 |   .   . v .   |
2782 qP 79  0  0    482.706118     .001310   .001000 |   .   .  x .  |
2783 qP 80  0  0    482.299876     .000495   .000500 |   .   .v  .   |
2784 qP 81  0  0    481.897628     .000584   .000500 |   .   .x  .   |
2785 qP 82  0  0    481.498025     .000235   .000200 |   .   x   .   |
2786 qP 83  0  0    481.101928     .000319   .000200 |   .   .x  .   |
2787 qP 84  0  0    480.709371     .000879   .000500 |   .   . x .   |
2788 qP 85  0  0    480.318689     .000259   .000500 |   .   .v  .   |
2789 qR  1  0  0    525.984224    -.001520   .002000 |  . v .   .    |
2790 qR  2  0  0    526.671276    -.000739   .001000 |  .  v.   .    |
2791 qR  3  0  0    527.362013    -.001396   .002000 |  . v .   .    |
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2792 qR  4  0  0   528.058628   -.001231   .001000 |   . x .   .   |
2793 qR  5  0  0   528.760543   -.000739   .000500 |   .  x.   .   |
2794 qR  6  0  0   529.466110   -.001470   .002000 |  . v .   .   |
2795 qR  7  0  0   530.178960    .000320   .001000 |   .   .v  .   |
2796 qR  8  0  0   530.893334   -.001000   .001000 |   . v .   .   |
2797 qR  9  0  0   531.614639    .000117   .001000 |   .   v   .   |
2798 qR 10  0  0   532.337603   -.001451   .001000 |   . x .   .   |
2799 qR 11  0  0   533.066905   -.000862   .000500 |   . x .   .   |
2800 qR 12  0  0   533.799701   -.000792   .000500 |   . x .   .   |
2801 qR 13  0  0   534.537308    .000248   .001000 |   .   v   .   |
2802 qR 14  0  0   535.277205   -.000088   .000500 |   .   v   .   |
2803 qR 15  0  0   536.020128   -.000893   .000500 |   . x .   .   |
2804 qR 16  0  0   536.767934   -.000144   .000500 |   .   v   .   |
2805 qR 17  0  0   537.516236   -.002069   .002000 |  .x   .   .   |
2806 qR 18  0  0   538.271137   -.000421   .000200 |   .  *.   .   |
2807 qR 19  0  0   539.027795    .000090   .001000 |   .   v   .   |
2808 qR 20  0  0   539.784154   -.002479   .003000 |  v    .   .   |
2809 qR 21  0  0   540.548119   -.000126   .000500 |   .   v   .   |
2810 qR 22  0  0   541.312297   -.000165   .000300 |   .   v   .   |
2811 qR 23  0  0   542.078775   -.000447   .000500 |   .  v.   .   |
2812 qR 24  0  0   542.848207   -.000274   .000200 |   .  x.   .   |
2813 qR 25  0  0   543.619465   -.000743   .000500 |   .  x.   .   |
2814 qR 26  0  0   544.394067   -.000321   .000200 |   .  x.   .   |
2815 qR 27  0  0   545.170655   -.000360   .000200 |   .  x.   .   |
2816 qR 28  0  0   545.950163    .000070   .000300 |   .   v   .   |
2817 qR 29  0  0   546.731594   -.000037   .000200 |   .   v   .   |
2818 qR 30  0  0   547.515247   -.000401   .000300 |   .  x.   .   |
2819 qR 31  0  0   548.302050   -.000112   .000200 |   .   v   .   |
2820 qR 32  0  0   549.091232    .000035   .000200 |   .   v   .   |
2821 qR 33  0  0   549.882675   -.000102   .000200 |   .   v   .   |
2822 qR 34  0  0   550.676922   -.000004   .000200 |   .   v   .   |
2823 qR 35  0  0   551.473696    .000027   .000200 |   .   v   .   |
2824 qR 36  0  0   552.273022   -.000006   .000200 |   .   v   .   |
2825 qR 37  0  0   553.075053    .000026   .000200 |   .   v   .   |
2826 qR 38  0  0   553.879690    .000004   .000200 |   .   v   .   |
2827 qR 39  0  0   554.687017   -.000006   .000200 |   .   v   .   |
2828 qR 40  0  0   555.497215    .000158   .000200 |   .   v   .   |
2829 qR 41  0  0   556.309824    .000021   .000200 |   .   v   .   |
2830 qR 42  0  0   557.125276    .000001   .000200 |   .   v   .   |
2831 qR 43  0  0   557.943580    .000096   .000200 |   .   v   .   |
2832 qR 44  0  0   558.764443    .000003   .000200 |   .   v   .   |
2833 qR 45  0  0   559.588216    .000063   .000200 |   .   v   .   |
2834 qR 46  0  0   560.414554   -.000074   .000200 |   .   v   .   |
2835 qR 47  0  0   561.243869   -.000002   .000200 |   .   v   .   |
2836 qR 48  0  0   562.075866   -.000020   .000200 |   .   v   .   |
2837 qR 49  0  0   562.910670   -.000005   .000200 |   .   v   .   |
2838 qR 50  0  0   563.748213   -.000027   .000200 |   .   v   .   |
2839 qR 51  0  0   564.588567   -.000013   .000200 |   .   v   .   |
2840 qR 52  0  0   565.431654   -.000041   .000200 |   .   v   .   |
2841 qR 53  0  0   566.277366   -.000216   .000200 |   .   x   .   |
2842 qR 54  0  0   567.126209   -.000030   .000200 |   .   v   .   |
2843 qR 55  0  0   567.977577   -.000083   .000200 |   .   v   .   |
2844 qR 56  0  0   568.833924    .002083   .003000 |   .   .  v.   |
2845 qR 57  0  0   569.688759   -.000018   .000200 |   .   v   .   |
2846 qR 58  0  0   570.548297   -.000164   .000200 |   .   v   .   |
2847 qR 59  0  0   571.410855   -.000030   .000200 |   .   v   .   |
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2848	qR 60	0	0	572.276144	.000101	.000200	|	.	v	. |
2849	qR 61	0	0	573.143879	-.000046	.000200	|	.	v	. |
2850	qR 62	0	0	574.014894	.000372	.000500	|	.	.v	. |
2851	qR 63	0	0	574.888021	.000196	.000200	|	.	v	. |
2852	qR 64	0	0	575.763727	-.000096	.000200	|	.	v	. |
2853	qR 65	0	0	576.641836	-.000670	.001000	|	.	v.	. |
2854	qR 66	0	0	577.523410	-.000454	.000500	|	.	v.	. |
2855	qR 67	0	0	578.408274	.000391	.000500	|	.	.v	. |
2856	qR 68	0	0	579.294575	.000023	.000200	|	.	v	. |
2857	qR 69	0	0	580.183467	-.000392	.001000	|	.	v.	. |
2858	qR 70	0	0	581.076374	.000583	.000500	|	.	.x	. |
2859	qR 71	0	0	581.970658	.000323	.000200	|	.	.x	. |
2860	qR 72	0	0	582.867281	-.000196	.001000	|	.	v	. |
2861	qP 17	1	0	513.893543	.000285	.000200	|	.	.x	. |
2862	qP 18	1	0	513.300240	.000234	.000200	|	.	x	. |
2863	qP 19	1	0	512.711099	.001056	.001000	|	.	. x	. |
2864	qP 20	1	0	512.123900	.000668	.000500	|	.	.x	. |
2865	qP 21	1	0	511.539707	.000255	.000200	|	.	.x	. |
2866	qP 22	1	0	510.959583	.000985	.001000	|	.	. v	. |
2867	qP 23	1	0	510.380925	.000342	.000300	|	.	.x	. |
2868	qP 24	1	0	509.805836	.000497	.000500	|	.	.v	. |
2869	qP 25	1	0	509.232925	.000110	.000200	|	.	v	. |
2870	qP 26	1	0	508.662907	-.000069	.000200	|	.	v	. |
2871	qP 27	1	0	508.095873	.000072	.000200	|	.	v	. |
2872	qP 28	1	0	507.532173	.000889	.001000	|	.	. v	. |
2873	qP 29	1	0	506.969764	.000335	.000500	|	.	.v	. |
2874	qP 30	1	0	506.412721	.002473	.003000	|	.	.	v |
2875	qP 31	1	0	505.853826	.000066	.000200	|	.	v	. |
2876	qP 32	1	0	505.300194	.000204	.000200	|	.	x	. |
2877	qP 33	1	0	504.749147	.000181	.000200	|	.	v	. |
2878	qP 34	1	0	504.200147	-.000570	.001000	|	.	v.	. |
2879	qP 35	1	0	503.655308	.000032	.000200	|	.	v	. |
2880	qP 36	1	0	503.112788	.000114	.000200	|	.	v	. |
2881	qP 37	1	0	502.573053	.000112	.000200	|	.	v	. |
2882	qP 38	1	0	502.036128	.000019	.000200	|	.	v	. |
2883	qP 39	1	0	501.502296	.000089	.000200	|	.	v	. |
2884	qP 40	1	0	500.971439	.000177	.000200	|	.	v	. |
2885	qP 41	1	0	500.443325	.000025	.000200	|	.	v	. |
2886	qP 42	1	0	499.918414	.000069	.000200	|	.	v	. |
2887	qP 43	1	0	499.396477	.000058	.000200	|	.	v	. |
2888	qP 44	1	0	498.877538	-.000006	.000200	|	.	v	. |
2889	qP 45	1	0	498.361748	.000011	.000200	|	.	v	. |
2890	qP 46	1	0	497.849040	.000023	.000200	|	.	v	. |
2891	qP 47	1	0	497.339420	.000022	.000200	|	.	v	. |
2892	qP 48	1	0	496.832847	-.000047	.000200	|	.	v	. |
2893	qP 49	1	0	496.329530	.000012	.000200	|	.	v	. |
2894	qP 50	1	0	495.829266	-.000014	.000200	|	.	v	. |
2895	qP 51	1	0	495.332123	-.000068	.000200	|	.	v	. |
2896	qP 52	1	0	494.838203	-.000056	.000200	|	.	v	. |
2897	qP 53	1	0	494.347453	-.000037	.000200	|	.	v	. |
2898	qP 54	1	0	493.859821	-.000071	.000200	|	.	v	. |
2899	qP 55	1	0	493.375375	-.000094	.000200	|	.	v	. |
2900	qP 56	1	0	492.894142	-.000083	.000200	|	.	v	. |
2901	qP 57	1	0	492.416073	-.000091	.000200	|	.	v	. |
2902	qP 58	1	0	491.941178	-.000111	.000200	|	.	v	. |
2903	qP 59	1	0	491.469501	-.000099	.000200	|	.	v	. |

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2904 qP 60  1  0   491.000952   -.000147   .000200 |  .   v   .  |
2905 qP 61  1  0   490.535652   -.000133   .000200 |  .   v   .  |
2906 qP 62  1  0   490.073473   -.000187   .000200 |  .   v   .  |
2907 qP 63  1  0   489.614610   -.000110   .000200 |  .   v   .  |
2908 qP 64  1  0   489.158888   -.000078   .000200 |  .   v   .  |
2909 qP 65  1  0   488.706444    .000050   .000200 |  .   v   .  |
2910 qP 66  1  0   488.256829   -.000173   .000200 |  .   v   .  |
2911 qP 67  1  0   487.810602   -.000184   .000200 |  .   v   .  |
2912 qP 68  1  0   487.367687   -.000057   .000200 |  .   v   .  |
2913 qP 69  1  0   486.927973    .000103   .000200 |  .   v   .  |
2914 qP 70  1  0   486.491343    .000182   .000200 |  .   v   .  |
2915 qP 71  1  0   486.057652    .000041   .000200 |  .   v   .  |
2916 qR 26  1  0   544.390555    .000064   .000200 |  .   v   .  |
2917 qR 27  1  0   545.166986    .000013   .000200 |  .   v   .  |
2918 qR 28  1  0   545.945923    .000009   .000200 |  .   v   .  |
2919 qR 29  1  0   546.727342    .000015   .000200 |  .   v   .  |
2920 qR 30  1  0   547.511069   -.000160   .000200 |  .   v   .  |
2921 qR 31  1  0   548.297541   -.000099   .000200 |  .   v   .  |
2922 qR 32  1  0   549.086557   -.000025   .000200 |  .   v   .  |
2923 qR 33  1  0   549.878182    .000102   .000200 |  .   v   .  |
2924 qR 34  1  0   550.672208    .000050   .000200 |  .   v   .  |
2925 qR 35  1  0   551.468749   -.000089   .000200 |  .   v   .  |
2926 qR 36  1  0   552.268238    .000093   .000200 |  .   v   .  |
2927 qR 37  1  0   553.070132    .000032   .000200 |  .   v   .  |
2928 qR 38  1  0   553.874738    .000016   .000200 |  .   v   .  |
2929 qR 39  1  0   554.681903   -.000127   .000200 |  .   v   .  |
2930 qR 40  1  0   555.492032   -.000010   .000200 |  .   v   .  |
2931 qR 41  1  0   556.304785    .000015   .000200 |  .   v   .  |
2932 qR 42  1  0   557.120214   -.000016   .000200 |  .   v   .  |
2933 qR 43  1  0   557.938385   -.000046   .000200 |  .   v   .  |
2934 qR 44  1  0   558.759243   -.000141   .000200 |  .   v   .  |
2935 qR 45  1  0   559.583070   -.000026   .000200 |  .   v   .  |
2936 qR 46  1  0   560.409591    .000017   .000200 |  .   v   .  |
2937 qR 47  1  0   561.238760   -.000062   .000200 |  .   v   .  |
2938 qR 48  1  0   562.070480   -.000365   .000300 |  .   x.  .  |
2939 qR 49  1  0   562.905478   -.000166   .000200 |  .   v   .  |
2940 qR 50  1  0   563.743144   -.000075   .000200 |  .   v   .  |
2941 qR 51  1  0   564.583483   -.000089   .000200 |  .   v   .  |
2942 qR 52  1  0   565.426581   -.000119   .000200 |  .   v   .  |
2943 qR 53  1  0   566.272503   -.000098   .000200 |  .   v   .  |
2944 qR 54  1  0   567.121196   -.000076   .000200 |  .   v   .  |
2945 qR 55  1  0   567.972563   -.000145   .000200 |  .   v   .  |
2946 qR 56  1  0   568.826665   -.000239   .000200 |  .   x   .  |
2947 qR 57  1  0   569.683810   -.000045   .000200 |  .   v   .  |
2948 qR 58  1  0   570.543398   -.000156   .000200 |  .   v   .  |
2949 qR 59  1  0   571.405990   -.000004   .000200 |  .   v   .  |
2950 qR 60  1  0   572.271018   -.000149   .000200 |  .   v   .  |
2951 qR 61  1  0   573.138879   -.000184   .000200 |  .   v   .  |
2952 qR 62  1  0   574.009555   -.000120   .000200 |  .   v   .  |
2953 qR 63  1  0   574.882527   -.000465   .000500 |  .   v.  .  |
2954 qP  3  2  0   522.626066    .000223   .000200 |  .   x   .  |
2955 qP  4  2  0   521.971115    .000197   .000200 |  .   v   .  |
2956 qP  5  2  0   521.321283    .000136   .000300 |  .   v   .  |
2957 qP  6  2  0   520.676607    .000143   .000300 |  .   v   .  |
2958 qP  7  2  0   520.037044    .000252   .000200 |  .   .x  .  |
2959 qP  8  2  0   519.402299    .000266   .000200 |  .   .x  .  |
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2960	qP	9	2	0	518.772348	.000270	.000200	|	.	.x	. |
2961	qP	10	2	0	518.147059	.000261	.000200	|	.	.x	. |
2962	qP	11	2	0	517.526721	.000665	.000500	|	.	.x	. |
2963	qP	12	2	0	516.909937	.000237	.000200	|	.	x	. |
2964	qP	13	2	0	516.297999	.000430	.000300	|	.	.x	. |
2965	qP	14	2	0	515.690007	.000510	.000500	|	.	.x	. |
2966	qP	15	2	0	515.085478	.000164	.000200	|	.	v	. |
2967	qP	16	2	0	514.485366	.000518	.000500	|	.	.x	. |
2968	qP	17	2	0	513.888337	.000402	.000300	|	.	.x	. |
2969	qP	18	2	0	513.294323	-.000093	.000200	|	.	v	. |
2970	qP	19	2	0	512.704408	.000263	.000200	|	.	.x	. |
2971	qP	20	2	0	512.117656	.000668	.001000	|	.	.v	. |
2972	qP	21	2	0	511.533001	.000170	.000200	|	.	v	. |
2973	qP	22	2	0	510.951720	.000144	.000200	|	.	v	. |
2974	qP	23	2	0	510.373432	.000288	.000200	|	.	.x	. |
2975	qP	24	2	0	509.797785	.000310	.000200	|	.	.x	. |
2976	qP	25	2	0	509.224974	.000448	.003000	|	.	.v	. |
2977	qP	26	2	0	508.654484	.000213	.000200	|	.	x	. |
2978	qP	27	2	0	508.087097	.000402	.000300	|	.	.x	. |
2979	qP	28	2	0	507.521920	.000121	.000200	|	.	v	. |
2980	qP	29	2	0	506.959702	.000113	.000200	|	.	v	. |
2981	qP	30	2	0	506.400242	.000158	.000200	|	.	v	. |
2982	qP	31	2	0	505.843555	.000252	.000200	|	.	.x	. |
2983	qP	32	2	0	505.288094	-.001178	.002000	|	.	v .	. |
2984	qP	33	2	0	504.738412	.000391	.000500	|	.	.v	. |
2985	qP	34	2	0	504.189790	.000211	.000200	|	.	x	. |
2986	qP	35	2	0	503.644071	.000096	.000200	|	.	v	. |
2987	qP	36	2	0	503.101427	.000186	.000200	|	.	v	. |
2988	qP	37	2	0	502.561688	.000282	.000200	|	.	.x	. |
2989	qP	38	2	0	502.024688	.000190	.000200	|	.	v	. |
2990	qP	39	2	0	501.490641	.000097	.000200	|	.	v	. |
2991	qP	40	2	0	500.959783	.000213	.000200	|	.	x	. |
2992	qP	41	2	0	500.431810	.000211	.000200	|	.	x	. |
2993	qP	42	2	0	499.906794	.000140	.000200	|	.	v	. |
2994	qP	43	2	0	499.384979	.000224	.000200	|	.	x	. |
2995	qP	44	2	0	498.866151	.000230	.000200	|	.	x	. |
2996	qP	45	2	0	498.350284	.000116	.000200	|	.	v	. |
2997	qP	46	2	0	497.837717	.000205	.000200	|	.	x	. |
2998	qP	47	2	0	497.328068	.000100	.000200	|	.	v	. |
2999	qP	48	2	0	496.821693	.000146	.000200	|	.	v	. |
3000	qP	49	2	0	496.318382	.000121	.000200	|	.	v	. |
3001	qP	50	2	0	495.818222	.000102	.000200	|	.	v	. |
3002	qP	51	2	0	495.321213	.000082	.000200	|	.	v	. |
3003	qP	52	2	0	494.827381	.000077	.000200	|	.	v	. |
3004	qP	53	2	0	494.336734	.000090	.000200	|	.	v	. |
3005	qP	54	2	0	493.849223	.000066	.000200	|	.	v	. |
3006	qP	55	2	0	493.365009	.000163	.000200	|	.	v	. |
3007	qP	56	2	0	492.883748	.000031	.000200	|	.	v	. |
3008	qP	57	2	0	492.405891	.000120	.000200	|	.	v	. |
3009	qP	58	2	0	491.931045	.000034	.000200	|	.	v	. |
3010	qP	59	2	0	491.459475	.000037	.000200	|	.	v	. |
3011	qP	60	2	0	490.991104	.000052	.000200	|	.	v	. |
3012	qP	61	2	0	490.525861	.000008	.000200	|	.	v	. |
3013	qP	62	2	0	490.063766	-.000075	.000200	|	.	v	. |
3014	qP	63	2	0	489.604965	-.000050	.000200	|	.	v	. |
3015	qP	64	2	0	489.149415	.000043	.000200	|	.	v	. |

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3016 qP 65  2  0   488.696908   -.000003   .000200 |   .   v   .   |
3017 qP 66  2  0   488.247544   -.000084   .000200 |   .   v   .   |
3018 qP 67  2  0   487.801459   -.000061   .000200 |   .   v   .   |
3019 qP 68  2  0   487.358837    .000254   .000200 |   .   .x  .   |
3020 qP 69  2  0   486.918778   -.000035   .000200 |   .   v   .   |
3021 qP 70  2  0   486.482534    .000328   .000200 |   .   .x  .   |
3022 qP 71  2  0   486.048943    .000187   .000200 |   .   v   .   |
3023 qP 72  2  0   485.618839    .000381   .000200 |   .   .x  .   |
3024 qR  2  2  0   526.665320    .000289   .000200 |   .   .x  .   |
3025 qR  3  2  0   527.356640    .000251   .000200 |   .   .x  .   |
3026 qR  4  2  0   528.053050    .000247   .000200 |   .   x   .   |
3027 qR  5  2  0   528.754435    .000249   .000200 |   .   x   .   |
3028 qR  6  2  0   529.460664    .000230   .000200 |   .   x   .   |
3029 qR  7  2  0   530.171724    .000296   .000200 |   .   .x  .   |
3030 qR  8  2  0   530.887404    .000369   .000200 |   .   .x  .   |
3031 qR  9  2  0   531.607530    .000422   .000200 |   .   .*  .   |
3032 qR 10  2  0   532.331846    .000358   .000200 |   .   .x  .   |
3033 qR 11  2  0   533.060051    .000043   .000200 |   .   v   .   |
3034 qR 12  2  0   533.792648    .000156   .000200 |   .   v   .   |
3035 qR 13  2  0   534.528968    .000204   .000200 |   .   x   .   |
3036 qR 14  2  0   535.268858    .000213   .000200 |   .   x   .   |
3037 qR 15  2  0   536.012189    .000227   .000200 |   .   x   .   |
3038 qR 16  2  0   536.757729   -.000821   .001000 |   . v .   .   |
3039 qR 17  2  0   537.507957   -.000296   .000500 |   . v.    .   |
3040 qR 18  2  0   538.261096    .000163   .000200 |   .   v   .   |
3041 qR 19  2  0   539.016684    .000217   .000200 |   .   x   .   |
3042 qR 20  2  0   539.774921    .000173   .000200 |   .   v   .   |
3043 qR 21  2  0   540.535777    .000086   .000200 |   .   v   .   |
3044 qR 22  2  0   541.299434    .000205   .000200 |   .   x   .   |
3045 qR 23  2  0   542.065524    .000214   .000200 |   .   x   .   |
3046 qR 24  2  0   542.834034    .000133   .000200 |   .   v   .   |
3047 qR 25  2  0   543.605097    .000116   .000200 |   .   v   .   |
3048 qR 26  2  0   544.378675    .000134   .000200 |   .   v   .   |
3049 qR 27  2  0   545.154969    .000387   .000200 |   .   .x  .   |
3050 qR 28  2  0   545.933157    .000045   .000500 |   .   v   .   |
3051 qR 29  2  0   546.714331    .000185   .000200 |   .   v   .   |
3052 qR 30  2  0   547.497616   -.000086   .000200 |   .   v   .   |
3053 qR 31  2  0   548.283585   -.000215   .000500 |   .   v   .   |
3054 qR 32  2  0   549.073244    .000780   .001000 |   .   . v .   |
3055 qR 33  2  0   549.863715    .000000   .000200 |   .   v   .   |
3056 qR 34  2  0   550.657735    .000159   .000200 |   .   v   .   |
3057 qR 35  2  0   551.454261    .000191   .000200 |   .   v   .   |
3058 qR 36  2  0   552.253500    .000283   .000200 |   .   .x  .   |
3059 qR 37  2  0   553.055052    .000015   .000200 |   .   v   .   |
3060 qR 38  2  0   553.859787    .000239   .000200 |   .   x   .   |
3061 qR 39  2  0   554.666817    .000051   .000200 |   .   v   .   |
3062 qR 40  2  0   555.476772    .000067   .000200 |   .   v   .   |
3063 qR 41  2  0   556.289408    .000030   .000200 |   .   v   .   |
3064 qR 42  2  0   557.104962    .000164   .000200 |   .   v   .   |
3065 qR 43  2  0   557.923072    .000100   .000200 |   .   v   .   |
3066 qR 44  2  0   558.744011    .000101   .000200 |   .   v   .   |
3067 qR 45  2  0   559.567813    .000196   .000200 |   .   v   .   |
3068 qR 46  2  0   560.394226    .000128   .000200 |   .   v   .   |
3069 qR 47  2  0   561.223768    .000410   .000200 |   .   .*  .   |
3070 qR 48  2  0   562.055520    .000122   .000200 |   .   v   .   |
3071 qR 49  2  0   562.890095   -.000125   .000200 |   .   v   .   |
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3072	qR 50	2	0	563.727917	.000093	.000200	|	.	v	.	|
3073	qR 51	2	0	564.568335	.000127	.000200	|	.	v	.	|
3074	qR 52	2	0	565.411408	.000038	.000200	|	.	v	.	|
3075	qR 53	2	0	566.257372	.000063	.000200	|	.	v	.	|
3076	qR 54	2	0	567.105956	-.000062	.000200	|	.	v	.	|
3077	qR 55	2	0	567.957446	-.000049	.000200	|	.	v	.	|
3078	qR 56	2	0	568.811755	.000022	.000200	|	.	v	.	|
3079	qR 57	2	0	569.668788	.000062	.000200	|	.	v	.	|
3080	qR 58	2	0	570.528465	-.000002	.000200	|	.	v	.	|
3081	qR 59	2	0	571.390777	-.000172	.000200	|	.	v	.	|
3082	qR 60	2	0	572.256278	.000115	.000200	|	.	v	.	|
3083	qR 61	2	0	573.123706	-.000395	.000500	|	.	v.	.	|
3084	qR 62	2	0	573.994615	-.000138	.000200	|	.	v	.	|
3085	qR 63	2	0	574.867951	-.000159	.000200	|	.	v	.	|
3086	qR 64	2	0	575.744121	-.000040	.000200	|	.	v	.	|
3087	qR 65	2	0	576.623521	.000625	.001000	|	.	.v	.	|
3088	qR 66	2	0	577.504364	.000062	.000200	|	.	v	.	|
3089	qR 67	2	0	578.388479	.000110	.000200	|	.	v	.	|
3090	qR 68	2	0	579.274596	-.000488	.001000	|	.	v.	.	|
3091	qR 69	2	0	580.164721	.000285	.000200	|	.	.x	.	|
3092	qR 70	2	0	581.057240	.000830	.001000	|	.	. v	.	|
3093	qR 71	2	0	581.951735	.000741	.001000	|	.	.v	.	|
3094	qP 4	3	0	521.963028	.000243	.000300	|	.	v	.	|
3095	qP 5	3	0	521.313403	.000279	.000300	|	.	.v	.	|
3096	qP 6	3	0	520.668852	.000301	.000200	|	.	.x	.	|
3097	qP 7	3	0	520.029287	.000305	.000200	|	.	.x	.	|
3098	qP 8	3	0	519.394663	.000349	.000200	|	.	.x	.	|
3099	qP 9	3	0	518.764688	.000262	.000200	|	.	.x	.	|
3100	qP 10	3	0	518.139509	.000326	.000200	|	.	.x	.	|
3101	qP 11	3	0	517.518206	-.000231	.001000	|	.	v	.	|
3102	qP 12	3	0	516.902300	.000273	.000200	|	.	.x	.	|
3103	qP 13	3	0	516.290148	.000365	.000200	|	.	.x	.	|
3104	qP 14	3	0	515.681382	-.000148	.000500	|	.	v	.	|
3105	qP 15	3	0	515.077836	.000744	.000500	|	.	.x	.	|
3106	qP 16	3	0	514.476624	.000329	.000200	|	.	.x	.	|
3107	qP 17	3	0	513.879394	.000423	.000200	|	.	.*	.	|
3108	qP 18	3	0	513.285950	.000984	.001000	|	.	. v	.	|
3109	qP 19	3	0	512.694879	.000739	.000500	|	.	.x	.	|
3110	qP 20	3	0	512.106741	.000374	.000200	|	.	.x	.	|
3111	qP 21	3	0	511.521847	.000301	.000200	|	.	.x	.	|
3112	qP 22	3	0	510.940039	.000446	.000300	|	.	.x	.	|
3113	qP 23	3	0	510.360745	.000303	.000200	|	.	.x	.	|
3114	qP 24	3	0	509.784424	.000374	.000200	|	.	.x	.	|
3115	qP 25	3	0	509.210537	.000150	.000200	|	.	v	.	|
3116	qP 26	3	0	508.639753	.000313	.000200	|	.	.x	.	|
3117	qP 27	3	0	508.071558	.000353	.000200	|	.	.x	.	|
3118	qP 28	3	0	507.506070	.000378	.000200	|	.	.x	.	|
3119	qP 29	3	0	506.943070	.000156	.000200	|	.	v	.	|
3120	qP 30	3	0	506.383164	.000271	.000200	|	.	.x	.	|
3121	qP 31	3	0	505.825942	.000289	.000200	|	.	.x	.	|
3122	qP 32	3	0	505.271456	.000236	.000200	|	.	x	.	|
3123	qP 33	3	0	504.719864	.000241	.000200	|	.	x	.	|
3124	qP 34	3	0	504.171192	.000302	.000200	|	.	.x	.	|
3125	qP 35	3	0	503.624935	-.000115	.000500	|	.	v	.	|
3126	qP 36	3	0	503.082347	.000218	.000200	|	.	x	.	|
3127	qP 37	3	0	502.542368	.000215	.000200	|	.	x	.	|

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3128 qP 38  3  0    502.005157     .000008    .000200 |   .   v   .   |
3129 qP 39  3  0    501.471201     .000063    .000200 |   .   v   .   |
3130 qP 40  3  0    500.940328     .000185    .000200 |   .   v   .   |
3131 qP 41  3  0    500.412336     .000152    .000200 |   .   v   .   |
3132 qP 42  3  0    499.887382     .000102    .000200 |   .   v   .   |
3133 qP 43  3  0    499.365619     .000171    .000200 |   .   v   .   |
3134 qP 44  3  0    498.846807     .000103    .000200 |   .   v   .   |
3135 qP 45  3  0    498.331149     .000088    .000200 |   .   v   .   |
3136 qP 46  3  0    497.818583     .000050    .000200 |   .   v   .   |
3137 qP 47  3  0    497.309181     .000049    .000200 |   .   v   .   |
3138 qP 48  3  0    496.802858    -.000009    .000200 |   .   v   .   |
3139 qP 49  3  0    496.299724    -.000023    .000200 |   .   v   .   |
3140 qP 50  3  0    495.799764    -.000018    .000200 |   .   v   .   |
3141 qP 51  3  0    495.302943    -.000035    .000200 |   .   v   .   |
3142 qP 52  3  0    494.809241    -.000099    .000200 |   .   v   .   |
3143 qP 53  3  0    494.318814    -.000061    .000200 |   .   v   .   |
3144 qP 54  3  0    493.831426    -.000160    .000200 |   .   v   .   |
3145 qP 55  3  0    493.347385    -.000093    .000200 |   .   v   .   |
3146 qP 56  3  0    492.866382    -.000170    .000200 |   .   v   .   |
3147 qP 57  3  0    492.388686    -.000125    .000200 |   .   v   .   |
3148 qP 58  3  0    491.914036    -.000219    .000200 |   .   x   .   |
3149 qP 59  3  0    491.442708    -.000179    .000200 |   .   v   .   |
3150 qP 60  3  0    490.974523    -.000183    .000200 |   .   v   .   |
3151 qP 61  3  0    490.509478    -.000232    .000200 |   .   x   .   |
3152 qP 62  3  0    490.047673    -.000227    .000200 |   .   x   .   |
3153 qP 63  3  0    489.589076    -.000198    .000200 |   .   v   .   |
3154 qP 64  3  0    489.133566    -.000263    .000200 |   .  x.   .   |
3155 qP 65  3  0    488.681327    -.000235    .000200 |   .   x   .   |
3156 qP 66  3  0    488.232310    -.000162    .000200 |   .   v   .   |
3157 qP 67  3  0    487.786316    -.000238    .000200 |   .   x   .   |
3158 qP 68  3  0    487.343509    -.000295    .000200 |   .  x.   .   |
3159 qP 69  3  0    486.904086    -.000133    .000200 |   .   v   .   |
3160 qP 70  3  0    486.467461    -.000331    .000200 |   .  x.   .   |
3161 qP 71  3  0    486.034593     .000073    .000500 |   .   v   .   |
3162 qP 72  3  0    485.604164    -.000233    .000200 |   .   x   .   |
3163 qP 73  3  0    485.177106    -.000311    .000500 |   .  v.   .   |
3164 qP 74  3  0    484.753861     .000287    .000200 |   .   .x  .   |
3165 qP 75  3  0    484.333102     .000241    .000200 |   .   x   .   |
3166 qP 76  3  0    483.914483    -.000788    .001000 |   . v .   .   |
3167 qP 77  3  0    483.500956     .000158    .000200 |   .   v   .   |
3168 qP 78  3  0    483.089369    -.000065    .000500 |   .   v   .   |
3169 qP 79  3  0    482.681611     .000439    .000200 |   .   .*  .   |
3170 qP 80  3  0    482.276918     .000916    .000200 |   .   . * .   |
3171 qP 81  3  0    481.874622     .000704    .000200 |   .   .*  .   |
3172 qP 82  3  0    481.475438     .000528    .000500 |   .   .x  .   |
3173 qP 83  3  0    481.080777     .001807    .001000 |   .   .  x.   |
3174 qP 84  3  0    480.687813     .001725    .001000 |   .   . x .   |
3175 qP 85  3  0    480.298385     .002129    .002000 |   .   .  x.   |
3176 qR  3  3  0    527.348043     .000359    .000200 |   .   .x  .   |
3177 qR  4  3  0    528.044400     .000344    .000200 |   .   .x  .   |
3178 qR  5  3  0    528.745706     .000315    .000200 |   .   .x  .   |
3179 qR  6  3  0    529.451923     .000346    .000200 |   .   .x  .   |
3180 qR  7  3  0    530.162841     .000353    .000200 |   .   .x  .   |
3181 qR  8  3  0    530.878332     .000351    .000200 |   .   .x  .   |
3182 qR  9  3  0    531.598105     .000206    .000200 |   .   x   .   |
3183 qR 10  3  0    532.322503     .000428    .000200 |   .   .*  .   |
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3184	qR 11	3	0	533.050086	-.000245	.001000	|	.	v	.	|
3185	qR 12	3	0	533.782881	.000396	.000200	|	.	.x	.	|
3186	qR 13	3	0	534.519253	.000901	.001000	|	.	. v	.	|
3187	qR 14	3	0	535.258070	.000319	.000200	|	.	.x	.	|
3188	qR 15	3	0	536.001231	.000722	.000500	|	.	.x	.	|
3189	qR 16	3	0	536.746651	.000189	.000200	|	.	v	.	|
3190	qR 17	3	0	537.495113	-.000348	.001000	|	.	v.	.	|
3191	qR 18	3	0	538.247373	-.000004	.000200	|	.	v	.	|
3192	qR 19	3	0	539.002390	.000291	.000200	|	.	.x	.	|
3193	qR 20	3	0	539.760390	.000856	.001000	|	.	. v	.	|
3194	qR 21	3	0	540.519923	.000311	.000200	|	.	.x	.	|
3195	qR 22	3	0	541.282491	.000212	.000200	|	.	x	.	|
3196	qR 23	3	0	542.047776	.000275	.000200	|	.	.x	.	|
3197	qR 24	3	0	542.815822	.000568	.000500	|	.	.x	.	|
3198	qR 25	3	0	543.586081	.000552	.000500	|	.	.x	.	|
3199	qR 26	3	0	544.358632	.000305	.000200	|	.	.x	.	|
3200	qR 27	3	0	545.133659	.000004	.000200	|	.	v	.	|
3201	qR 28	3	0	545.911815	.000289	.000200	|	.	.x	.	|
3202	qR 29	3	0	546.692502	.000545	.000500	|	.	.x	.	|
3203	qR 30	3	0	547.475118	.000150	.000200	|	.	v	.	|
3204	qR 31	3	0	548.260984	.000405	.000500	|	.	.v	.	|
3205	qR 32	3	0	549.048966	.000156	.000200	|	.	v	.	|
3206	qR 33	3	0	549.839889	.000206	.000200	|	.	x	.	|
3207	qR 34	3	0	550.633298	.000081	.000200	|	.	v	.	|
3208	qR 35	3	0	551.429467	.000036	.000200	|	.	v	.	|
3209	qR 36	3	0	552.228423	.000081	.000200	|	.	v	.	|
3210	qR 37	3	0	553.029681	-.000286	.000500	|	.	v.	.	|
3211	qR 38	3	0	553.834463	.000144	.000200	|	.	v	.	|
3212	qR 39	3	0	554.641136	-.000275	.000500	|	.	v.	.	|
3213	qR 40	3	0	555.451306	.000051	.000200	|	.	v	.	|
3214	qR 41	3	0	556.263901	.000041	.000200	|	.	v	.	|
3215	qR 42	3	0	557.079307	.000073	.000200	|	.	v	.	|
3216	qR 43	3	0	557.897320	-.000065	.000200	|	.	v	.	|
3217	qR 44	3	0	558.718343	.000027	.000200	|	.	v	.	|
3218	qR 45	3	0	559.541790	-.000243	.000500	|	.	v	.	|
3219	qR 46	3	0	560.368555	.000016	.000200	|	.	v	.	|
3220	qR 47	3	0	561.197766	-.000068	.000200	|	.	v	.	|
3221	qR 48	3	0	562.029568	-.000352	.000500	|	.	v.	.	|
3222	qR 49	3	0	562.864742	-.000054	.000200	|	.	v	.	|
3223	qR 50	3	0	563.702397	-.000064	.000200	|	.	v	.	|
3224	qR 51	3	0	564.542814	-.000098	.000200	|	.	v	.	|
3225	qR 52	3	0	565.386022	-.000124	.000200	|	.	v	.	|
3226	qR 53	3	0	566.232016	-.000143	.000200	|	.	v	.	|
3227	qR 54	3	0	567.080836	-.000111	.000200	|	.	v	.	|
3228	qR 55	3	0	567.932327	-.000176	.000200	|	.	v	.	|
3229	qR 56	3	0	568.786679	-.000144	.000200	|	.	v	.	|
3230	qR 57	3	0	569.643745	-.000153	.000200	|	.	v	.	|
3231	qR 58	3	0	570.503532	-.000189	.000200	|	.	v	.	|
3232	qR 59	3	0	571.366046	-.000239	.000200	|	.	x	.	|
3233	qR 60	3	0	572.231376	-.000205	.000200	|	.	x	.	|
3234	qR 61	3	0	573.099478	-.000122	.000200	|	.	v	.	|
3235	qR 62	3	0	573.970259	-.000072	.000200	|	.	v	.	|
3236	qR 63	3	0	574.843933	.000167	.000500	|	.	v	.	|
3237	qR 64	3	0	575.719845	-.000048	.000200	|	.	v	.	|
3238	qR 65	3	0	576.598751	.000049	.000500	|	.	v	.	|
3239	qR 66	3	0	577.479634	-.000547	.000500	|	.	x.	.	|

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3240 qR 67  3  0    578.363920    -.000399    .000200 |   .  x.   .   |
3241 qR 68  3  0    579.250680    -.000422    .000200 |   .  *.   .   |
3242 qR 69  3  0    580.140363    -.000156    .000200 |   .   v   .   |
3243 qR 70  3  0    581.032087    -.000470    .000200 |   .  *.   .   |
3244 qP  5  4  0    521.302229     .000279    .000200 |   .  .x   .   |
3245 qP  6  4  0    520.657825     .000282    .000200 |   .  .x   .   |
3246 qP  7  4  0    520.018390     .000262    .000200 |   .  .x   .   |
3247 qP  8  4  0    519.383928     .000338    .000200 |   .  .x   .   |
3248 qP  9  4  0    518.754116     .000320    .000200 |   .  .x   .   |
3249 qP 10  4  0    518.128893     .000296    .000200 |   .  .x   .   |
3250 qP 11  4  0    517.508119     .000293    .000200 |   .  .x   .   |
3251 qP 12  4  0    516.891663     .000355    .000200 |   .  .x   .   |
3252 qP 13  4  0    516.279076     .000218    .000200 |   .   x   .   |
3253 qP 14  4  0    515.670582     .000291    .000200 |   .  .x   .   |
3254 qP 15  4  0    515.065722     .000302    .000200 |   .  .x   .   |
3255 qP 16  4  0    514.464616     .000547    .000500 |   .  .x   .   |
3256 qP 17  4  0    513.866357     .000284    .000200 |   .  .x   .   |
3257 qP 18  4  0    513.271680     .000395    .000200 |   .  .x   .   |
3258 qP 19  4  0    512.679926     .000349    .000200 |   .  .x   .   |
3259 qP 20  4  0    512.091290     .000444    .000300 |   .  .x   .   |
3260 qP 21  4  0    511.505163     .000156    .000200 |   .   v   .   |
3261 qP 22  4  0    510.922086     .000085    .000200 |   .   v   .   |
3262 qP 23  4  0    510.342292     .000505    .000500 |   .  .x   .   |
3263 qP 24  4  0    509.764368     .000026    .000200 |   .   v   .   |
3264 qP 25  4  0    509.189634    -.000022    .000300 |   .   v   .   |
3265 qP 26  4  0    508.618007     .000274    .000200 |   .  .x   .   |
3266 qP 27  4  0    508.048884     .000300    .000200 |   .  .x   .   |
3267 qP 28  4  0    507.482888     .000662    .000500 |   .  .x   .   |
3268 qP 29  4  0    506.918959     .000279    .000200 |   .  .x   .   |
3269 qP 30  4  0    506.358367     .000394    .000200 |   .  .x   .   |
3270 qP 31  4  0    505.799798    -.000331    .001000 |   .  v.   .   |
3271 qP 32  4  0    505.245506     .000331    .000200 |   .  .x   .   |
3272 qP 33  4  0    504.693220     .000085    .000200 |   .   v   .   |
3273 qP 34  4  0    504.144453     .000417    .000200 |   .  .*   .   |
3274 qP 35  4  0    503.598009     .000107    .000200 |   .   v   .   |
3275 qP 36  4  0    503.055022     .000269    .000200 |   .  .x   .   |
3276 qP 37  4  0    502.514943     .000330    .000200 |   .  .x   .   |
3277 qP 38  4  0    501.977524     .000024    .000300 |   .   v   .   |
3278 qP 39  4  0    501.443756     .000323    .000200 |   .  .x   .   |
3279 qP 40  4  0    500.912823     .000395    .000200 |   .  .x   .   |
3280 qP 41  4  0    500.384513     .000012    .000300 |   .   v   .   |
3281 qP 42  4  0    499.859700     .000034    .000300 |   .   v   .   |
3282 qP 43  4  0    499.338038     .000102    .000200 |   .   v   .   |
3283 qP 44  4  0    498.819652     .000330    .000200 |   .  .x   .   |
3284 qP 45  4  0    498.303967     .000131    .000200 |   .   v   .   |
3285 qP 46  4  0    497.791838     .000353    .000200 |   .  .x   .   |
3286 qP 47  4  0    497.282509     .000229    .000200 |   .   x   .   |
3287 qP 48  4  0    496.776421     .000194    .000200 |   .   v   .   |
3288 qP 49  4  0    496.273597     .000263    .000200 |   .  .x   .   |
3289 qP 50  4  0    495.773769     .000164    .000200 |   .   v   .   |
3290 qP 51  4  0    495.277275     .000228    .000200 |   .   x   .   |
3291 qP 52  4  0    494.783877     .000215    .000200 |   .   x   .   |
3292 qP 53  4  0    494.293685     .000229    .000200 |   .   x   .   |
3293 qP 54  4  0    493.806627     .000197    .000200 |   .   v   .   |
3294 qP 55  4  0    493.322780     .000193    .000200 |   .   v   .   |
3295 qP 56  4  0    492.842142     .000213    .000200 |   .   x   .   |
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3296	qP 57	4	0	492.364649	.000193	.000200	|	.	v	.	|
3297	qP 58	4	0	491.890335	.000165	.000200	|	.	v	.	|
3298	qP 59	4	0	491.419294	.000225	.000200	|	.	x	.	|
3299	qP 60	4	0	490.951311	.000157	.000200	|	.	v	.	|
3300	qP 61	4	0	490.486618	.000195	.000200	|	.	v	.	|
3301	qP 62	4	0	490.025056	.000182	.000200	|	.	v	.	|
3302	qP 63	4	0	489.566650	.000144	.000200	|	.	v	.	|
3303	qP 64	4	0	489.111424	.000107	.000200	|	.	v	.	|
3304	qP 65	4	0	488.659457	.000155	.000200	|	.	v	.	|
3305	qP 66	4	0	488.210478	.000018	.000200	|	.	v	.	|
3306	qP 67	4	0	487.765059	.000273	.000200	|	.	.x	.	|
3307	qP 68	4	0	487.322533	.000257	.000200	|	.	.x	.	|
3308	qP 69	4	0	486.883134	.000208	.000200	|	.	x	.	|
3309	qP 70	4	0	486.447276	.000546	.000300	|	.	.x	.	|
3310	qP 71	4	0	486.013945	.000260	.000200	|	.	.x	.	|
3311	qP 72	4	0	485.584053	.000270	.000200	|	.	.x	.	|
3312	qR 4	4	0	528.032279	.000399	.000200	|	.	.x	.	|
3313	qR 5	4	0	528.733529	.000372	.000200	|	.	.x	.	|
3314	qR 6	4	0	529.439579	.000316	.000200	|	.	.x	.	|
3315	qR 7	4	0	530.150389	.000332	.000200	|	.	.x	.	|
3316	qR 8	4	0	530.865724	.000343	.000200	|	.	.x	.	|
3317	qR 9	4	0	531.585410	.000346	.000200	|	.	.x	.	|
3318	qR 10	4	0	532.309167	.000246	.000200	|	.	x	.	|
3319	qR 11	4	0	533.037095	.000334	.000200	|	.	.x	.	|
3320	qR 12	4	0	533.768685	.000296	.000200	|	.	.x	.	|
3321	qR 13	4	0	534.503940	.000326	.000200	|	.	.x	.	|
3322	qR 14	4	0	535.242526	.000276	.000200	|	.	.x	.	|
3323	qR 15	4	0	535.984495	.000368	.000200	|	.	.x	.	|
3324	qR 16	4	0	536.729480	.000392	.000200	|	.	.x	.	|
3325	qR 17	4	0	537.476935	-.000064	.000300	|	.	v	.	|
3326	qR 18	4	0	538.228172	.000424	.000300	|	.	.x	.	|
3327	qR 19	4	0	538.981607	.000363	.000200	|	.	.x	.	|
3328	qR 20	4	0	539.737740	.000319	.000200	|	.	.x	.	|
3329	qR 21	4	0	540.496573	.000344	.000200	|	.	.x	.	|
3330	qR 22	4	0	541.257957	.000319	.000200	|	.	.x	.	|
3331	qR 23	4	0	542.021914	.000282	.000200	|	.	.x	.	|
3332	qR 24	4	0	542.788428	.000223	.000200	|	.	x	.	|
3333	qR 25	4	0	543.557605	.000243	.000200	|	.	x	.	|
3334	qR 26	4	0	544.329800	.000688	.000500	|	.	.x	.	|
3335	qR 27	4	0	545.103739	.000268	.000200	|	.	.x	.	|
3336	qR 28	4	0	545.880669	.000214	.000200	|	.	x	.	|
3337	qR 29	4	0	546.660322	.000240	.000200	|	.	x	.	|
3338	qR 30	4	0	547.442727	.000357	.000200	|	.	.x	.	|
3339	qR 31	4	0	548.227642	.000302	.000200	|	.	.x	.	|
3340	qR 32	4	0	549.015278	.000271	.000200	|	.	.x	.	|
3341	qR 33	4	0	549.805752	.000364	.000200	|	.	.x	.	|
3342	qR 34	4	0	550.598710	.000212	.000200	|	.	x	.	|
3343	qR 35	4	0	551.394588	.000236	.000200	|	.	x	.	|
3344	qR 36	4	0	552.193179	.000219	.000200	|	.	x	.	|
3345	qR 37	4	0	552.994579	.000245	.000200	|	.	x	.	|
3346	qR 38	4	0	553.799130	.000647	.000500	|	.	.x	.	|
3347	qR 39	4	0	554.605406	-.000010	.000300	|	.	v	.	|
3348	qR 40	4	0	555.415272	.000134	.000200	|	.	v	.	|
3349	qR 41	4	0	556.227728	.000074	.000200	|	.	v	.	|
3350	qR 42	4	0	557.042909	-.000061	.000500	|	.	v	.	|
3351	qR 43	4	0	557.862601	.001512	.002000	|	.	.	v	. |

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3352 qR 44  4  0    558.682111     .000100    .000200 |   .    v    .   |
3353 qR 45  4  0    559.505750     .000011    .000200 |   .    v    .   |
3354 qR 46  4  0    560.332320     .000048    .000200 |   .    v    .   |
3355 qR 47  4  0    561.161839     .000230    .000200 |   .    x    .   |
3356 qR 48  4  0    561.993951     .000202    .000200 |   .    x    .   |
3357 qR 49  4  0    562.828927     .000237    .000200 |   .    x    .   |
3358 qR 50  4  0    563.666494     .000067    .000200 |   .    v    .   |
3359 qR 51  4  0    564.507176     .000218    .000200 |   .    x    .   |
3360 qR 52  4  0    565.350506     .000229    .000200 |   .    x    .   |
3361 qR 53  4  0    566.196477     .000098    .000200 |   .    v    .   |
3362 qR 54  4  0    567.045473     .000214    .000200 |   .    x    .   |
3363 qR 55  4  0    567.896971     .000061    .000200 |   .    v    .   |
3364 qR 56  4  0    568.751579     .000255    .000200 |   .    .x   .   |
3365 qR 57  4  0    569.608668     .000173    .000200 |   .    v    .   |
3366 qR 58  4  0    570.468442     .000027    .000200 |   .    v    .   |
3367 qR 59  4  0    571.331272     .000199    .000200 |   .    v    .   |
3368 qR 60  4  0    572.196545     .000082    .000200 |   .    v    .   |
3369 qR 61  4  0    573.063653    -.000920    .002000 |   . v .    .   |
3370 qR 62  4  0    573.935693     .000298    .000200 |   .    .x   .   |
3371 qR 63  4  0    574.809009     .000092    .000200 |   .    v    .   |
3372 qR 64  4  0    575.685393     .000264    .000200 |   .    .x   .   |
3373 qR 65  4  0    576.564436     .000416    .000200 |   .    .*   .   |
3374 qR 66  4  0    577.446006     .000428    .000200 |   .    .*   .   |
3375 qR 67  4  0    578.330755     .000963    .001000 |   .    . v  .   |
3376 qR 68  4  0    579.217310     .000661    .000500 |   .    .x   .   |
3377 qR 69  4  0    580.106163     .000027    .000200 |   .    v    .   |
3378 qP  6  5  0    520.643454     .000118    .000200 |   .    v    .   |
3379 qP  7  5  0    520.004147     .000007    .000200 |   .    v    .   |
3380 qP  8  5  0    519.369981     .000197    .000200 |   .    v    .   |
3381 qP  9  5  0    518.740204     .000093    .000200 |   .    v    .   |
3382 qP 10  5  0    518.115079     .000134    .000200 |   .    v    .   |
3383 qP 11  5  0    517.494193     .000097    .000200 |   .    v    .   |
3384 qP 12  5  0    516.877480     .000116    .000200 |   .    v    .   |
3385 qP 13  5  0    516.264711     .000168    .000200 |   .    v    .   |
3386 qP 14  5  0    515.655500     .000069    .000200 |   .    v    .   |
3387 qP 15  5  0    515.049841     .000004    .000200 |   .    v    .   |
3388 qP 16  5  0    514.447617     .000031    .000200 |   .    v    .   |
3389 qP 17  5  0    513.848686     .000159    .000200 |   .    v    .   |
3390 qP 18  5  0    513.252773     .000240    .000200 |   .    x    .   |
3391 qP 19  5  0    512.659630     .000123    .000200 |   .    v    .   |
3392 qP 20  5  0    512.069646     .000268    .000200 |   .    .x   .   |
3393 qP 21  5  0    511.482278     .000179    .000200 |   .    v    .   |
3394 qP 22  5  0    510.897850     .000204    .000200 |   .    x    .   |
3395 qP 23  5  0    510.316050     .000042    .000200 |   .    v    .   |
3396 qP 24  5  0    509.737192     .000000    .000200 |   .    v    .   |
3397 qP 25  5  0    509.161504     .000294    .000200 |   .    .x   .   |
3398 qP 26  5  0    508.589290     .001208    .001000 |   .    . x  .   |
3399 qP 27  5  0    508.018156     .000325    .000200 |   .    .x   .   |
3400 qP 28  5  0    507.450630     .000148    .000200 |   .    v    .   |
3401 qP 29  5  0    506.886370     .000311    .000200 |   .    .x   .   |
3402 qP 30  5  0    506.325581     .000993    .001000 |   .    . v  .   |
3403 qP 31  5  0    505.766236     .000146    .000200 |   .    v    .   |
3404 qP 32  5  0    505.210782     .000194    .000200 |   .    v    .   |
3405 qP 33  5  0    504.658404     .000301    .000200 |   .    .x   .   |
3406 qP 34  5  0    504.108786     .000134    .000200 |   .    v    .   |
3407 qP 35  5  0    503.562448     .000195    .000200 |   .    v    .   |
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3408 qP 36  5  0   503.019137    .000216   .000200 |   .   x   .   |
3409 qP 37  5  0   502.478960    .000290   .000200 |   .   .x  .   |
3410 qP 38  5  0   501.941707    .000195   .000200 |   .   v   .   |
3411 qP 39  5  0   501.407876    .000416   .000200 |   .   .*  .   |
3412 qP 40  5  0   500.876801    .000278   .000200 |   .   .x  .   |
3413 qP 41  5  0   500.348906    .000194   .000200 |   .   v   .   |
3414 qP 42  5  0   499.824263    .000229   .000200 |   .   x   .   |
3415 qP 43  5  0   499.302661    .000163   .000200 |   .   v   .   |
3416 qP 44  5  0   498.784295    .000184   .000200 |   .   v   .   |
3417 qP 45  5  0   498.269070    .000192   .000200 |   .   v   .   |
3418 qP 46  5  0   497.756942    .000137   .000200 |   .   v   .   |
3419 qP 47  5  0   497.247995    .000097   .000200 |   .   v   .   |
3420 qP 48  5  0   496.742347    .000187   .000200 |   .   v   .   |
3421 qP 49  5  0   496.241679    .002084   .002000 |   .   .   x.  |
3422 qP 50  5  0   495.739704   -.000504   .001000 |   .   v.  .   |
3423 qP 51  5  0   495.243730   -.000269   .000500 |   .   v.  .   |
3424 qP 52  5  0   494.751328    .000356   .000300 |   .   .x  .   |
3425 qP 53  5  0   494.261213    .000085   .000200 |   .   v   .   |
3426 qP 54  5  0   493.774598    .000129   .000200 |   .   v   .   |

3427 qP 55  5  0   493.291117    .000123   .000200 |   .   v   .   |
3428 qP 56  5  0   492.810768    .000062   .000200 |   .   v   .   |
3429 qP 57  5  0   492.333724    .000122   .000200 |   .   v   .   |
3430 qP 58  5  0   491.859765    .000081   .000200 |   .   v   .   |
3431 qP 59  5  0   491.389036    .000086   .000200 |   .   v   .   |
3432 qP 60  5  0   490.921653    .000255   .000200 |   .   .x  .   |
3433 qP 61  5  0   490.457022   -.000005   .000200 |   .   v   .   |
3434 qP 62  5  0   489.995908    .000073   .000200 |   .   v   .   |
3435 qP 63  5  0   489.537893    .000073   .000200 |   .   v   .   |
3436 qP 64  5  0   489.082979    .000002   .000200 |   .   v   .   |
3437 qP 65  5  0   488.631268   -.000037   .000200 |   .   v   .   |
3438 qP 66  5  0   488.182842    .000043   .000200 |   .   v   .   |
3439 qP 67  5  0   487.737633    .000178   .000200 |   .   v   .   |
3440 qP 68  5  0   487.295461    .000191   .000200 |   .   v   .   |
3441 qP 69  5  0   486.856354    .000115   .000200 |   .   v   .   |
3442 qP 70  5  0   486.420940    .000584   .000300 |   .   .x  .   |
3443 qP 71  5  0   485.988123    .000506   .000200 |   .   .*  .   |
3444 qR  5  5  0   528.717608    .000211   .000200 |   .   x   .   |
3445 qR  6  5  0   529.423584    .000171   .000200 |   .   v   .   |
3446 qR  7  5  0   530.134247    .000192   .000200 |   .   v   .   |
3447 qR  8  5  0   530.849269    .000127   .000200 |   .   v   .   |
3448 qR  9  5  0   531.568720    .000245   .000200 |   .   x   .   |
3449 qR 10  5  0   532.292033    .000186   .000200 |   .   v   .   |
3450 qR 11  5  0   533.019181    .000136   .000200 |   .   v   .   |
3451 qR 12  5  0   533.750028    .000169   .000200 |   .   v   .   |
3452 qR 13  5  0   534.484190    .000099   .000200 |   .   v   .   |
3453 qR 14  5  0   535.221693    .000134   .000200 |   .   v   .   |
3454 qR 15  5  0   535.962324    .000221   .000200 |   .   x   .   |
3455 qR 16  5  0   536.705715    .000124   .000200 |   .   v   .   |
3456 qR 17  5  0   537.451989    .000073   .000200 |   .   v   .   |
3457 qR 18  5  0   538.201347    .000346   .000300 |   .   .x  .   |
3458 qR 19  5  0   538.952758   -.000033   .000200 |   .   v   .   |
3459 qR 20  5  0   539.707490    .000235   .000200 |   .   x   .   |
3460 qR 21  5  0   540.464356   -.000019   .000200 |   .   v   .   |
3461 qR 22  5  0   541.224806    .000657   .000500 |   .   .x  .   |
3462 qR 23  5  0   541.986645    .000062   .000200 |   .   v   .   |
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3463 qR 24  5  0    542.751826     .000137    .000200 |   .   v   .   |
3464 qR 25  5  0    543.519592     .000109    .000200 |   .   v   .   |
3465 qR 26  5  0    544.290206     .000224    .000200 |   .   x   .   |
3466 qR 27  5  0    545.063272     .000069    .000200 |   .   v   .   |
3467 qR 28  5  0    545.839622     .000459    .000300 |   .   .x  .   |
3468 qR 29  5  0    546.618074     .000195    .000200 |   .   v   .   |
3469 qR 30  5  0    547.399343    -.000021    .000300 |   .   v   .   |
3470 qR 31  5  0    548.183859     .000228    .000200 |   .   x   .   |
3471 qR 32  5  0    548.970820     .000128    .000200 |   .   v   .   |
3472 qR 33  5  0    549.761036     .000481    .000500 |   .   .v  .   |
3473 qR 34  5  0    550.553181    -.000048    .000300 |   .   v   .   |
3474 qR 35  5  0    551.348872     .000152    .000200 |   .   v   .   |
3475 qR 36  5  0    552.147101     .000068    .000200 |   .   v   .   |
3476 qR 37  5  0    552.948375     .000202    .000200 |   .   x   .   |
3477 qR 38  5  0    553.752290     .000147    .000200 |   .   v   .   |
3478 qR 39  5  0    554.559007     .000063    .000200 |   .   v   .   |
3479 qR 40  5  0    555.368581     .000003    .000200 |   .   v   .   |
3480 qR 41  5  0    556.180981    -.000064    .000300 |   .   v   .   |
3481 qR 42  5  0    556.996485     .000141    .000200 |   .   v   .   |
3482 qR 43  5  0    557.814620     .000146    .000200 |   .   v   .   |
3483 qR 44  5  0    558.635585     .000151    .000200 |   .   v   .   |
3484 qR 45  5  0    559.459336     .000115    .000200 |   .   v   .   |
3485 qR 46  5  0    560.285150    -.000681    .001000 |   .  v.   .   |
3486 qR 47  5  0    561.115441     .000179    .000200 |   .   v   .   |
3487 qR 48  5  0    561.947574     .000066    .000200 |   .   v   .   |
3488 qR 49  5  0    562.782850     .000285    .000200 |   .   .x  .   |
3489 qR 50  5  0    563.620508     .000079    .000200 |   .   v   .   |
3490 qR 51  5  0    564.460788    -.000304    .000500 |   .  v.   .   |
3491 qR 52  5  0    565.304651     .000103    .000200 |   .   v   .   |
3492 qR 53  5  0    566.150830     .000038    .000200 |   .   v   .   |
3493 qR 54  5  0    566.999863     .000047    .000200 |   .   v   .   |
3494 qR 55  5  0    567.852038     .000426    .000500 |   .   .v  .   |
3495 qR 56  5  0    568.707598     .001425    .002000 |   .   . v .   |
3496 qR 57  5  0    569.563392    -.000097    .000200 |   .   v   .   |
3497 qR 58  5  0    570.423590     .000037    .000200 |   .   v   .   |
3498 qR 59  5  0    571.286158    -.000196    .000200 |   .   v   .   |
3499 qR 60  5  0    572.153408     .001524    .002000 |   .   . v .   |
3500 qR 61  5  0    573.019650    -.000482    .001000 |   .  v.   .   |
3501 qR 62  5  0    573.891538     .000450    .000500 |   .   .v  .   |
3502 qR 63  5  0    574.765318     .000577    .000500 |   .   .x  .   |
3503 qR 64  5  0    575.641240     .000160    .000200 |   .   v   .   |
3504 qR 65  5  0    576.520505     .000411    .000300 |   .   .x  .   |
3505 qR 66  5  0    577.402175     .000404    .000200 |   .   .*  .   |
3506 qR 67  5  0    578.286775     .000676    .000500 |   .   .x  .   |
3507 qR 68  5  0    579.173533     .000467    .000200 |   .   .*  .   |
3508 qR 69  5  0    580.062919     .000261    .000300 |   .   .v  .   |
3509 qR 70  5  0    580.955338     .000474    .000200 |   .   .*  .   |
3510 qR 71  5  0    581.850230     .000562    .000200 |   .   .*  .   |
3511 qP  7  6  0    519.986508    -.000147    .000200 |   .   v   .   |
3512 qP  8  6  0    519.352460    -.000091    .000200 |   .   v   .   |
3513 qP  9  6  0    518.722870    -.000150    .000200 |   .   v   .   |
3514 qP 10  6  0    518.097699    -.000143    .000200 |   .   v   .   |
3515 qP 11  6  0    517.476616    -.000165    .000200 |   .   v   .   |
3516 qP 12  6  0    516.859426    -.000175    .000200 |   .   v   .   |
3517 qP 13  6  0    516.245952    -.000117    .000200 |   .   v   .   |
3518 qP 14  6  0    515.635730    -.000242    .000200 |   .   x   .   |
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3519 qP 15  6  0    515.029057    -.000071    .000200 |   .   v   .   |
3520 qP 16  6  0    514.425295    -.000092    .000200 |   .   v   .   |
3521 qP 17  6  0    513.823772    -.000868    .001000 |   . v .   .   |
3522 qP 18  6  0    513.226634    -.000182    .000200 |   .   v   .   |
3523 qP 19  6  0    512.631829    -.000045    .000200 |   .   v   .   |
3524 qP 20  6  0    512.039665    -.000138    .000200 |   .   v   .   |
3525 qP 21  6  0    511.450538    -.000068    .000200 |   .   v   .   |
3526 qP 22  6  0    510.864366     .000062    .000200 |   .   v   .   |
3527 qP 23  6  0    510.280711    -.000211    .000200 |   .   x   .   |
3528 qP 24  6  0    509.700641     .000153    .000200 |   .   v   .   |
3529 qP 25  6  0    509.123074     .000041    .000200 |   .   v   .   |
3530 qP 26  6  0    508.548419    -.000165    .000200 |   .   v   .   |
3531 qP 27  6  0    507.977138    -.000030    .000200 |   .   v   .   |
3532 qP 28  6  0    507.408770    -.000037    .000200 |   .   v   .   |
3533 qP 29  6  0    506.842988    -.000534    .001000 |   .  v.   .   |
3534 qP 30  6  0    506.281362     .000033    .000200 |   .   v   .   |
3535 qP 31  6  0    505.722234    -.000009    .000200 |   .   v   .   |
3536 qP 32  6  0    505.166226    -.000051    .000200 |   .   v   .   |
3537 qP 33  6  0    504.613438    -.000002    .000200 |   .   v   .   |
3538 qP 34  6  0    504.063759     .000016    .000200 |   .   v   .   |
3539 qP 35  6  0    503.517238     .000047    .000200 |   .   v   .   |
3540 qP 36  6  0    502.974263     .000472    .000500 |   .   .v  .   |
3541 qP 37  6  0    502.433489    -.000061    .000200 |   .   v   .   |
3542 qP 38  6  0    501.896491     .000021    .000200 |   .   v   .   |
3543 qP 39  6  0    501.362488    -.000069    .000200 |   .   v   .   |
3544 qP 40  6  0    500.831830     .000017    .000200 |   .   v   .   |
3545 qP 41  6  0    500.304291     .000049    .000200 |   .   v   .   |
3546 qP 42  6  0    499.779946     .000100    .000200 |   .   v   .   |
3547 qP 43  6  0    499.258639     .000011    .000200 |   .   v   .   |
3548 qP 44  6  0    498.740583    -.000006    .000200 |   .   v   .   |
3549 qP 45  6  0    498.225730    -.000001    .000200 |   .   v   .   |
3550 qP 46  6  0    497.713989    -.000068    .000200 |   .   v   .   |
3551 qP 47  6  0    497.205538    -.000028    .000200 |   .   v   .   |
3552 qP 48  6  0    496.700262     .000001    .000200 |   .   v   .   |
3553 qP 49  6  0    496.198132    -.000010    .000200 |   .   v   .   |
3554 qP 50  6  0    495.699134    -.000075    .000200 |   .   v   .   |
3555 qP 51  6  0    495.203442    -.000021    .000200 |   .   v   .   |
3556 qP 52  6  0    494.710875    -.000029    .000200 |   .   v   .   |
3557 qP 53  6  0    494.221454    -.000078    .000200 |   .   v   .   |
3558 qP 54  6  0    493.735280    -.000066    .000200 |   .   v   .   |
3559 qP 55  6  0    493.252207    -.000139    .000200 |   .   v   .   |
3560 qP 56  6  0    492.772420    -.000111    .000200 |   .   v   .   |
3561 qP 57  6  0    492.295855    -.000044    .000200 |   .   v   .   |
3562 qP 58  6  0    491.821048    -.001401    .002000 |   . v .   .   |
3563 qP 59  6  0    491.352102    -.000077    .000200 |   .   v   .   |
3564 qP 60  6  0    490.884975    -.000112    .000200 |   .   v   .   |
3565 qP 61  6  0    490.421025    -.000145    .000200 |   .   v   .   |
3566 qP 62  6  0    489.960306    -.000121    .000200 |   .   v   .   |
3567 qP 63  6  0    489.502842    -.000011    .000200 |   .   v   .   |
3568 qP 64  6  0    489.048374    -.000071    .000200 |   .   v   .   |
3569 qP 65  6  0    488.597145    -.000056    .000200 |   .   v   .   |
3570 qP 66  6  0    488.148933    -.000182    .000200 |   .   v   .   |
3571 qP 67  6  0    487.704046    -.000139    .000200 |   .   v   .   |
3572 qP 68  6  0    487.262416     .000012    .000200 |   .   v   .   |
3573 qR  6  6  0    529.403617    -.000065    .000200 |   .   v   .   |
3574 qR  7  6  0    530.114043    -.000092    .000200 |   .   v   .   |
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3575	qR	8	6	0	530.828805	-.000072	.000200	|	.	v	. |
3576	qR	9	6	0	531.547589	-.000079	.000200	|	.	v	. |
3577	qR	10	6	0	532.270172	-.000089	.000200	|	.	v	. |
3578	qR	11	6	0	532.996302	-.000116	.000200	|	.	v	. |
3579	qR	12	6	0	533.725633	-.000285	.000200	|	.	x.	. |
3580	qR	13	6	0	534.458441	-.000129	.000200	|	.	v	. |
3581	qR	14	6	0	535.194117	-.000102	.000200	|	.	v	. |
3582	qR	15	6	0	535.932580	-.000168	.000200	|	.	v	. |
3583	qR	16	6	0	536.674144	.000067	.000200	|	.	v	. |
3584	qR	17	6	0	537.418182	.000022	.000200	|	.	v	. |
3585	qR	18	6	0	538.164884	-.000092	.000200	|	.	v	. |
3586	qR	19	6	0	538.914426	-.000098	.000200	|	.	v	. |
3587	qR	20	6	0	539.666947	.000132	.000200	|	.	v	. |
3588	qR	21	6	0	540.421830	-.000036	.000200	|	.	v	. |
3589	qR	22	6	0	541.179744	.000043	.000200	|	.	v	. |
3590	qR	23	6	0	541.940205	-.000135	.000200	|	.	v	. |
3591	qR	24	6	0	542.703625	-.000181	.000200	|	.	v	. |
3592	qR	25	6	0	543.469935	-.000180	.000200	|	.	v	. |
3593	qR	26	6	0	544.239732	.000448	.000500	|	.	.v	. |
3594	qR	27	6	0	545.011240	-.000085	.000200	|	.	v	. |
3595	qR	28	6	0	545.785940	-.000308	.000500	|	.	v.	. |
3596	qR	29	6	0	546.564051	-.000009	.000200	|	.	v	. |
3597	qR	30	6	0	547.344808	.000041	.000200	|	.	v	. |
3598	qR	31	6	0	548.128280	-.000091	.000200	|	.	v	. |
3599	qR	32	6	0	548.914822	-.000051	.000200	|	.	v	. |
3600	qR	33	6	0	549.704497	.000224	.000300	|	.	v	. |
3601	qR	34	6	0	550.496528	-.000043	.000200	|	.	v	. |
3602	qR	35	6	0	551.291646	-.000119	.000200	|	.	v	. |
3603	qR	36	6	0	552.089913	.000063	.000200	|	.	v	. |
3604	qR	37	6	0	552.891436	.000611	.001000	|	.	.v	. |
3605	qR	38	6	0	553.694430	-.000255	.000200	|	.	x.	. |
3606	qR	39	6	0	554.501360	-.000065	.000200	|	.	v	. |
3607	qR	40	6	0	555.310935	-.000105	.000200	|	.	v	. |
3608	qR	41	6	0	556.123380	-.000147	.000200	|	.	v	. |
3609	qR	42	6	0	556.938806	-.000072	.000200	|	.	v	. |
3610	qR	43	6	0	557.757057	-.000032	.000200	|	.	v	. |
3611	qR	44	6	0	558.578084	-.000070	.000200	|	.	v	. |
3612	qR	45	6	0	559.402004	-.000062	.000200	|	.	v	. |
3613	qR	46	6	0	560.228774	-.000045	.000200	|	.	v	. |
3614	qR	47	6	0	561.058317	-.000089	.000200	|	.	v	. |
3615	qR	48	6	0	561.890784	-.000037	.000200	|	.	v	. |
3616	qR	49	6	0	562.725954	-.000102	.000200	|	.	v	. |
3617	qR	50	6	0	563.564023	-.000082	.000200	|	.	v	. |
3618	qR	51	6	0	564.404834	-.000124	.000200	|	.	v	. |
3619	qR	52	6	0	565.248516	-.000094	.000200	|	.	v	. |
3620	qR	53	6	0	566.094952	-.000098	.000200	|	.	v	. |
3621	qR	54	6	0	566.944172	-.000100	.000200	|	.	v	. |
3622	qR	55	6	0	567.796299	.000033	.000300	|	.	v	. |
3623	qR	56	6	0	568.650949	-.000074	.000200	|	.	v	. |
3624	qR	57	6	0	569.508432	-.000102	.000200	|	.	v	. |
3625	qR	58	6	0	570.368385	-.000404	.000500	|	.	v.	. |
3626	qR	59	6	0	571.231742	-.000037	.000300	|	.	v	. |
3627	qR	60	6	0	572.097067	-.000426	.000500	|	.	v.	. |
3628	qR	61	6	0	572.966556	.000635	.001000	|	.	.v	. |
3629	qR	62	6	0	573.836863	-.000189	.000200	|	.	v	. |
3630	qR	63	6	0	574.710839	-.000036	.000200	|	.	v	. |

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3631 qR 64  6  0    575.587466     .000087    .000200 |   .    v    .   |
3632 qR 65  6  0    576.466741     .000189    .000200 |   .    v    .   |
3633 qR 66  6  0    577.348601     .000219    .000200 |   .    x    .   |
3634 qP  8  7  0    519.331142     .000085    .000500 |   .    v    .   |
3635 qP  9  7  0    518.701473    -.000203    .000200 |   .    x    .   |
3636 qP 10  7  0    518.077453     .001137    .002000 |   .    . v  .   |
3637 qP 11  7  0    517.454343    -.000323    .000200 |   .   x.    .   |
3638 qP 12  7  0    516.836232    -.000204    .000200 |   .    x    .   |
3639 qP 13  7  0    516.220736    -.000655    .000500 |   .   x.    .   |
3640 qP 14  7  0    515.609093    -.000265    .000200 |   .   x.    .   |
3641 qP 15  7  0    515.000104    -.000130    .000200 |   .    v    .   |
3642 qP 16  7  0    514.394119     .000141    .001000 |   .    v    .   |
3643 qP 17  7  0    513.790070    -.000525    .000300 |   .   x.    .   |
3644 qP 18  7  0    513.189790    -.000328    .000200 |   .   x.    .   |
3645 qP 19  7  0    512.592498    -.000099    .000200 |   .    v    .   |
3646 qP 20  7  0    511.998338     .000251    .001000 |   .    .v   .   |
3647 qP 21  7  0    511.404982    -.001655    .002000 |   . v  .    .   |
3648 qP 22  7  0    510.817345    -.000949    .001000 |   . v .    .   |
3649 qP 23  7  0    510.232253    -.000843    .001000 |   . v .    .   |
3650 qP 24  7  0    509.649859    -.001214    .001000 |   . x .    .   |
3651 qP 25  7  0    509.070381    -.001868    .002000 |   .v   .    .   |
3652 qP 26  7  0    508.496329    -.000313    .000200 |   .   x.    .   |
3653 qP 27  7  0    507.924062    -.000202    .000200 |   .    x    .   |
3654 qP 28  7  0    507.354212    -.000911    .001000 |   . v .    .   |
3655 qP 29  7  0    506.789108    -.000116    .000200 |   .    v    .   |
3656 qP 30  7  0    506.226064    -.000506    .000300 |   .   x.    .   |
3657 qP 31  7  0    505.667416     .000256    .000500 |   .    .v   .   |
3658 qP 32  7  0    505.110655    -.000339    .000200 |   .   x.    .   |
3659 qP 33  7  0    504.558060    -.000009    .000200 |   .    v    .   |
3660 qP 34  7  0    504.008251    -.000132    .000200 |   .    v    .   |
3661 qP 35  7  0    503.461044    -.000887    .001000 |   . v .    .   |
3662 qP 36  7  0    502.918687    -.000024    .000200 |   .    v    .   |
3663 qP 37  7  0    502.378609    -.000110    .000200 |   .    v    .   |
3664 qP 38  7  0    501.841847    -.000103    .000200 |   .    v    .   |
3665 qP 39  7  0    501.308333    -.000068    .000200 |   .    v    .   |
3666 qP 40  7  0    500.778015    -.000054    .000200 |   .    v    .   |
3667 qP 41  7  0    500.250940    -.000010    .000200 |   .    v    .   |
3668 qP 42  7  0    499.726532    -.000510    .000500 |   .   x.    .   |
3669 qP 43  7  0    499.206270    -.000071    .000200 |   .    v    .   |
3670 qP 44  7  0    498.688864     .000019    .000200 |   .    v    .   |
3671 qP 45  7  0    498.174675     .000124    .000200 |   .    v    .   |
3672 qP 46  7  0    497.663310    -.000147    .000200 |   .    v    .   |
3673 qP 47  7  0    497.155512    -.000048    .000200 |   .    v    .   |
3674 qP 48  7  0    496.650686    -.000174    .000200 |   .    v    .   |
3675 qP 49  7  0    496.149239    -.000114    .000200 |   .    v    .   |
3676 qP 50  7  0    495.650787    -.000251    .000200 |   .   x.    .   |
3677 qP 51  7  0    495.155873    -.000040    .000200 |   .    v    .   |
3678 qP 52  7  0    494.663848    -.000128    .000200 |   .    v    .   |
3679 qP 53  7  0    494.174894    -.000331    .000300 |   .   x.    .   |
3680 qP 54  7  0    493.689598    -.000059    .000200 |   .    v    .   |
3681 qP 55  7  0    493.206946    -.000326    .000200 |   .   x.    .   |
3682 qP 56  7  0    492.727915    -.000151    .000200 |   .    v    .   |
3683 qP 57  7  0    492.251915    -.000123    .000200 |   .    v    .   |
3684 qP 58  7  0    491.778900    -.000284    .000200 |   .   x.    .   |
3685 qP 59  7  0    491.309271    -.000232    .000200 |   .    x    .   |
3686 qP 60  7  0    490.842816    -.000175    .000200 |   .    v    .   |
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3687	qP 61	7	0	490.379546	-.000099	.000300	|	.	v	.	|
3688	qP 62	7	0	489.918835	-.000628	.000200	|	.	*.	.	|
3689	qR 7	7	0	530.089377	-.000072	.000200	|	.	v	.	|
3690	qR 8	7	0	530.803600	-.000019	.000200	|	.	v	.	|
3691	qR 9	7	0	531.521334	-.000094	.000200	|	.	v	.	|
3692	qR 10	7	0	532.242410	-.000171	.000200	|	.	v	.	|
3693	qR 11	7	0	532.966765	-.000070	.000200	|	.	v	.	|
3694	qR 12	7	0	533.693106	-.000902	.001000	|	.	v.	.	|
3695	qR 13	7	0	534.423761	-.000231	.000200	|	.	x	.	|
3696	qR 14	7	0	535.156612	-.000126	.000200	|	.	v	.	|
3697	qR 15	7	0	535.891735	-.000508	.000500	|	.	x.	.	|
3698	qR 16	7	0	536.630451	-.000082	.000200	|	.	v	.	|
3699	qR 17	7	0	537.371411	-.000241	.000200	|	.	x	.	|
3700	qR 18	7	0	538.116013	.000369	.000500	|	.	.v	.	|
3701	qR 19	7	0	538.862553	-.000002	.000200	|	.	v	.	|
3702	qR 20	7	0	539.612603	.000181	.000200	|	.	v	.	|
3703	qR 21	7	0	540.365073	-.000203	.000200	|	.	x	.	|
3704	qR 22	7	0	541.121109	-.000031	.000200	|	.	v	.	|
3705	qR 23	7	0	541.880259	.000228	.000500	|	.	v	.	|
3706	qR 24	7	0	542.641902	-.000057	.000200	|	.	v	.	|
3707	qR 25	7	0	543.406895	-.000034	.000200	|	.	v	.	|
3708	qR 26	7	0	544.172583	-.002359	.000200	|	*	.	.	|
3709	qR 27	7	0	544.945906	-.000089	.000200	|	.	v	.	|
3710	qR 28	7	0	545.720347	.000264	.000500	|	.	.v	.	|
3711	qR 29	7	0	546.497151	-.000049	.000200	|	.	v	.	|
3712	qR 30	7	0	547.277280	-.000056	.000200	|	.	v	.	|
3713	qR 31	7	0	548.060346	-.000137	.000200	|	.	v	.	|
3714	qR 32	7	0	548.846440	-.000189	.000200	|	.	v	.	|
3715	qR 33	7	0	549.635619	-.000145	.000200	|	.	v	.	|
3716	qR 34	7	0	550.427870	-.000007	.000200	|	.	v	.	|
3717	qR 35	7	0	551.223124	.000168	.000200	|	.	v	.	|
3718	qR 36	7	0	552.021140	.000148	.000200	|	.	v	.	|
3719	qR 37	7	0	552.823302	.001330	.002000	|	.	.	v.	|
3720	qR 38	7	0	553.625829	-.000056	.000200	|	.	v	.	|
3721	qR 39	7	0	554.432022	-.000700	.001000	|	.	v.	.	|
3722	qR 40	7	0	555.242388	-.000083	.000200	|	.	v	.	|
3723	qR 41	7	0	556.055149	.000026	.000200	|	.	v	.	|
3724	qR 42	7	0	556.870584	-.000082	.000200	|	.	v	.	|
3725	qR 43	7	0	557.689089	-.000004	.000200	|	.	v	.	|
3726	qR 44	7	0	558.510276	-.000115	.000200	|	.	v	.	|
3727	qR 45	7	0	559.334415	-.000138	.000200	|	.	v	.	|
3728	qR 46	7	0	560.161421	-.000147	.000200	|	.	v	.	|
3729	qR 47	7	0	560.991060	-.000368	.000300	|	.	x.	.	|
3730	qR 48	7	0	561.824401	.000279	.000500	|	.	.v	.	|
3731	qR 49	7	0	562.659507	-.000135	.000200	|	.	v	.	|
3732	qR 50	7	0	563.498063	.000085	.000200	|	.	v	.	|
3733	qR 51	7	0	564.339025	-.000096	.000200	|	.	v	.	|
3734	qR 52	7	0	565.182906	-.000154	.000200	|	.	v	.	|
3735	qR 53	7	0	566.031782	.001994	.003000	|	.	.	v.	|
3736	qR 54	7	0	566.879218	-.000076	.000200	|	.	v	.	|
3737	qR 55	7	0	567.731479	-.000089	.000200	|	.	v	.	|
3738	qR 56	7	0	568.586382	-.000219	.000200	|	.	x	.	|
3739	qR 57	7	0	569.444300	-.000082	.000200	|	.	v	.	|
3740	qR 58	7	0	570.304428	-.000473	.000500	|	.	v.	.	|
3741	qR 59	7	0	571.167826	-.000321	.000200	|	.	x.	.	|
3742	qR 60	7	0	572.034012	-.000099	.000500	|	.	v	.	|

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3743 qR 61  7  0    572.901946    -.000835    .001000 |   . v .    .   |
3744 qR 62  7  0    573.774013    -.000132    .000200 |   .   v    .   |
3745 qR 63  7  0    574.648076    -.000117    .000200 |   .   v    .   |
3746 qR 64  7  0    575.524673    -.000241    .000200 |   .   x    .   |
3747 qR 65  7  0    576.405092     .000798    .001000 |   .   . v  .   |
3748 qR 66  7  0    577.286222    -.000100    .000200 |   .   v    .   |
3749 qR 67  7  0    578.170667    -.000320    .000200 |   .  x.    .   |
3750 qP 10  8  0    518.047888     .000002    .000500 |   .   v    .   |
3751 qP 13  8  0    516.183884     .000117    .000500 |   .   v    .   |
3752 qP 16  8  0    514.343600    -.000629    .000500 |   .  x.    .   |
3753 qP 17  8  0    513.737641     .000354    .000500 |   .   .v   .   |
3754 qP 18  8  0    513.133746     .000104    .000200 |   .   v    .   |
3755 qP 19  8  0    512.533408     .000056    .000200 |   .   v    .   |
3756 qP 20  8  0    511.936672     .000216    .000200 |   .   x    .   |
3757 qP 21  8  0    511.343493     .000518    .001000 |   .   .v   .   |
3758 qP 22  8  0    510.752657    -.000264    .000500 |   .  v.    .   |
3759 qP 23  8  0    510.166535     .000239    .000200 |   .   x    .   |
3760 qP 34  8  0    503.937600     .000364    .000200 |   .   .x   .   |
3761 qP 35  8  0    503.391443     .000462    .000200 |   .   .*   .   |
3762 qP 36  8  0    502.848227     .000217    .000200 |   .   x    .   |
3763 qP 37  8  0    502.308539     .000226    .000200 |   .   x    .   |
3764 qP 38  8  0    501.773009     .001128    .001000 |   .   . x  .   |
3765 qP 39  8  0    501.239219     .000514    .000500 |   .   .x   .   |
3766 qP 40  8  0    500.708874     .000098    .000200 |   .   v    .   |
3767 qP 41  8  0    500.182102     .000015    .000500 |   .   v    .   |
3768 qP 42  8  0    499.659351     .000719    .000200 |   .   .*   .   |
3769 qP 43  8  0    499.138584     .000180    .000200 |   .   v    .   |
3770 qP 44  8  0    498.621679     .000283    .000200 |   .   .x   .   |
3771 qP 45  8  0    498.108102     .000497    .000200 |   .   .*   .   |
3772 qP 46  8  0    497.596458    -.000568    .001000 |   .  v.    .   |
3773 qP 47  8  0    497.090101     .000449    .000200 |   .   .*   .   |
3774 qR  9  8  0    531.486303     .000250    .000500 |   .   .v   .   |
3775 qR 10  8  0    532.203962     .000382    .000500 |   .   .v   .   |
3776 qR 11  8  0    532.923444    -.000111    .000200 |   .   v    .   |
3777 qR 12  8  0    533.646410     .000250    .000200 |   .   .x   .   |
3778 qR 14  8  0    535.100178     .000190    .000200 |   .   v    .   |
3779 qR 19  8  0    538.789986     .000318    .000200 |   .   .x   .   |
3780 qR 20  8  0    539.537419     .000036    .000200 |   .   v    .   |
3781 qR 21  8  0    540.288033    -.000337    .000500 |   .  v.    .   |
3782 qR 35  8  0    551.136282    -.000154    .000200 |   .   v    .   |
3783 qR 36  8  0    551.934535     .000143    .000200 |   .   v    .   |
3784 qR 37  8  0    552.735484     .000154    .000200 |   .   v    .   |
3785 qR 38  8  0    553.539306     .000071    .000200 |   .   v    .   |
3786 qR 39  8  0    554.347656     .001565    .002000 |   .   .  v .   |
3787 qR 40  8  0    555.155999     .000114    .000200 |   .   v    .   |
3788 qR 41  8  0    555.968774     .000171    .000200 |   .   v    .   |
3789 qR 42  8  0    556.784318     .000086    .000200 |   .   v    .   |
3790 qR 43  8  0    557.602931     .000171    .000200 |   .   v    .   |
3791 qR 44  8  0    558.424225     .000052    .000200 |   .   v    .   |
3792 qR 45  8  0    559.248640     .000179    .000200 |   .   v    .   |
3793 qR 46  8  0    560.075924     .000312    .000200 |   .   .x   .   |
3794 qR 47  8  0    560.905802     .000188    .000200 |   .   v    .   |
3795 qR 48  8  0    561.738557     .000100    .000200 |   .   v    .   |
3796 qR 49  8  0    562.574708     .000579    .000500 |   .   .x   .   |
3797 qR 50  8  0    563.412755     .000134    .000200 |   .   v    .   |
3798 qR 51  8  0    564.253913    -.000008    .000200 |   .   v    .   |
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3799	qP 10	9	0	518.022888	-.000659	.000500	|	.	x.	.	|
3800	qP 13	9	0	516.226451	-.000130	.000200	|	.	v	.	|
3801	qP 14	9	0	515.640612	-.000248	.000200	|	.	x	.	|
3802	qP 15	9	0	515.061949	.000416	.001000	|	.	.v	.	|
3803	qP 16	9	0	514.489181	.000645	.001000	|	.	.v	.	|
3804	qP 17	9	0	513.922239	.000421	.001000	|	.	.v	.	|
3805	qP 18	9	0	513.360949	-.000382	.000200	|	.	x.	.	|
3806	qP 20	9	0	512.258131	-.000717	.000500	|	.	x.	.	|
3807	qP 21	9	0	511.716939	.000189	.001000	|	.	v	.	|
3808	qP 22	9	0	511.180519	-.000156	.000200	|	.	v	.	|
3809	qP 23	9	0	510.650500	-.000062	.000200	|	.	v	.	|
3810	qP 24	9	0	510.126458	.000107	.000200	|	.	v	.	|
3811	qP 25	9	0	509.608262	.000286	.000200	|	.	.x	.	|
3812	qP 26	9	0	509.095905	.000537	.000500	|	.	.x	.	|
3813	qP 27	9	0	508.589290	.000833	.001000	|	.	. v	.	|
3814	qP 28	9	0	508.087097	-.000068	.000200	|	.	v	.	|
3815	qP 29	9	0	507.591572	.000155	.000200	|	.	v	.	|
3816	qP 30	9	0	507.101115	-.000017	.000200	|	.	v	.	|
3817	qP 31	9	0	506.615838	-.000389	.001000	|	.	v.	.	|
3818	qP 32	9	0	504.950859	-.001557	.002000	|	. v	.	.	|
3819	qP 33	9	0	504.400740	.000383	.000200	|	.	.x	.	|
3820	qP 34	9	0	503.851696	.000057	.000200	|	.	v	.	|
3821	qP 35	9	0	503.306590	.000343	.000200	|	.	.x	.	|
3822	qP 36	9	0	502.764564	.000398	.000200	|	.	.x	.	|
3823	qP 37	9	0	502.225659	.000275	.001000	|	.	.v	.	|
3824	qP 38	9	0	501.690827	.000939	.001000	|	.	. v	.	|
3825	qP 39	9	0	501.158057	.000392	.005000	|	.	.v	.	|
3826	qP 40	9	0	500.631424	.002718	.003000	|	.	.	v	|
3827	qP 41	9	0	500.103431	.000432	.001000	|	.	.v	.	|
3828	qP 42	9	0	499.581038	.000502	.000200	|	.	.*	.	|
3829	qP 43	9	0	499.061594	.000286	.000200	|	.	.x	.	|
3830	qP 44	9	0	498.545725	.000418	.001000	|	.	.v	.	|
3831	qP 45	9	0	498.032903	.000377	.000200	|	.	.x	.	|
3832	qP 46	9	0	497.523193	.000235	.000200	|	.	x	.	|
3833	qP 47	9	0	497.017041	.000444	.000200	|	.	.*	.	|
3834	qP 48	9	0	496.513777	.000339	.000200	|	.	.x	.	|
3835	qP 49	9	0	496.013808	.000334	.000200	|	.	.x	.	|
3836	qP 50	9	0	495.517013	.000312	.000200	|	.	.x	.	|
3837	qP 51	9	0	495.023395	.000282	.000200	|	.	.x	.	|
3838	qP 52	9	0	494.532690	-.000018	.000200	|	.	v	.	|
3839	qP 53	9	0	494.045646	.000166	.000200	|	.	v	.	|
3840	qP 54	9	0	493.561525	.000101	.000200	|	.	v	.	|
3841	qP 55	9	0	493.080610	.000072	.000200	|	.	v	.	|
3842	qP 56	9	0	492.602798	-.000020	.000200	|	.	v	.	|
3843	qP 57	9	0	492.128177	-.000081	.000200	|	.	v	.	|
3844	qP 58	9	0	491.657025	.000169	.000200	|	.	v	.	|
3845	qP 59	9	0	491.188576	-.000031	.000200	|	.	v	.	|
3846	qP 60	9	0	490.723447	-.000061	.000200	|	.	v	.	|
3847	qP 61	9	0	490.261654	.000099	.000200	|	.	v	.	|
3848	qP 62	9	0	489.802741	-.000002	.000200	|	.	v	.	|
3849	qP 63	9	0	489.346763	-.000305	.000200	|	.	x.	.	|
3850	qP 64	9	0	488.894354	-.000172	.000200	|	.	v	.	|
3851	qP 65	9	0	488.444486	-.000626	.000500	|	.	x.	.	|
3852	qP 66	9	0	487.998620	-.000202	.000200	|	.	x	.	|
3853	qQ 24	9	0	526.334526	.000194	.000200	|	.	v	.	|
3854	qQ 25	9	0	526.490339	.000357	.000200	|	.	.x	.	|
3855	qQ 26	9	0	526.651662	.000429	.000200	|	.	.*	.	|

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3856 qQ 34  9  0    526.710524     .000007    .000200 |   .   v   .   |
3857 qR 10  9  0    532.213895     .000069    .000500 |   .   v   .   |
3858 qR 11  9  0    532.960047     .000082    .000500 |   .   v   .   |
3859 qR 12  9  0    533.713056     .000563    .001000 |   .   .v  .   |
3860 qR 13  9  0    534.471291    -.000027    .000200 |   .   v   .   |
3861 qR 14  9  0    535.236460     .000092    .000500 |   .   v   .   |
3862 qR 15  9  0    536.008423     .000837    .002000 |   .   . v .   |
3863 qR 16  9  0    536.784876    -.000039    .000200 |   .   v   .   |
3864 qR 17  9  0    537.568301     .000002    .000200 |   .   v   .   |
3865 qR 18  9  0    538.357526    -.000155    .000200 |   .   v   .   |
3866 qR 19  9  0    539.152988    -.000011    .000200 |   .   v   .   |
3867 qR 20  9  0    539.954196     .000004    .000200 |   .   v   .   |
3868 qR 21  9  0    540.761420     .000227    .000200 |   .   x   .   |
3869 qR 22  9  0    541.573890    -.000044    .000200 |   .   v   .   |
3870 qR 23  9  0    542.392436     .000096    .000200 |   .   v   .   |
3871 qR 24  9  0    543.214090    -.002247    .003000 |  .v   .   .   |
3872 qR 25  9  0    544.046199     .000353    .000200 |   .   .x  .   |
3873 qR 26  9  0    544.880992     .000207    .000200 |   .   x   .   |
3874 qR 27  9  0    545.720347    -.000720    .001000 |   .  v.   .   |
3875 qR 28  9  0    546.564051    -.002556    .003000 |  v   .   .   |
3876 qR 29  9  0    547.420209     .002895    .003000 |   .   .   .v  |
3877 qR 30  9  0    547.088863    -.000032    .000200 |   .   v   .   |
3878 qR 31  9  0    547.872007     .000008    .000500 |   .   v   .   |
3879 qR 32  9  0    548.658454     .000244    .000500 |   .   v   .   |
3880 qR 33  9  0    549.447577     .000072    .000200 |   .   v   .   |
3881 qR 34  9  0    550.240287     .000425    .000300 |   .   .x  .   |
3882 qR 35  9  0    551.035562     .000301    .000200 |   .   .x  .   |
3883 qR 36  9  0    551.834076     .000395    .000200 |   .   .x  .   |
3884 qR 37  9  0    552.635396     .000293    .000200 |   .   .x  .   |
3885 qR 38  9  0    553.439915     .000405    .000200 |   .   .*  .   |
3886 qR 39  9  0    554.247225     .000341    .000200 |   .   .x  .   |
3887 qR 40  9  0    555.057477     .000269    .000200 |   .   .x  .   |
3888 qR 41  9  0    555.870758     .000291    .000200 |   .   .x  .   |
3889 qR 42  9  0    556.687051     .000406    .000200 |   .   .*  .   |
3890 qR 43  9  0    557.506024     .000296    .000200 |   .   .x  .   |
3891 qR 44  9  0    558.326533    -.001168    .002000 |   . v .   .   |
3892 qR 45  9  0    559.152868     .000316    .000200 |   .   .x  .   |
3893 qR 46  9  0    559.979014    -.001252    .002000 |   . v .   .   |
3894 qR 47  9  0    560.811115     .000283    .000200 |   .   .x  .   |
3895 qR 48  9  0    561.643937    -.000299    .000500 |   .  v.   .   |
3896 qR 49  9  0    562.480615     .000147    .000200 |   .   v   .   |
3897 qR 50  9  0    563.320025     .000511    .000500 |   .   .x  .   |
3898 qR 51  9  0    564.161582     .000219    .000200 |   .   x   .   |
3899 qR 52  9  0    565.006587     .000582    .000500 |   .   .x  .   |
3900 qR 53  9  0    565.855776     .002349    .003000 |   .   .   v   |
3901 qR 54  9  0    566.703621     .000003    .000200 |   .   v   .   |
3902 qR 55  9  0    567.556500    -.000067    .000200 |   .   v   .   |
3903 qR 56  9  0    568.412159    -.000103    .000200 |   .   v   .   |
3904 qR 57  9  0    569.270509    -.000184    .000200 |   .   v   .   |
3905 qR 58  9  0    570.131753    -.000095    .000200 |   .   v   .   |
3906 qR 59  9  0    570.996207     .000492    .000500 |   .   .v  .   |
3907 qR 60  9  0    571.862149    -.000134    .000200 |   .   v   .   |

File # 3  2nu80h.wn    No. data :  933    .00500 cm-1 -> |----+----0----+----|
3908 pP  1  1  1    261.467458     -.001217    .002000 |   . v .   .   |
3909 pP  2  1  1    260.799292     -.000552    .001000 |   .  v.   .   |
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3910 pP  3  1  1   260.134630    .000099   .000200 |   .   v   .   |
3911 pP  4  1  1   259.472464   -.000244   .000300 |   .   v   .   |
3912 pP  5  1  1   258.814199   -.000131   .000200 |   .   v   .   |
3913 pP  6  1  1   258.159254   -.000085   .000200 |   .   v   .   |
3914 pP  7  1  1   257.507512   -.000148   .000200 |   .   v   .   |
3915 pP  8  1  1   256.857920   -.001282   .002000 |   . v .   .   |
3916 pP  9  1  1   256.213726   -.000136   .000200 |   .   v   .   |
3917 pP 10  1  1   255.571249   -.000270   .000200 |   .  x.   .   |
3918 pP 11  1  1   254.931745   -.000297   .000200 |   .  x.   .   |
3919 pP 12  1  1   254.294993   -.000296   .000200 |   .  x.   .   |
3920 pP 13  1  1   253.660950   -.000156   .000200 |   .   v   .   |
3921 pP 14  1  1   253.029143   -.000191   .000200 |   .   v   .   |
3922 pP 15  1  1   252.399731   -.000079   .000500 |   .   v   .   |
3923 pP 16  1  1   251.772143   -.000224   .000200 |   .   x   .   |
3924 pP 17  1  1   251.146650   -.000192   .000200 |   .   v   .   |
3925 pP 18  1  1   250.522878   -.000201   .000200 |   .   x   .   |
3926 pP 19  1  1   249.903002    .002072   .003000 |   .   .  v.   |
3927 pP 20  1  1   249.280085   -.000172   .000200 |   .   v   .   |
3928 pP 21  1  1   248.660721   -.000219   .000200 |   .   x   .   |
3929 pP 22  1  1   248.042607   -.000267   .000200 |   .  x.   .   |
3930 pP 23  1  1   247.425851   -.000120   .000200 |   .   v   .   |
3931 pP 24  1  1   246.809993   -.000169   .000200 |   .   v   .   |
3932 pP 25  1  1   246.194010   -.001385   .002000 |   . v .   .   |
3933 pP 26  1  1   245.581499   -.000137   .000200 |   .   v   .   |
3934 pP 27  1  1   244.968687   -.000177   .000200 |   .   v   .   |
3935 pP 28  1  1   244.355241   -.001832   .002000 |   .v  .   .   |
3936 pP 29  1  1   243.746088   -.000179   .000200 |   .   v   .   |
3937 pP 30  1  1   243.136343   -.000117   .000200 |   .   v   .   |
3938 pP 31  1  1   242.527564   -.000109   .000200 |   .   v   .   |
3939 pP 32  1  1   241.919894   -.000038   .000200 |   .   v   .   |
3940 pP 33  1  1   241.313177   -.000092   .000200 |   .   v   .   |
3941 pP 34  1  1   240.707640   -.000076   .000200 |   .   v   .   |
3942 pP 35  1  1   240.103269   -.000039   .000200 |   .   v   .   |
3943 pP 36  1  1   239.500011   -.000069   .000200 |   .   v   .   |
3944 pP 37  1  1   238.898049   -.000018   .000200 |   .   v   .   |
3945 pP 38  1  1   238.297340    .000037   .000200 |   .   v   .   |
3946 pP 39  1  1   237.697785   -.000036   .000200 |   .   v   .   |
3947 pP 40  1  1   237.099763    .000110   .000200 |   .   v   .   |
3948 pP 41  1  1   236.502838    .000008   .000200 |   .   v   .   |
3949 pP 42  1  1   235.907374   -.000005   .000200 |   .   v   .   |
3950 pP 43  1  1   235.313712    .000385   .000500 |   .  .v   .   |
3951 pP 44  1  1   234.721032    .000332   .000500 |   .  .v   .   |
3952 pP 45  1  1   234.129808    .000288   .000200 |   .  .x   .   |
3953 pP 46  1  1   233.540032    .000224   .000200 |   .   x   .   |
3954 pP 47  1  1   232.951934    .000348   .000500 |   .  .v   .   |
3955 pP 48  1  1   232.365024    .000153   .000200 |   .   v   .   |
3956 pP 49  1  1   231.779732    .000052   .000200 |   .   v   .   |
3957 pP 50  1  1   231.196086    .000057   .000200 |   .   v   .   |
3958 pP 51  1  1   230.614052    .000119   .000200 |   .   v   .   |
3959 pP 52  1  1   230.035113    .001710   .002000 |   .   . v .   |
3960 pP 53  1  1   229.454958    .000505   .001000 |   .  .v   .   |
3961 pP 54  1  1   228.877215    .000121   .000500 |   .   v   .   |
3962 pP 55  1  1   228.301221   -.000113   .000200 |   .   v   .   |
3963 pP 56  1  1   227.726996   -.000188   .000200 |   .   v   .   |
3964 pP 57  1  1   227.154271   -.000381   .000200 |   .  x.   .   |
3965 pP 58  1  1   226.583324   -.000421   .000200 |   .  *.   .   |
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3966 pP 59  1  1   226.013949   -.000520   .000200 |   .  *.   .   |
3967 pP 60  1  1   225.446103   -.000729   .000500 |   .  x.   .   |
3968 pP 61  1  1   224.880359   -.000478   .000200 |   .  *.   .   |
3969 pR  1  1  1   263.495613   -.000700   .001000 |   .  v.   .   |
3970 pR  2  1  1   264.179892    .000717   .001000 |   .   .v  .   |
3971 pR  3  1  1   264.865066   -.000390   .000200 |   .  x.   .   |
3972 pR  4  1  1   265.554564   -.000525   .000200 |   .  *.   .   |
3973 pR  5  1  1   266.247809   -.000183   .000200 |   .   v   .   |
3974 pR  6  1  1   266.943972   -.000094   .000200 |   .   v   .   |
3975 pR  7  1  1   267.642229   -.000971   .001000 |   . v .   .   |
3976 pR  8  1  1   268.345042   -.000224   .000200 |   .   x   .   |
3977 pR  9  1  1   269.049926   -.000199   .000200 |   .   v   .   |
3978 pR 10  1  1   269.757439   -.000188   .000200 |   .   v   .   |
3979 pR 11  1  1   270.467446   -.000164   .000200 |   .   v   .   |
3980 pR 12  1  1   271.177752   -.002157   .002000 |   .x  .   .   |
3981 pR 13  1  1   271.894146   -.000205   .000200 |   .   x   .   |
3982 pR 14  1  1   272.610700   -.000063   .000200 |   .   v   .   |
3983 pR 15  1  1   273.327968   -.001006   .001000 |   . x .   .   |
3984 pR 16  1  1   274.048534   -.000286   .000200 |   .  x.   .   |
3985 pR 17  1  1   274.772438    .002293   .003000 |   .   .   v   |
3986 pR 18  1  1   275.492422   -.000382   .000200 |   .  x.   .   |
3987 pR 19  1  1   276.216408   -.000261   .000200 |   .  x.   .   |
3988 pR 20  1  1   276.942141    .000514   .001000 |   .   .v  .   |
3989 pR 21  1  1   277.665834   -.001749   .002000 |   . v .   .   |
3990 pR 22  1  1   278.394290   -.000169   .000200 |   .   v   .   |
3991 pR 23  1  1   279.121683   -.000515   .001000 |   .  v.   .   |
3992 pR 24  1  1   279.850601   -.000154   .000200 |   .   v   .   |
3993 pR 25  1  1   280.579753   -.000351   .000200 |   .  x.   .   |
3994 pR 26  1  1   281.310056   -.000173   .000200 |   .   v   .   |
3995 pR 27  1  1   282.040919   -.000209   .000200 |   .   x   .   |
3996 pR 28  1  1   282.772633   -.000173   .000200 |   .   v   .   |
3997 pR 29  1  1   283.505124   -.000153   .000200 |   .   v   .   |
3998 pR 30  1  1   284.238400   -.000161   .000200 |   .   v   .   |
3999 pR 31  1  1   284.972547   -.000132   .000200 |   .   v   .   |
4000 pR 32  1  1   285.707537   -.000121   .000200 |   .   v   .   |
4001 pR 33  1  1   286.443412   -.000111   .000200 |   .   v   .   |
4002 pR 34  1  1   287.180219   -.000084   .000200 |   .   v   .   |
4003 pR 35  1  1   287.917955   -.000070   .000200 |   .   v   .   |
4004 pR 36  1  1   288.656630   -.000086   .000200 |   .   v   .   |
4005 pR 37  1  1   289.397043    .000643   .001000 |   .   .v  .   |
4006 pR 38  1  1   290.137425    .000324   .000200 |   .   .x  .   |
4007 pR 39  1  1   290.879049    .000206   .000200 |   .   x   .   |
4008 pR 40  1  1   291.621755    .000109   .000200 |   .   v   .   |
4009 pR 41  1  1   292.366184    .000655   .001000 |   .   .v  .   |
4010 pR 42  1  1   293.110246   -.000263   .000500 |   .  v.   .   |
4011 pR 43  1  1   293.856192   -.000410   .001000 |   .  v.   .   |
4012 pR 44  1  1   294.603296   -.000525   .001000 |   .  v.   .   |
4013 pR 45  1  1   295.351762   -.000417   .001000 |   .  v.   .   |
4014 pR 46  1  1   296.101160   -.000526   .001000 |   .  v.   .   |
4015 pR 47  1  1   296.851767   -.000585   .001000 |   .  v.   .   |
4016 pR 48  1  1   297.603549   -.000636   .001000 |   .  v.   .   |
4017 pR 49  1  1   298.356108   -.001084   .002000 |   . v .   .   |
4018 pR 50  1  1   299.110656   -.000721   .001000 |   .  v.   .   |
4019 pR 51  1  1   299.865501   -.001244   .002000 |   . v .   .   |
4020 pR 52  1  1   300.622951   -.000348   .000200 |   .  x.   .   |
4021 pR 53  1  1   301.380758   -.000285   .000200 |   .  x.   .   |
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4022 pR 54  1  1   302.139717   -.000259   .000200 |  .  x.   .  |
4023 pR 55  1  1   302.899940   -.000160   .000200 |  .   v   .  |
4024 pR 56  1  1   303.661106   -.000309   .000200 |  .  x.   .  |
4025 pR 57  1  1   304.423626   -.000293   .000200 |  .  x.   .  |
4026 pR 58  1  1   305.187321   -.000290   .000200 |  .  x.   .  |
4027 pR 59  1  1   305.952172   -.000317   .000200 |  .  x.   .  |
4028 pR 60  1  1   306.718239   -.000311   .000200 |  .  x.   .  |
4029 pR 61  1  1   307.485553   -.000237   .000200 |  .   x   .  |
4030 pP  2  2  1   260.714320   -.000207   .000200 |  .   x   .  |
4031 pP  3  2  1   260.046164   -.000139   .000200 |  .   v   .  |
4032 pP  4  2  1   259.380203   -.000245   .000200 |  .   x   .  |
4033 pP  5  2  1   258.716624   -.000172   .000200 |  .   v   .  |
4034 pP  6  2  1   258.054931   -.000212   .000200 |  .   x   .  |
4035 pP  7  2  1   257.394916   -.000334   .000200 |  .  x.   .  |
4036 pP  8  2  1   256.736842   -.000020   .000200 |  .   v   .  |
4037 pP  9  2  1   256.079023   -.000691   .000200 |  .  *.   .  |
4038 pP 10  2  1   255.423971    .000420   .000200 |  .   .*  .  |
4039 pP 11  2  1   254.768179    .000043   .001000 |  .   v   .  |
4040 pP 12  2  1   254.113389    .000132   .000500 |  .   v   .  |
4041 pP  4  4  1   259.210977    .000046   .000200 |  .   v   .  |
4042 pP  5  4  1   258.547892    .000042   .000200 |  .   v   .  |
4043 pP  6  4  1   257.887119    .000059   .000200 |  .   v   .  |
4044 pP  7  4  1   257.228484    .000067   .000200 |  .   v   .  |
4045 pP  8  4  1   256.571702   -.000044   .000200 |  .   v   .  |
4046 pP  9  4  1   255.916841   -.000010   .000200 |  .   v   .  |
4047 pP 10  4  1   255.263591    .000079   .000200 |  .   v   .  |
4048 pP 11  4  1   254.611560    .000069   .000200 |  .   v   .  |
4049 pP 13  4  1   253.310535    .000156   .000200 |  .   v   .  |
4050 pP 14  4  1   252.660838    .000078   .000200 |  .   v   .  |
4051 pP 15  4  1   252.010791   -.000621   .001000 |  .  v.   .  |
4052 pP 16  4  1   251.362084    .000000   .000200 |  .   v   .  |
4053 pP 17  4  1   250.712484   -.000054   .000200 |  .   v   .  |
4054 pP 18  4  1   250.062635    .000076   .000200 |  .   v   .  |
4055 pP 19  4  1   249.412195    .000236   .000200 |  .   x   .  |
4056 pP 20  4  1   248.761417    .000837   .001000 |  .   . v .  |
4057 pP 21  4  1   248.108345    .000051   .000200 |  .   v   .  |
4058 pP 22  4  1   247.455018    .000012   .000200 |  .   v   .  |
4059 pP 23  4  1   246.801052    .000405   .000200 |  .   .*  .  |
4060 pR  4  4  1   265.291609   -.000594   .001000 |  .  v.   .  |
4061 pR  5  4  1   265.980892    .000775   .001000 |  .   . v .  |
4062 pR  6  4  1   266.670465    .000379   .000500 |  .   .v  .  |
4063 pR  7  4  1   267.361961    .000039   .000200 |  .   v   .  |
4064 pR  8  4  1   268.057123    .001710   .002000 |  .   . v .  |
4065 pR  9  4  1   268.750283   -.000042   .000200 |  .   v   .  |
4066 pR 10  4  1   269.446256   -.000148   .000200 |  .   v   .  |
4067 pR 11  4  1   270.143452    .000067   .000200 |  .   v   .  |
4068 pR 12  4  1   270.840721   -.000271   .000500 |  .  v.   .  |
4069 pR 13  4  1   271.539052    .000104   .000200 |  .   v   .  |
4070 pR 14  4  1   272.236959   -.000022   .000200 |  .   v   .  |
4071 pR 15  4  1   272.933472   -.001357   .002000 |  . v .   .  |
4072 pR 16  4  1   273.632212   -.000039   .000200 |  .   v   .  |
4073 pR 17  4  1   274.329076    .000048   .000200 |  .   v   .  |
4074 pR 18  4  1   275.025166    .000196   .000200 |  .   v   .  |
4075 pR 19  4  1   275.720928    .001010   .001000 |  .   . x .  |
4076 pR 20  4  1   276.413480   -.000267   .000500 |  .  v.   .  |
4077 pR 21  4  1   277.108007    .001647   .002000 |  .   . v .  |
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4078 pR 22  4  1    277.797448    -.000245   .001000 |   .   v   .   |
4079 pR 23  4  1    278.487953     .000248   .000500 |   .   v   .   |
4080 pR 24  4  1    279.176783     .000401   .001000 |   .   .v  .   |
4081 pR 25  4  1    279.865950     .002225   .002000 |   .   .   x.  |
4082 pR 26  4  1    280.552493     .002742   .002000 |   .   .   x   |
4083 pP  6  6  1    257.712834     .001047   .001000 |   .   . x .   |
4084 pP  7  6  1    257.053423    -.000284   .000500 |   .  v.   .   |
4085 pP  8  6  1    256.397587    -.000059   .000200 |   .   v   .   |
4086 pP  9  6  1    255.743408     .000006   .000200 |   .   v   .   |
4087 pP 10  6  1    255.090546    -.000199   .000200 |   .   v   .   |
4088 pP 11  6  1    254.437248    -.002179   .003000 |  .v   .   .   |
4089 pP 12  6  1    253.789452     .000266   .001000 |   .   .v  .   |
4090 pP 13  6  1    253.139582    -.000169   .000200 |   .   v   .   |
4091 pP 14  6  1    252.490571    -.000282   .000200 |   .  x.   .   |
4092 pP 15  6  1    251.842233     .000003   .000200 |   .   v   .   |
4093 pP 16  6  1    251.193249    -.000388   .000200 |   .  x.   .   |
4094 pP 19  6  1    249.245886    -.000080   .000200 |   .   v   .   |
4095 pP 20  6  1    248.595453    -.000117   .000200 |   .   v   .   |
4096 pP 21  6  1    247.945591     .001198   .002000 |   .   . v .   |
4097 pP 22  6  1    247.291870    -.000490   .000500 |   .  v.   .   |
4098 pP 23  6  1    246.639185    -.000235   .000200 |   .   x   .   |
4099 pP 24  6  1    245.985794     .000252   .000200 |   .   .x  .   |
4100 pP 26  6  1    244.674551    -.000375   .000200 |   .  x.   .   |
4101 pP  9  9  1    255.464850    -.000103   .000500 |   .   v   .   |
4102 pP 10  9  1    254.811270    -.000097   .000500 |   .   v   .   |
4103 pP 11  9  1    254.157164    -.000300   .000200 |   .  x.   .   |
4104 pP 12  9  1    253.503071    -.000022   .000500 |   .   v   .   |
4105 pP 13  9  1    252.848235    -.000074   .000500 |   .   v   .   |
4106 pP 14  9  1    252.192617    -.000638   .001000 |   .  v.   .   |
4107 pP 15  9  1    251.539851     .001769   .002000 |   .   .  v.   |
4108 pP 16  9  1    250.883710     .000806   .001000 |   . v .   .   |
4109 pP 17  9  1    250.227708    -.000089   .000200 |   .   v   .   |
4110 pP 18  9  1    249.572647    -.000147   .000200 |   .   v   .   |
4111 pP 19  9  1    248.917926     .000024   .000200 |   .   v   .   |
4112 rP  2  0 -1    260.877613    -.000228   .000200 |   .   x   .   |
4113 rP  3  0 -1    260.209737    -.000184   .000200 |   .   v   .   |
4114 rP  4  0 -1    259.544442    -.000322   .000200 |   .  x.   .   |
4115 rP  5  0 -1    258.882223    -.000224   .000200 |   .   x   .   |
4116 rP  6  0 -1    258.223239     .000184   .000500 |   .   v   .   |
4117 rP  7  0 -1    257.566571    -.000103   .000200 |   .   v   .   |
4118 rP  8  0 -1    256.913197    -.000183   .000200 |   .   v   .   |
4119 rP  9  0 -1    256.263020    -.000206   .000200 |   .   x   .   |
4120 rP 10  0 -1    255.616070    -.000156   .000200 |   .   v   .   |
4121 rP 11  0 -1    254.972102    -.000250   .000200 |   .  x.   .   |
4122 rP 12  0 -1    254.331312    -.000218   .000200 |   .   x   .   |
4123 rP 13  0 -1    253.693622    -.000019   .000200 |   .   v   .   |
4124 rP 14  0 -1    253.058285    -.000245   .000200 |   .   x   .   |
4125 rP 15  0 -1    252.425944    -.000076   .000200 |   .   v   .   |
4126 rP 16  0 -1    251.795863    -.000056   .000200 |   .   v   .   |
4127 rP 17  0 -1    251.165529    -.002502   .003000 |  v   .   .   |
4128 rP 18  0 -1    250.541997    -.000168   .000200 |   .   v   .   |
4129 rP 19  0 -1    249.917924    -.000216   .000200 |   .   x   .   |
4130 rP 20  0 -1    249.295599    -.000192   .000200 |   .   v   .   |
4131 rP 21  0 -1    248.674765    -.000204   .000200 |   .   x   .   |
4132 rP 22  0 -1    248.055385    -.000163   .000200 |   .   v   .   |
4133 rP 23  0 -1    247.437272    -.000150   .000200 |   .   v   .   |
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4134 rP 24  0 -1   246.819523   -.000984   .001000 |   . v .   .   |
4135 rP 25  0 -1   246.204551   -.000185   .000200 |   .   v   .   |
4136 rP 26  0 -1   245.589920   -.000145   .000200 |   .   v   .   |
4137 rP 27  0 -1   244.977715    .001251   .002000 |   .   . v .   |
4138 rP 28  0 -1   244.364988    .001069   .002000 |   .   . v .   |
4139 rP 29  0 -1   243.752275   -.000152   .000200 |   .   v   .   |
4140 rP 30  0 -1   243.141938   -.000059   .000200 |   .   v   .   |
4141 rP 31  0 -1   242.532498   -.000145   .000200 |   .   v   .   |
4142 rP 32  0 -1   241.924262   -.000127   .000200 |   .   v   .   |
4143 rP 33  0 -1   241.317135   -.000125   .000200 |   .   v   .   |
4144 rP 34  0 -1   240.711131   -.000153   .000200 |   .   v   .   |
4145 rP 35  0 -1   240.106302   -.000192   .000200 |   .   v   .   |
4146 rP 36  0 -1   239.502772   -.000148   .000200 |   .   v   .   |
4147 rP 37  0 -1   238.900428   -.000166   .000200 |   .   v   .   |
4148 rP 38  0 -1   238.299282   -.000266   .000200 |   .  x.   .   |
4149 rP 39  0 -1   237.699613   -.000198   .000200 |   .   v   .   |
4150 rP 40  0 -1   237.101235   -.000179   .000200 |   .   v   .   |
4151 rP 41  0 -1   236.504295   -.000088   .000200 |   .   v   .   |
4152 rP 42  0 -1   235.908535   -.000211   .000200 |   .   x   .   |
4153 rR  0  0 -1   262.898088    .000496   .000500 |   .   .v  .   |
4154 rR  1  0 -1   263.574483   -.001572   .002000 |   . v .   .   |
4155 rR  2  0 -1   264.258228    .001123   .002000 |   .   . v .   |
4156 rR  3  0 -1   264.939912   -.000840   .001000 |   . v .   .   |
4157 rR  4  0 -1   265.627217    .000195   .000200 |   .   v   .   |
4158 rR  5  0 -1   266.316568    .000614   .001000 |   .   .v  .   |
4159 rR  6  0 -1   267.008350    .000756   .001000 |   .   . v .   |
4160 rR  7  0 -1   267.701844   -.000146   .000200 |   .   v   .   |
4161 rR  8  0 -1   268.399147   -.000034   .000200 |   .   v   .   |
4162 rR  9  0 -1   269.099651    .000467   .001000 |   .   .v  .   |
4163 rR 10  0 -1   269.801574   -.000409   .000300 |   .  x.   .   |
4164 rR 11  0 -1   270.507335   -.000186   .000200 |   .   v   .   |
4165 rR 12  0 -1   271.215526   -.000174   .000200 |   .   v   .   |
4166 rR 13  0 -1   271.926149   -.000231   .000200 |   .   x   .   |
4167 rR 14  0 -1   272.639238   -.000159   .000200 |   .   v   .   |
4168 rR 15  0 -1   273.354247   -.000318   .000200 |   .  x.   .   |
4169 rR 16  0 -1   274.071684   -.000010   .000200 |   .   v   .   |
4170 rR 17  0 -1   274.788440   -.002157   .002000 |   .x  .   .   |
4171 rR 18  0 -1   275.510921   -.000177   .000200 |   .   v   .   |
4172 rR 19  0 -1   276.234999    .001964   .003000 |   .   .  v.   |
4173 rR 20  0 -1   276.954519   -.001748   .002000 |   . v .   .   |
4174 rR 21  0 -1   277.680377   -.000298   .000200 |   .  x.   .   |
4175 rR 22  0 -1   278.405579   -.000580   .000500 |   .  x.   .   |
4176 rR 23  0 -1   279.132458   -.000183   .000200 |   .   v   .   |
4177 rR 24  0 -1   279.859872   -.000192   .000200 |   .   v   .   |
4178 rR 25  0 -1   280.588170   -.000216   .000200 |   .   x   .   |
4179 rR 26  0 -1   281.317383   -.000198   .000200 |   .   v   .   |
4180 rR 27  0 -1   282.047427   -.000209   .000200 |   .   x   .   |
4181 rR 28  0 -1   282.778355   -.000194   .000200 |   .   v   .   |
4182 rR 29  0 -1   283.510116   -.000209   .000200 |   .   x   .   |
4183 rR 30  0 -1   284.242709   -.000269   .000200 |   .  x.   .   |
4184 rR 31  0 -1   284.976345   -.000178   .000200 |   .   v   .   |
4185 rR 32  0 -1   285.710725   -.000256   .000200 |   .  x.   .   |
4186 rR 33  0 -1   286.446077   -.000297   .000200 |   .  x.   .   |
4187 rR 34  0 -1   287.182467   -.000258   .000200 |   .  x.   .   |
4188 rR 35  0 -1   287.919773   -.000283   .000200 |   .  x.   .   |
4189 rR 36  0 -1   288.658078   -.000313   .000200 |   .  x.   .   |
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4190 rR 37  0 -1   289.397043   -.000709   .000300 |   .  *.   .   |
4191 rR 38  0 -1   290.137425   -.000735   .000300 |   .  *.   .   |
4192 rR 39  0 -1   290.879049   -.000586   .000200 |   .  *.   .   |
4193 rR 40  0 -1   291.621755   -.000439   .000200 |   .  *.   .   |
4194 rR 41  0 -1   292.366184    .000330   .000200 |   .   .x  .   |
4195 rP  3  1 -1   260.288904    .000032   .000200 |   .   v   .   |
4196 rP  4  1 -1   259.622830   -.000793   .001000 |   . v .   .   |
4197 rP  5  1 -1   258.961012   -.000053   .000200 |   .   v   .   |
4198 rP  6  1 -1   258.301246    .000033   .000200 |   .   v   .   |
4199 rP  7  1 -1   257.644226    .000150   .000200 |   .   v   .   |
4200 rP  8  1 -1   256.989466   -.000198   .000200 |   .   v   .   |
4201 rP  9  1 -1   256.336487   -.001489   .002000 |   . v .   .   |
4202 rP 10  1 -1   255.688635   -.000370   .000200 |   .  x.   .   |
4203 rP 11  1 -1   255.042870    .000141   .000200 |   .   v   .   |
4204 rP 12  1 -1   254.398279   -.000833   .001000 |   . v .   .   |
4205 rP 13  1 -1   253.758943    .000843   .001000 |   .   . v .   |
4206 rP 14  1 -1   253.119777    .000159   .000200 |   .   v   .   |
4207 rP 15  1 -1   252.483858    .000283   .000200 |   .   .x  .   |
4208 rP 16  1 -1   251.850260    .000401   .000500 |   .   .v  .   |
4209 rP 17  1 -1   251.218413    .000066   .000200 |   .   v   .   |
4210 rP 18  1 -1   250.588969    .000063   .000200 |   .   v   .   |
4211 rP 19  1 -1   249.961436    .000036   .000200 |   .   v   .   |
4212 rP 20  1 -1   249.335702    .000006   .000200 |   .   v   .   |
4213 rP 21  1 -1   248.711546   -.000125   .000200 |   .   v   .   |
4214 rP 22  1 -1   248.089140   -.000070   .000200 |   .   v   .   |
4215 rP 23  1 -1   247.468220    .000004   .000200 |   .   v   .   |
4216 rP 24  1 -1   246.848643    .000034   .000200 |   .   v   .   |
4217 rP 25  1 -1   246.228762   -.001560   .002000 |   . v .   .   |
4218 rP 26  1 -1   245.613815    .000507   .000500 |   .   .x  .   |
4219 rP 27  1 -1   244.997573    .000040   .000200 |   .   v   .   |
4220 rP 28  1 -1   244.382980    .000003   .000200 |   .   v   .   |
4221 rP 29  1 -1   243.769580   -.000051   .000200 |   .   v   .   |
4222 rP 30  1 -1   243.157495    .000000   .000200 |   .   v   .   |
4223 rP 31  1 -1   242.546599    .000022   .000200 |   .   v   .   |
4224 rP 32  1 -1   241.936951    .000060   .000200 |   .   v   .   |
4225 rP 33  1 -1   241.328551    .000098   .000200 |   .   v   .   |
4226 rP 34  1 -1   240.721288    .000003   .000200 |   .   v   .   |
4227 rP 35  1 -1   240.115422    .000013   .000200 |   .   v   .   |
4228 rP 36  1 -1   239.510896    .000048   .000200 |   .   v   .   |
4229 rP 37  1 -1   238.907622   -.000005   .000200 |   .   v   .   |
4230 rP 38  1 -1   238.305760   -.000008   .000200 |   .   v   .   |
4231 rP 39  1 -1   237.705258   -.000038   .000200 |   .   v   .   |
4232 rP 40  1 -1   237.106238    .000005   .000200 |   .   v   .   |
4233 rP 41  1 -1   236.508569   -.000032   .000200 |   .   v   .   |
4234 rP 42  1 -1   235.912314   -.000106   .000200 |   .   v   .   |
4235 rP 43  1 -1   235.317729    .000020   .000200 |   .   v   .   |
4236 rP 44  1 -1   234.724432   -.000056   .000200 |   .   v   .   |
4237 rP 45  1 -1   234.132712   -.000060   .000200 |   .   v   .   |
4238 rP 46  1 -1   233.542486   -.000093   .000200 |   .   v   .   |
4239 rP 47  1 -1   232.953800   -.000123   .000200 |   .   v   .   |
4240 rP 48  1 -1   232.367037    .000219   .000200 |   .   x   .   |
4241 rR  1  1 -1   263.655591    .000739   .001000 |   .   .v  .   |
4242 rR  2  1 -1   264.333620   -.002238   .003000 |   .v  .   .   |
4243 rR  3  1 -1   265.017508   -.001910   .002000 |   .v  .   .   |
4244 rR  4  1 -1   265.705216   -.000292   .000200 |   .  x.   .   |
4245 rR  5  1 -1   266.394360    .000255   .000500 |   .   .v  .   |
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4246 rR  6  1 -1   267.085837    .000655   .001000 |   .   .v   .   |
4247 rR  7  1 -1   267.776816   -.001896   .002000 |   .v   .   .   |
4248 rR  8  1 -1   268.474659   -.000007   .000200 |   .   v   .   |
4249 rR  9  1 -1   269.172867   -.000140   .000200 |   .   v   .   |
4250 rR 10  1 -1   269.873680   -.000015   .000200 |   .   v   .   |
4251 rR 11  1 -1   270.576654   -.000027   .000200 |   .   v   .   |
4252 rR 12  1 -1   271.281913    .000009   .000200 |   .   v   .   |
4253 rR 13  1 -1   271.989322    .000028   .000200 |   .   v   .   |
4254 rR 14  1 -1   272.698455   -.000311   .000500 |   .   v.   .   |
4255 rR 15  1 -1   273.410175   -.000048   .000200 |   .   v   .   |
4256 rR 16  1 -1   274.123142   -.000418   .000500 |   .   v.   .   |
4257 rR 17  1 -1   274.838625   -.000040   .000200 |   .   v   .   |
4258 rR 18  1 -1   275.555306   -.000117   .000200 |   .   v   .   |
4259 rR 19  1 -1   276.273216   -.000506   .001000 |   .   v.   .   |
4260 rR 20  1 -1   276.993711    .000255   .000200 |   .   .x   .   |
4261 rR 21  1 -1   277.714547    .000016   .000200 |   .   v   .   |
4262 rR 22  1 -1   278.436811   -.000052   .000200 |   .   v   .   |
4263 rR 23  1 -1   279.160295   -.000088   .000200 |   .   v   .   |
4264 rR 24  1 -1   279.885411    .000376   .000500 |   .   .v   .   |
4265 rR 25  1 -1   280.610747   -.000030   .000200 |   .   v   .   |
4266 rR 26  1 -1   281.337509   -.000069   .000200 |   .   v   .   |
4267 rR 27  1 -1   282.065276   -.000144   .000200 |   .   v   .   |
4268 rR 28  1 -1   282.794302    .000012   .000200 |   .   v   .   |
4269 rR 29  1 -1   283.524044   -.000144   .000200 |   .   v   .   |
4270 rR 30  1 -1   284.255046   -.000068   .000200 |   .   v   .   |
4271 rR 31  1 -1   284.987002   -.000073   .000200 |   .   v   .   |
4272 rR 32  1 -1   285.720020   -.000062   .000200 |   .   v   .   |
4273 rR 33  1 -1   286.454054   -.000093   .000200 |   .   v   .   |
4274 rR 34  1 -1   287.189215   -.000068   .000200 |   .   v   .   |
4275 rR 35  1 -1   287.925444   -.000060   .000200 |   .   v   .   |
4276 rR 36  1 -1   288.662718   -.000106   .000200 |   .   v   .   |
4277 rR 37  1 -1   289.401206   -.000052   .000200 |   .   v   .   |
4278 rP  4  2 -1   259.700948   -.000087   .000300 |   .   v   .   |
4279 rP  5  2 -1   259.038756    .000259   .000200 |   .   .x   .   |
4280 rP  6  2 -1   258.378495   -.000094   .000200 |   .   v   .   |
4281 rP  7  2 -1   257.721355    .000068   .000200 |   .   v   .   |
4282 rP  8  2 -1   257.066646    .000084   .000200 |   .   v   .   |
4283 rP  9  2 -1   256.415264    .000891   .001000 |   .   . v   .   |
4284 rP 10  2 -1   255.764771    .000099   .000200 |   .   v   .   |
4285 rP 11  2 -1   255.117282   -.000122   .000200 |   .   v   .   |
4286 rP 12  2 -1   254.472630    .000127   .000200 |   .   v   .   |
4287 rP 13  2 -1   253.829866   -.000031   .000200 |   .   v   .   |
4288 rP 14  2 -1   253.189635    .000130   .000200 |   .   v   .   |
4289 rP 15  2 -1   252.551489    .000246   .000300 |   .   v   .   |
4290 rP 16  2 -1   251.915081    .000059   .000200 |   .   v   .   |
4291 rP 17  2 -1   251.280808    .000060   .000200 |   .   v   .   |
4292 rP 18  2 -1   250.648150   -.000182   .000500 |   .   v   .   |
4293 rP 19  2 -1   250.019685    .001999   .002000 |   .   .   v.   |
4294 rP 20  2 -1   249.388770    .000041   .000200 |   .   v   .   |
4295 rP 21  2 -1   248.761417    .000032   .000200 |   .   v   .   |
4296 rP 22  2 -1   248.135392   -.000200   .000500 |   .   v   .   |
4297 rP 23  2 -1   247.511354    .000060   .000200 |   .   v   .   |
4298 rP 24  2 -1   246.888505    .000056   .000200 |   .   v   .   |
4299 rP 25  2 -1   246.267112    .000088   .000200 |   .   v   .   |
4300 rP 26  2 -1   245.646925   -.000069   .000200 |   .   v   .   |
4301 rP 27  2 -1   245.028435    .000088   .000200 |   .   v   .   |
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4302	rP 28	2	-1	244.411163	.000089	.000200	|	.	v	.	|
4303	rP 29	2	-1	243.795290	.000115	.000200	|	.	v	.	|
4304	rP 30	2	-1	243.180714	.000061	.000200	|	.	v	.	|
4305	rP 31	2	-1	242.567583	.000066	.000200	|	.	v	.	|
4306	rP 32	2	-1	241.955770	-.000006	.000200	|	.	v	.	|
4307	rP 33	2	-1	241.345496	.000053	.000200	|	.	v	.	|
4308	rP 34	2	-1	240.736604	.000072	.000200	|	.	v	.	|
4309	rP 35	2	-1	240.129090	.000032	.000200	|	.	v	.	|
4310	rP 36	2	-1	239.523041	.000005	.000200	|	.	v	.	|
4311	rP 37	2	-1	238.918482	.000001	.000200	|	.	v	.	|
4312	rP 38	2	-1	238.315360	-.000048	.000200	|	.	v	.	|
4313	rP 39	2	-1	237.713801	-.000030	.000200	|	.	v	.	|
4314	rP 40	2	-1	237.113638	-.000127	.000200	|	.	v	.	|
4315	rP 41	2	-1	236.515156	-.000067	.000200	|	.	v	.	|
4316	rP 42	2	-1	235.918147	-.000071	.000200	|	.	v	.	|
4317	rP 43	2	-1	235.322671	-.000092	.000200	|	.	v	.	|
4318	rP 44	2	-1	234.728740	-.000128	.000200	|	.	v	.	|
4319	rP 45	2	-1	234.136435	-.000111	.000200	|	.	v	.	|
4320	rP 46	2	-1	233.545621	-.000184	.000200	|	.	v	.	|
4321	rP 47	2	-1	232.956505	-.000151	.000200	|	.	v	.	|
4322	rP 48	2	-1	232.368742	-.000365	.000200	|	.	x.	.	|
4323	rP 49	2	-1	231.783021	-.000146	.000200	|	.	v	.	|
4324	rP 50	2	-1	231.198669	-.000175	.000200	|	.	v	.	|
4325	rP 51	2	-1	230.615828	-.000317	.000200	|	.	x.	.	|
4326	rP 52	2	-1	230.035113	.000037	.000500	|	.	v	.	|
4327	rP 53	2	-1	229.454958	-.000685	.000500	|	.	x.	.	|
4328	rP 54	2	-1	228.877215	-.000638	.000500	|	.	x.	.	|
4329	rP 55	2	-1	228.301221	-.000489	.000300	|	.	x.	.	|
4330	rP 56	2	-1	227.726996	-.000223	.000200	|	.	x	.	|
4331	rP 57	2	-1	227.154271	-.000114	.000200	|	.	v	.	|
4332	rP 58	2	-1	226.583324	.000114	.000200	|	.	v	.	|
4333	rP 59	2	-1	226.013949	.000249	.000200	|	.	x	.	|
4334	rP 60	2	-1	225.446103	.000248	.000200	|	.	x	.	|
4335	rP 61	2	-1	224.880359	.000678	.000200	|	.	.*	.	|
4336	rR 2	2	-1	264.413600	.000807	.000500	|	.	. x	.	|
4337	rR 3	2	-1	265.095811	-.000488	.001000	|	.	v.	.	|
4338	rR 4	2	-1	265.782955	.000649	.000500	|	.	.x	.	|
4339	rR 5	2	-1	266.471277	.000513	.000500	|	.	.x	.	|
4340	rR 6	2	-1	267.161628	.000014	.000300	|	.	v	.	|
4341	rR 7	2	-1	267.854921	.000128	.000200	|	.	v	.	|
4342	rR 8	2	-1	268.549147	-.001083	.002000	|	.	v .	.	|
4343	rR 9	2	-1	269.247962	.000115	.000200	|	.	v	.	|
4344	rR 10	2	-1	269.947774	.000210	.000200	|	.	x	.	|
4345	rR 11	2	-1	270.649361	.000063	.000200	|	.	v	.	|
4346	rR 12	2	-1	271.353044	.000083	.000200	|	.	v	.	|
4347	rR 13	2	-1	272.058489	.000024	.000200	|	.	v	.	|
4348	rR 14	2	-1	272.765808	.000082	.000200	|	.	v	.	|
4349	rR 15	2	-1	273.474767	.000107	.000200	|	.	v	.	|
4350	rR 16	2	-1	274.185266	.000077	.000200	|	.	v	.	|
4351	rR 17	2	-1	274.897254	.000016	.000200	|	.	v	.	|
4352	rR 18	2	-1	275.611098	.000355	.000500	|	.	.v	.	|
4353	rR 19	2	-1	276.325705	.000060	.000200	|	.	v	.	|
4354	rR 20	2	-1	277.041951	.000056	.000200	|	.	v	.	|
4355	rR 21	2	-1	277.759386	-.000065	.000200	|	.	v	.	|
4356	rR 22	2	-1	278.478349	.000070	.000200	|	.	v	.	|
4357	rR 23	2	-1	279.198398	.000046	.000200	|	.	v	.	|

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4358 rR 24  2 -1   279.919600   -.000052   .000200 |  .   v   .   |
4359 rR 25  2 -1   280.642187    .000022   .000200 |  .   v   .   |
4360 rR 26  2 -1   281.365894    .000013   .000200 |  .   v   .   |
4361 rR 27  2 -1   282.090812    .000016   .000200 |  .   v   .   |
4362 rR 28  2 -1   282.816874   -.000034   .000200 |  .   v   .   |
4363 rR 29  2 -1   283.544229    .000011   .000200 |  .   v   .   |
4364 rR 30  2 -1   284.272704   -.000024   .000200 |  .   v   .   |
4365 rR 31  2 -1   285.002449    .000006   .000200 |  .   v   .   |
4366 rR 32  2 -1   285.733315   -.000050   .000200 |  .   v   .   |
4367 rR 33  2 -1   286.465443   -.000059   .000200 |  .   v   .   |
4368 rR 34  2 -1   287.198710   -.000148   .000200 |  .   v   .   |
4369 rR 35  2 -1   287.933365   -.000074   .000200 |  .   v   .   |
4370 rR 36  2 -1   288.669079   -.000170   .000200 |  .   v   .   |
4371 rR 37  2 -1   289.406243   -.000051   .000200 |  .   v   .   |
4372 rR 38  2 -1   290.144413   -.000165   .000200 |  .   v   .   |
4373 rR 39  2 -1   290.883870   -.000234   .000200 |  .   x   .   |
4374 rR 40  2 -1   291.624743   -.000134   .000200 |  .   v   .   |
4375 rR 41  2 -1   292.366184   -.000715   .001000 |  .  v.   .   |
4376 rR 42  2 -1   293.110246    .000074   .000200 |  .   v   .   |
4377 rR 43  2 -1   293.856192    .001493   .002000 |  .   . v .   |
4378 rR 44  2 -1   294.600296   -.000185   .000200 |  .   v   .   |
4379 rR 45  2 -1   295.347311   -.000207   .000200 |  .   x   .   |
4380 rR 46  2 -1   296.095600   -.000210   .000200 |  .   x   .   |
4381 rR 47  2 -1   296.845167   -.000191   .000200 |  .   v   .   |
4382 rR 48  2 -1   297.595866   -.000294   .000200 |  .  x.   .   |
4383 rR 49  2 -1   298.347950   -.000266   .000200 |  .  x.   .   |
4384 rR 50  2 -1   299.101220   -.000303   .000200 |  .  x.   .   |
4385 rR 51  2 -1   299.855769   -.000310   .000200 |  .  x.   .   |
4386 rR 52  2 -1   300.611543   -.000338   .000200 |  .  x.   .   |
4387 rR 53  2 -1   301.368588   -.000339   .000200 |  .  x.   .   |
4388 rR 54  2 -1   302.126845   -.000369   .000200 |  .  x.   .   |
4389 rR 55  2 -1   302.886433   -.000303   .000200 |  .  x.   .   |
4390 rR 56  2 -1   303.647085   -.000405   .000200 |  .  *.   .   |
4391 rR 57  2 -1   304.409099   -.000373   .000200 |  .  x.   .   |
4392 rR 58  2 -1   305.172130   -.000546   .000200 |  .  *.   .   |
4393 rR 59  2 -1   305.936660   -.000438   .000200 |  .  *.   .   |
4394 rR 60  2 -1   306.702247   -.000484   .000200 |  .  *.   .   |
4395 rR 61  2 -1   307.469098   -.000472   .000200 |  .  *.   .   |
4396 rR 62  2 -1   308.237262   -.000347   .000200 |  .  x.   .   |
4397 rR 63  2 -1   309.006256   -.000586   .000200 |  .  *.   .   |
4398 rR 64  2 -1   309.776648   -.000613   .000200 |  .  *.   .   |
4399 rR 65  2 -1   310.548284   -.000576   .000200 |  .  *.   .   |
4400 rR 66  2 -1   311.321081   -.000551   .000200 |  .  *.   .   |
4401 rR 67  2 -1   312.095372   -.000196   .000500 |  .   v   .   |
4402 rR 68  2 -1   312.870301   -.000362   .000200 |  .  x.   .   |
4403 rP  5  3 -1   259.112787   -.001695   .002000 |  . v .   .   |
4404 rP  6  3 -1   258.454801    .000135   .000200 |  .   v   .   |
4405 rP  7  3 -1   257.797580    .000184   .000200 |  .   v   .   |
4406 rP  8  3 -1   257.141786   -.000825   .010000 |  . v .   .   |
4407 rP  9  3 -1   256.490412    .000173   .000200 |  .   v   .   |
4408 rP 10  3 -1   255.840284    .000085   .000200 |  .   v   .   |
4409 rP 11  3 -1   255.192512    .000112   .000200 |  .   v   .   |
4410 rP 12  3 -1   254.546768    .000025   .000200 |  .   v   .   |
4411 rP 13  3 -1   253.903605    .000478   .000500 |  .  .v   .   |
4412 rP 14  3 -1   253.261511    .000064   .000200 |  .   v   .   |
4413 rP 15  3 -1   252.621783    .000180   .000200 |  .   v   .   |
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4414	rP 16	3	-1	251.983539	.000038	.000200	|	.	v	. |
4415	rP 17	3	-1	251.346932	-.000122	.000200	|	.	v	. |
4416	rP 18	3	-1	250.712484	.000293	.000300	|	.	.v	. |
4417	rP 19	3	-1	250.078905	.000052	.000200	|	.	v	. |
4418	rP 20	3	-1	249.446808	-.000187	.000300	|	.	v	. |
4419	rP 21	3	-1	248.816816	.000227	.000200	|	.	x	. |
4420	rP 22	3	-1	248.187812	.000196	.000200	|	.	v	. |
4421	rP 23	3	-1	247.560264	.000191	.000200	|	.	v	. |
4422	rP 24	3	-1	246.934049	.000086	.000200	|	.	v	. |
4423	rP 25	3	-1	246.309391	.000096	.000200	|	.	v	. |
4424	rP 26	3	-1	245.686194	.000111	.000200	|	.	v	. |
4425	rP 27	3	-1	245.064483	.000138	.000200	|	.	v	. |
4426	rP 28	3	-1	244.444058	-.000040	.000200	|	.	v	. |
4427	rP 29	3	-1	243.825540	.000180	.000200	|	.	v	. |
4428	rP 30	3	-1	243.208245	.000098	.000200	|	.	v	. |
4429	rP 31	3	-1	242.592510	.000034	.000200	|	.	v	. |
4430	rP 32	3	-1	241.978497	.000137	.000200	|	.	v	. |
4431	rP 33	3	-1	241.365924	.000112	.000200	|	.	v	. |
4432	rP 34	3	-1	240.754965	.000120	.000200	|	.	v	. |
4433	rP 35	3	-1	240.145524	.000057	.000200	|	.	v	. |
4434	rP 36	3	-1	239.537921	.000232	.000200	|	.	x	. |
4435	rP 37	3	-1	238.931609	.000091	.000200	|	.	v	. |
4436	rP 38	3	-1	238.327017	.000056	.000200	|	.	v	. |
4437	rP 39	3	-1	237.724124	.000098	.000200	|	.	v	. |
4438	rP 40	3	-1	237.122881	.000164	.000200	|	.	v	. |
4439	rP 41	3	-1	236.523142	.000101	.000200	|	.	v	. |
4440	rP 42	3	-1	235.925069	.000066	.000200	|	.	v	. |
4441	rP 43	3	-1	235.328672	.000066	.000200	|	.	v	. |
4442	rP 44	3	-1	234.733950	.000095	.000200	|	.	v	. |
4443	rP 45	3	-1	234.140835	.000080	.000200	|	.	v	. |
4444	rP 46	3	-1	233.549343	.000034	.000200	|	.	v	. |
4445	rP 47	3	-1	232.959453	-.000067	.000200	|	.	v	. |
4446	rP 48	3	-1	232.371849	.000456	.000500	|	.	.v	. |
4447	rP 49	3	-1	231.784752	-.000178	.000200	|	.	v	. |
4448	rP 50	3	-1	231.200344	.000210	.000500	|	.	v	. |
4449	rP 51	3	-1	230.617624	.000616	.001000	|	.	.v	. |
4450	rP 52	3	-1	230.035113	-.000441	.000500	|	.	v.	. |
4451	rP 53	3	-1	229.454958	-.000817	.001000	|	.	v .	. |
4452	rP 54	3	-1	228.877215	-.000459	.000500	|	.	v.	. |
4453	rP 55	3	-1	228.301221	-.000031	.000200	|	.	v	. |
4454	rR 3	3	-1	265.171949	.000570	.000500	|	.	.x	. |
4455	rR 4	3	-1	265.857903	.000577	.000500	|	.	.x	. |
4456	rR 5	3	-1	266.544956	-.000733	.001000	|	.	v.	. |
4457	rR 6	3	-1	267.236798	.000411	.000500	|	.	.v	. |
4458	rR 7	3	-1	267.929355	.000030	.000200	|	.	v	. |
4459	rR 8	3	-1	268.624427	.000025	.000200	|	.	v	. |
4460	rR 9	3	-1	269.321690	.000183	.000200	|	.	v	. |
4461	rR 10	3	-1	270.020616	.000092	.000200	|	.	v	. |
4462	rR 11	3	-1	270.721458	.000123	.000200	|	.	v	. |
4463	rR 12	3	-1	271.423909	.000084	.000200	|	.	v	. |
4464	rR 13	3	-1	272.127961	.000079	.000200	|	.	v	. |
4465	rR 14	3	-1	272.833594	.000187	.000200	|	.	v	. |
4466	rR 15	3	-1	273.540500	.000190	.000200	|	.	v	. |
4467	rR 16	3	-1	274.248619	.000099	.000200	|	.	v	. |
4468	rR 17	3	-1	274.957963	-.000017	.000200	|	.	v	. |
4469	rR 18	3	-1	275.668597	-.000057	.000200	|	.	v	. |

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4470 rR 19  3 -1   276.380565    .000045   .000200 |   .   v   .   |
4471 rR 20  3 -1   277.093701    .000130   .000200 |   .   v   .   |
4472 rR 21  3 -1   277.807820    .000009   .000200 |   .   v   .   |
4473 rR 23  3 -1   279.239956    .000038   .000200 |   .   v   .   |
4474 rR 24  3 -1   279.957914    .000088   .000200 |   .   v   .   |
4475 rR 25  3 -1   280.677096    .000096   .000200 |   .   v   .   |
4476 rR 26  3 -1   281.397980    .000517   .000500 |   .   .x  .   |
4477 rR 27  3 -1   282.119330    .000097   .000200 |   .   v   .   |
4478 rR 28  3 -1   282.842720    .000392   .000500 |   .   .v  .   |
4479 rR 29  3 -1   283.566811    .000050   .000200 |   .   v   .   |
4480 rR 30  3 -1   284.292445   -.000100   .000200 |   .   v   .   |
4481 rR 31  3 -1   285.019566   -.000120   .000200 |   .   v   .   |
4482 rR 32  3 -1   285.748255    .000063   .000200 |   .   v   .   |
4483 rR 33  3 -1   286.478095    .000030   .000200 |   .   v   .   |
4484 rR 34  3 -1   287.209366    .000059   .000200 |   .   v   .   |
4485 rR 35  3 -1   287.941846   -.000071   .000200 |   .   v   .   |
4486 rR 36  3 -1   288.675883   -.000012   .000200 |   .   v   .   |
4487 rR 37  3 -1   289.411398    .000159   .000200 |   .   v   .   |
4488 rR 38  3 -1   290.148423    .000478   .000500 |   .   .v  .   |
4489 rR 39  3 -1   290.886043    .000034   .000200 |   .   v   .   |
4490 rR 40  3 -1   291.624743   -.000684   .001000 |   .  v.   .   |
4491 rR 41  3 -1   292.366184   -.000010   .000200 |   .   v   .   |
4492 rR 42  3 -1   293.110246    .001939   .002000 |   .   .  v.   |
4493 rR 43  3 -1   293.851748   -.000010   .000200 |   .   v   .   |
4494 rR 44  3 -1   294.596303   -.000241   .000500 |   .   v   .   |
4495 rR 45  3 -1   295.342787    .000129   .000200 |   .   v   .   |
4496 rR 46  3 -1   296.089977   -.000118   .000200 |   .   v   .   |
4497 rR 47  3 -1   296.838718   -.000131   .000200 |   .   v   .   |
4498 rR 48  3 -1   297.588948    .000033   .000200 |   .   v   .   |
4499 rR 49  3 -1   298.340219   -.000067   .000200 |   .   v   .   |
4500 rR 50  3 -1   299.092854   -.000102   .000200 |   .   v   .   |
4501 rR 51  3 -1   299.846893   -.000026   .000200 |   .   v   .   |
4502 rR 52  3 -1   300.602272    .000103   .000200 |   .   v   .   |
4503 rR 53  3 -1   301.358640   -.000059   .000200 |   .   v   .   |
4504 rR 54  3 -1   302.116320   -.000183   .000200 |   .   v   .   |
4505 rR 55  3 -1   302.875621    .000047   .000200 |   .   v   .   |
4506 rR 56  3 -1   303.635841   -.000065   .000200 |   .   v   .   |
4507 rR 57  3 -1   304.397452   -.000039   .000200 |   .   v   .   |
4508 rR 58  3 -1   305.160387    .000065   .000200 |   .   v   .   |
4509 rR 59  3 -1   305.924276   -.000117   .000200 |   .   v   .   |
4510 rR 60  3 -1   306.689521   -.000175   .000200 |   .   v   .   |
4511 rR 61  3 -1   307.455927   -.000296   .000500 |   .  v.   .   |
4512 rR 62  3 -1   308.223766   -.000202   .000300 |   .   v   .   |
4513 rR 63  3 -1   308.993060    .000139   .000200 |   .   v   .   |
4514 rR 64  3 -1   309.763219    .000144   .000200 |   .   v   .   |
4515 rR 65  3 -1   310.534540    .000117   .000200 |   .   v   .   |
4516 rR 66  3 -1   311.307418    .000463   .000500 |   .   .v  .   |
4517 rR 67  3 -1   312.080907    .000242   .000500 |   .   v   .   |
4518 rR 68  3 -1   312.856253    .000711   .000500 |   .   .x  .   |
4519 rR 69  3 -1   313.632013    .000435   .000200 |   .   .*  .   |
4520 rP  6  4 -1   258.530380    .001118   .002000 |   .   . v .   |
4521 rP  7  4 -1   257.872142   -.000004   .000200 |   .   v   .   |
4522 rP  8  4 -1   257.216986   -.000452   .000500 |   .  v.   .   |
4523 rP  9  4 -1   256.564910   -.000121   .000200 |   .   v   .   |
4524 rP 10  4 -1   255.916841    .002035   .002000 |   .   .  x.   |
4525 rP 12  4 -1   254.620639    .000263   .000500 |   .   .v  .   |
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4526	rP 14	4	-1	253.333089	.000014	.000200	|	.	v	.	|
4527	rP 15	4	-1	252.691845	.000062	.000200	|	.	v	.	|
4528	rP 16	4	-1	252.051895	-.000030	.000200	|	.	v	.	|
4529	rP 17	4	-1	251.413359	-.000066	.000200	|	.	v	.	|
4530	rP 18	4	-1	250.775926	-.000302	.000300	|	.	x.	.	|
4531	rP 19	4	-1	250.140135	-.000174	.000200	|	.	v	.	|
4532	rP 20	4	-1	249.505561	-.000101	.000200	|	.	v	.	|
4533	rP 21	4	-1	248.872302	-.000002	.000200	|	.	v	.	|
4534	rP 22	4	-1	248.240676	.000412	.000500	|	.	.v	.	|
4535	rP 23	4	-1	247.609532	-.000051	.000200	|	.	v	.	|
4536	rP 24	4	-1	246.980254	-.000056	.000200	|	.	v	.	|
4537	rP 25	4	-1	246.352480	-.000013	.000200	|	.	v	.	|
4538	rP 26	4	-1	245.726167	-.000013	.000200	|	.	v	.	|
4539	rP 27	4	-1	245.101344	-.000073	.000200	|	.	v	.	|
4540	rP 28	4	-1	244.478286	.000041	.000200	|	.	v	.	|
4541	rP 29	4	-1	243.856616	-.000082	.000200	|	.	v	.	|
4542	rP 30	4	-1	243.236773	-.000035	.000200	|	.	v	.	|
4543	rP 31	4	-1	242.618582	-.000015	.000200	|	.	v	.	|
4544	rP 32	4	-1	242.002144	.000057	.000200	|	.	v	.	|
4545	rP 33	4	-1	241.387363	.000072	.000200	|	.	v	.	|
4546	rP 34	4	-1	240.774002	-.000219	.000200	|	.	x	.	|
4547	rP 35	4	-1	240.162940	.000055	.000200	|	.	v	.	|
4548	rP 36	4	-1	239.553274	-.000014	.000200	|	.	v	.	|
4549	rP 37	4	-1	238.945359	-.000074	.000200	|	.	v	.	|
4550	rP 38	4	-1	238.339257	-.000065	.000200	|	.	v	.	|
4551	rP 39	4	-1	237.734871	-.000083	.000200	|	.	v	.	|
4552	rP 40	4	-1	237.132262	-.000067	.000200	|	.	v	.	|
4553	rP 41	4	-1	236.531379	-.000066	.000200	|	.	v	.	|
4554	rP 42	4	-1	235.932281	-.000019	.000200	|	.	v	.	|
4555	rP 43	4	-1	235.334722	-.000171	.000200	|	.	v	.	|
4556	rP 44	4	-1	234.739194	-.000027	.000200	|	.	v	.	|
4557	rP 45	4	-1	234.145396	.000115	.000200	|	.	v	.	|
4558	rR 4	4	-1	265.930315	-.000156	.000200	|	.	v	.	|
4559	rR 5	4	-1	266.618581	-.000185	.000200	|	.	v	.	|
4560	rR 6	4	-1	267.309330	-.000008	.000200	|	.	v	.	|
4561	rR 7	4	-1	268.001814	-.000247	.000200	|	.	x	.	|
4562	rR 8	4	-1	268.696792	-.000004	.000200	|	.	v	.	|
4563	rR 9	4	-1	269.393388	-.000008	.000200	|	.	v	.	|
4564	rR 10	4	-1	270.091585	-.000123	.000200	|	.	v	.	|
4565	rR 11	4	-1	270.791545	-.000036	.000200	|	.	v	.	|
4566	rR 12	4	-1	271.492894	.000023	.000200	|	.	v	.	|
4567	rR 13	4	-1	272.195392	-.000057	.000200	|	.	v	.	|
4568	rR 14	4	-1	272.899068	-.000135	.000200	|	.	v	.	|
4569	rR 15	4	-1	273.604609	.000559	.001000	|	.	.v	.	|
4570	rR 16	4	-1	274.309883	-.000047	.000200	|	.	v	.	|
4571	rR 17	4	-1	275.016679	-.000135	.000200	|	.	v	.	|
4572	rR 18	4	-1	275.724548	-.000148	.000200	|	.	v	.	|
4573	rR 19	4	-1	276.433539	-.000054	.000200	|	.	v	.	|
4574	rR 20	4	-1	277.144879	.001340	.002000	|	.	. v	.	|
4575	rR 21	4	-1	277.854208	-.000371	.000500	|	.	v.	.	|
4576	rR 22	4	-1	278.566683	-.000084	.000200	|	.	v	.	|
4577	rR 23	4	-1	279.280024	-.000134	.000200	|	.	v	.	|
4578	rR 24	4	-1	279.995088	.000281	.000500	|	.	.v	.	|
4579	rR 25	4	-1	280.710689	-.000077	.000200	|	.	v	.	|
4580	rR 26	4	-1	281.428078	-.000002	.000200	|	.	v	.	|
4581	rR 27	4	-1	282.146807	.000018	.000200	|	.	v	.	|

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4582 rR 28  4 -1   282.866809   -.000117   .000200 |   .   v   .   |
4583 rR 29  4 -1   283.588380   -.000138   .000200 |   .   v   .   |
4584 rR 30  4 -1   284.311475   -.000109   .000200 |   .   v   .   |
4585 rR 31  4 -1   285.035857   -.000282   .000500 |   .  v.   .   |
4586 rR 32  4 -1   285.762121   -.000069   .000200 |   .   v   .   |
4587 rR 33  4 -1   286.489674   -.000069   .000200 |   .   v   .   |
4588 rR 34  4 -1   287.218726   -.000072   .000200 |   .   v   .   |
4589 rR 35  4 -1   287.949334   -.000018   .000200 |   .   v   .   |
4590 rR 36  4 -1   288.681441    .000041   .000200 |   .   v   .   |
4591 rR 37  4 -1   289.415181    .000244   .000200 |   .   x   .   |
4592 rR 38  4 -1   290.148423   -.001529   .002000 |   . v .   .   |
4593 rR 39  4 -1   290.886043   -.000395   .001000 |   .  v.   .   |
4594 rR 40  4 -1   291.624743    .000360   .000300 |   .   .x  .   |
4595 rR 41  4 -1   292.366184    .002407   .003000 |   .   .   v   |
4596 rR 42  4 -1   293.104221   -.000389   .001000 |   .  v.   .   |
4597 rR 43  4 -1   293.846828   -.000041   .000200 |   .   v   .   |
4598 rR 44  4 -1   294.590335   -.000209   .000500 |   .   v   .   |
4599 rR 45  4 -1   295.335490   -.000134   .000300 |   .   v   .   |
4600 rR 46  4 -1   296.081954   -.000143   .000300 |   .   v   .   |
4601 rR 47  4 -1   296.829870   -.000084   .000200 |   .   v   .   |
4602 rR 48  4 -1   297.579118   -.000064   .000200 |   .   v   .   |
4603 rR 49  4 -1   298.329624   -.000148   .000200 |   .   v   .   |
4604 rR 50  4 -1   299.081629   -.000084   .000200 |   .   v   .   |
4605 rR 51  4 -1   299.834899   -.000097   .000200 |   .   v   .   |
4606 rR 52  4 -1   300.589283   -.000326   .000200 |   .  x.   .   |
4607 rR 53  4 -1   301.345322   -.000222   .000200 |   .   x   .   |
4608 rR 54  4 -1   302.102608   -.000182   .000200 |   .   v   .   |
4609 rR 55  4 -1   302.861231   -.000108   .000200 |   .   v   .   |
4610 rR 56  4 -1   303.620915   -.000265   .000200 |   .  x.   .   |
4611 rR 57  4 -1   304.382185   -.000119   .000200 |   .   v   .   |
4612 rR 58  4 -1   305.144479   -.000222   .000200 |   .   x   .   |
4613 rR 59  4 -1   305.908090   -.000274   .000200 |   .  x.   .   |
4614 rR 60  4 -1   306.672985   -.000296   .000200 |   .  x.   .   |
4615 rR 61  4 -1   307.439362   -.000082   .000200 |   .   v   .   |
4616 rR 62  4 -1   308.206623   -.000221   .000200 |   .   x   .   |
4617 rR 63  4 -1   308.975382   -.000088   .000200 |   .   v   .   |
4618 rP  7  5 -1   257.942702   -.002481   .030000 |   v   .   .   |
4619 rP  8  5 -1   257.288746   -.001921   .002000 |   .v  .   .   |
4620 rP  9  5 -1   256.637842   -.000467   .000200 |   .  *.   .   |
4621 rP 10  5 -1   255.987686   -.000248   .000200 |   .   x   .   |
4622 rP 11  5 -1   255.338849   -.000513   .000200 |   .  *.   .   |
4623 rP 12  5 -1   254.692555    .000146   .001000 |   .   v   .   |
4624 rP 13  5 -1   254.046299   -.000605   .000300 |   .  *.   .   |
4625 rP 14  5 -1   253.402437   -.000259   .000200 |   .  x.   .   |
4626 rP 15  5 -1   252.759353   -.000314   .000200 |   .  x.   .   |
4627 rP 16  5 -1   252.117413   -.000324   .000200 |   .  x.   .   |
4628 rP 17  5 -1   251.476472   -.000392   .000200 |   .  x.   .   |
4629 rP 18  5 -1   250.836711   -.000333   .000200 |   .  x.   .   |
4630 rP 19  5 -1   250.198254   -.000053   .000300 |   .   v   .   |
4631 rP 20  5 -1   249.560433   -.000271   .000200 |   .  x.   .   |
4632 rP 21  5 -1   248.923978   -.000327   .000200 |   .  x.   .   |
4633 rP 22  5 -1   248.289171   -.000017   .000300 |   .   v   .   |
4634 rP 23  5 -1   247.655223   -.000213   .000200 |   .   x   .   |
4635 rP 24  5 -1   247.022932   -.000197   .000200 |   .   v   .   |
4636 rP 25  5 -1   246.392054   -.000287   .000200 |   .  x.   .   |
4637 rP 27  5 -1   245.135462   -.000126   .000200 |   .   v   .   |
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4638	rP 28	5	-1	244.509520	-.000216	.000200	|	.	x	.	|
4639	rP 29	5	-1	243.885395	-.000231	.000200	|	.	x	.	|
4640	rP 30	5	-1	243.263067	-.000227	.000200	|	.	x	.	|
4641	rP 31	5	-1	242.642465	-.000302	.000200	|	.	x.	.	|
4642	rP 32	5	-1	242.023850	-.000216	.000200	|	.	x	.	|
4643	rP 33	5	-1	241.407031	-.000175	.000200	|	.	v	.	|
4644	rP 34	5	-1	240.791952	-.000244	.000200	|	.	x	.	|
4645	rP 35	5	-1	240.178792	-.000251	.000200	|	.	x.	.	|
4646	rP 36	5	-1	239.567422	-.000327	.000200	|	.	x.	.	|
4647	rP 37	5	-1	238.958123	-.000190	.000200	|	.	v	.	|
4648	rP 38	5	-1	238.350501	-.000232	.000200	|	.	x	.	|
4649	rP 39	5	-1	237.744795	-.000208	.000200	|	.	x	.	|
4650	rP 40	5	-1	237.140963	-.000155	.000200	|	.	v	.	|
4651	rP 41	5	-1	236.538791	-.000282	.000200	|	.	x.	.	|
4652	rP 42	5	-1	235.938627	-.000232	.000200	|	.	x	.	|
4653	rP 43	5	-1	235.340234	-.000235	.000200	|	.	x	.	|
4654	rP 44	5	-1	234.743721	-.000175	.000200	|	.	v	.	|
4655	rP 45	5	-1	234.148927	-.000205	.000200	|	.	x	.	|
4656	rP 46	5	-1	233.555881	-.000289	.000200	|	.	x.	.	|
4657	rP 47	5	-1	232.964682	-.000322	.000200	|	.	x.	.	|
4658	rP 48	5	-1	232.375343	-.000282	.000200	|	.	x.	.	|
4659	rP 49	5	-1	231.787746	-.000283	.000200	|	.	x.	.	|
4660	rP 50	5	-1	231.201986	-.000222	.000200	|	.	x	.	|
4661	rP 51	5	-1	230.617624	-.000534	.000300	|	.	x.	.	|
4662	rP 52	5	-1	230.035113	-.000760	.000500	|	.	x .	.	|
4663	rP 53	5	-1	229.454958	-.000390	.000200	|	.	x.	.	|
4664	rP 54	5	-1	228.877215	.000637	.001000	|	.	.v	.	|
4665	rP 55	5	-1	228.299433	-.000126	.000300	|	.	v	.	|
4666	rP 56	5	-1	227.723932	-.000355	.000200	|	.	x.	.	|
4667	rP 57	5	-1	227.150444	-.000314	.000200	|	.	x.	.	|
4668	rP 58	5	-1	226.577935	-.001033	.001000	|	.	x .	.	|
4669	rP 59	5	-1	226.008674	-.000241	.000200	|	.	x	.	|
4670	rP 60	5	-1	225.440154	-.000441	.000300	|	.	x.	.	|
4671	rP 61	5	-1	224.873809	-.000196	.000200	|	.	v	.	|
4672	rP 62	5	-1	224.309239	.000098	.000200	|	.	v	.	|
4673	rR 5	5	-1	266.689385	-.000305	.000200	|	.	x.	.	|
4674	rR 6	5	-1	267.379881	-.000285	.000200	|	.	x.	.	|
4675	rR 7	5	-1	268.072216	-.000448	.000200	|	.	*.	.	|
4676	rR 8	5	-1	268.766650	-.000344	.000200	|	.	x.	.	|
4677	rR 9	5	-1	269.462677	-.000280	.000200	|	.	x.	.	|
4678	rR 10	5	-1	270.159934	-.000420	.000200	|	.	*.	.	|
4679	rR 11	5	-1	270.858501	-.000498	.000200	|	.	*.	.	|
4680	rR 12	5	-1	271.558602	-.000124	.000700	|	.	v	.	|
4681	rR 13	5	-1	272.259493	.000088	.000500	|	.	v	.	|
4682	rR 14	5	-1	272.960662	-.000280	.000200	|	.	x.	.	|
4683	rR 15	5	-1	273.663005	-.000282	.000200	|	.	x.	.	|
4684	rR 16	5	-1	274.366098	-.000329	.000200	|	.	x.	.	|
4685	rR 17	5	-1	275.070107	-.000277	.000200	|	.	x.	.	|
4686	rR 18	5	-1	275.774762	-.000443	.000200	|	.	*.	.	|
4687	rR 19	5	-1	276.480627	-.000329	.000200	|	.	x.	.	|
4688	rR 20	5	-1	277.187427	-.000289	.000200	|	.	x.	.	|
4689	rR 21	5	-1	277.895242	-.000323	.000200	|	.	x.	.	|
4690	rR 22	5	-1	278.604315	-.000270	.000200	|	.	x.	.	|
4691	rR 23	5	-1	279.314637	-.000218	.000200	|	.	x	.	|
4692	rR 24	5	-1	280.026156	-.000290	.000200	|	.	x.	.	|
4693	rR 25	5	-1	280.739168	-.000255	.000200	|	.	x.	.	|

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4694	rR 26	5 -1	281.453565	-.000275	.000200	|	.	x.	.	|	
4695	rR 27	5 -1	282.169478	-.000267	.000200	|	.	x.	.	|	
4696	rR 28	5 -1	282.886909	-.000267	.000200	|	.	x.	.	|	
4697	rR 29	5 -1	283.606294	.000130	.000500	|	.	v	.	|	
4698	rR 30	5 -1	284.326473	-.000259	.000200	|	.	x.	.	|	
4699	rR 31	5 -1	285.048695	-.000199	.000200	|	.	v	.	|	
4700	rR 32	5 -1	285.772350	-.000312	.000200	|	.	x.	.	|	
4701	rR 33	5 -1	286.497784	-.000255	.000200	|	.	x.	.	|	
4702	rR 34	5 -1	287.224905	-.000120	.000200	|	.	v	.	|	
4703	rR 35	5 -1	287.953191	-.000426	.000200	|	.	*.	.	|	
4704	rR 36	5 -1	288.683423	-.000385	.000200	|	.	x.	.	|	
4705	rR 37	5 -1	289.415181	-.000408	.000200	|	.	*.	.	|	
4706	rR 38	5 -1	290.148423	-.000524	.000300	|	.	x.	.	|	
4707	rR 39	5 -1	290.883870	-.000001	.000300	|	.	v	.	|	
4708	rR 40	5 -1	291.621755	.001409	.002000	|	.	.	v	.	|
4709	rR 41	5 -1	292.358019	-.000339	.000200	|	.	x.	.	|	
4710	rR 42	5 -1	293.097570	-.000321	.000200	|	.	x.	.	|	
4711	rR 43	5 -1	293.838551	-.000379	.000200	|	.	x.	.	|	
4712	rR 44	5 -1	294.581137	-.000324	.000200	|	.	x.	.	|	
4713	rR 45	5 -1	295.325089	-.000377	.000200	|	.	x.	.	|	
4714	rR 46	5 -1	296.070576	-.000356	.000200	|	.	x.	.	|	
4715	rR 47	5 -1	296.817557	-.000286	.000200	|	.	x.	.	|	
4716	rR 48	5 -1	297.565904	-.000281	.000200	|	.	x.	.	|	
4717	rR 49	5 -1	298.315569	-.000375	.000200	|	.	x.	.	|	
4718	rR 50	5 -1	299.066780	-.000324	.000200	|	.	x.	.	|	
4719	rR 51	5 -1	299.819273	-.000381	.000200	|	.	x.	.	|	
4720	rR 52	5 -1	300.573254	-.000324	.000200	|	.	x.	.	|	
4721	rR 53	5 -1	301.328538	-.000328	.000200	|	.	x.	.	|	
4722	rR 54	5 -1	302.085137	-.000366	.000200	|	.	x.	.	|	
4723	rR 55	5 -1	302.843088	-.000390	.000200	|	.	x.	.	|	
4724	rR 56	5 -1	303.602383	-.000395	.000200	|	.	x.	.	|	
4725	rR 57	5 -1	304.363201	-.000191	.000200	|	.	v	.	|	
4726	rR 58	5 -1	305.125085	-.000223	.000200	|	.	x	.	|	
4727	rR 59	5 -1	305.888224	-.000291	.000200	|	.	x.	.	|	
4728	rR 60	5 -1	306.652577	-.000424	.000200	|	.	*.	.	|	
4729	rR 61	5 -1	307.418367	-.000388	.000200	|	.	x.	.	|	
4730	rR 62	5 -1	308.185494	-.000273	.000200	|	.	x.	.	|	
4731	rR 63	5 -1	308.953704	-.000321	.000200	|	.	x.	.	|	
4732	rR 64	5 -1	309.723019	-.000499	.000300	|	.	x.	.	|	
4733	rR 65	5 -1	310.494202	-.000035	.000200	|	.	v	.	|	
4734	rR 66	5 -1	311.265986	-.000184	.000200	|	.	v	.	|	
4735	rP 11	6 -1	255.408785	-.000628	.000200	|	.	*.	.	|	
4736	rP 12	6 -1	254.761057	-.000186	.000500	|	.	v	.	|	
4737	rP 13	6 -1	254.113389	-.000616	.000200	|	.	*.	.	|	
4738	rP 14	6 -1	253.467355	-.000229	.000500	|	.	v	.	|	
4739	rP 15	6 -1	252.819311	-.002622	.003000	|	v	.	.	|	
4740	rP 16	6 -1	252.176858	-.000215	.000500	|	.	v	.	|	
4741	rP 17	6 -1	251.532438	-.000631	.000200	|	.	*.	.	|	
4742	rP 18	6 -1	250.889378	-.000642	.000200	|	.	*.	.	|	
4743	rP 19	6 -1	250.247687	-.000351	.000200	|	.	x.	.	|	
4744	rP 20	6 -1	249.606572	-.000667	.000300	|	.	*.	.	|	
4745	rP 21	6 -1	248.967214	-.000523	.000200	|	.	*.	.	|	
4746	rP 22	6 -1	248.328576	-.001061	.001000	|	.	x.	.	|	
4747	rP 23	6 -1	247.692929	-.000107	.000500	|	.	v	.	|	
4748	rP 24	6 -1	247.057607	-.000411	.000200	|	.	*.	.	|	
4749	rP 25	6 -1	246.424236	-.000421	.000200	|	.	*.	.	|	

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4750 rP 26  6 -1   245.792958   -.000060   .000500 |   .   v   .   |
4751 rP 27  6 -1   245.162856   -.000298   .000200 |   .  x.   .   |
4752 rP 28  6 -1   244.535903    .000791   .002000 |   .   . v .   |
4753 rP 29  6 -1   243.908518   -.000410   .000200 |   .  *.   .   |
4754 rP 30  6 -1   243.284330   -.000303   .000200 |   .  x.   .   |
4755 rP 31  6 -1   242.662000   -.000248   .000200 |   .   x   .   |
4756 rP 32  6 -1   242.041515   -.000277   .000200 |   .  x.   .   |
4757 rP 33  6 -1   241.422912   -.000363   .000200 |   .  x.   .   |
4758 rP 34  6 -1   240.806392   -.000312   .000200 |   .  x.   .   |
4759 rP 35  6 -1   240.191809   -.000274   .000200 |   .  x.   .   |
4760 rP 36  6 -1   239.579128   -.000283   .000200 |   .  x.   .   |
4761 rP 37  6 -1   238.968422   -.000262   .000200 |   .  x.   .   |
4762 rP 38  6 -1   238.359839   -.000059   .000200 |   .   v   .   |
4763 rP 39  6 -1   237.752690   -.000355   .000200 |   .  x.   .   |
4764 rP 40  6 -1   237.147730   -.000387   .000200 |   .  x.   .   |
4765 rP 41  6 -1   236.544680   -.000424   .000200 |   .  *.   .   |
4766 rP 42  6 -1   235.943631   -.000364   .000200 |   .  x.   .   |
4767 rP 43  6 -1   235.344580   -.000201   .000200 |   .   x   .   |
4768 rP 44  6 -1   234.746992   -.000458   .000200 |   .  *.   .   |
4769 rP 45  6 -1   234.151647   -.000345   .000200 |   .  x.   .   |
4770 rP 46  6 -1   233.557912   -.000484   .000200 |   .  *.   .   |
4771 rR  6  6 -1   267.447974   -.000242   .000200 |   .   x   .   |
4772 rR  7  6 -1   268.140118   -.000335   .000200 |   .  x.   .   |
4773 rR  8  6 -1   268.833807   -.000367   .000200 |   .  x.   .   |
4774 rR  9  6 -1   269.528502   -.000595   .000200 |   .  *.   .   |
4775 rR 10  6 -1   270.225068    .000102   .001000 |   .   v   .   |
4776 rR 11  6 -1   270.921078   -.000504   .000200 |   .  *.   .   |
4777 rR 12  6 -1   271.618590   -.000225   .000200 |   .   x   .   |
4778 rR 13  6 -1   272.316328   -.000279   .000200 |   .  x.   .   |
4779 rR 14  6 -1   273.014512   -.000452   .000200 |   .  *.   .   |
4780 rR 15  6 -1   273.713473   -.000469   .000200 |   .  *.   .   |
4781 rR 16  6 -1   274.413164   -.000464   .000200 |   .  *.   .   |
4782 rR 17  6 -1   275.115859    .001733   .003000 |   .   . v .   |
4783 rR 18  6 -1   275.815130   -.000416   .000200 |   .  *.   .   |
4784 rR 19  6 -1   276.517616   -.000379   .000200 |   .  x.   .   |
4785 rR 20  6 -1   277.220878   -.000696   .000500 |   .  x.   .   |
4786 rR 21  6 -1   277.926044   -.000332   .000200 |   .  x.   .   |
4787 rR 22  6 -1   278.632313   -.000170   .000200 |   .   v   .   |
4788 rR 23  6 -1   279.340968    .000997   .002000 |   .   . v .   |
4789 rR 24  6 -1   280.048324   -.000580   .000200 |   .  *.   .   |
4790 rR 25  6 -1   280.759001   -.000336   .000200 |   .  x.   .   |
4791 rR 26  6 -1   281.469808   -.001509   .002000 |   . v .   .   |
4792 rR 27  6 -1   282.184795   -.000090   .000200 |   .   v   .   |
4793 rR 28  6 -1   282.899768   -.000305   .000200 |   .  x.   .   |
4794 rR 29  6 -1   283.616413   -.000491   .000200 |   .  *.   .   |
4795 rR 30  6 -1   284.335144   -.000256   .000200 |   .  x.   .   |
4796 rR 31  6 -1   285.055405   -.000166   .000200 |   .   v   .   |
4797 rR 32  6 -1   285.777357   -.000070   .000200 |   .   v   .   |
4798 rR 33  6 -1   286.500704   -.000265   .000200 |   .  x.   .   |
4799 rP  9  7 -1   256.776285   -.000556   .000200 |   .  *.   .   |
4800 rP 10  7 -1   256.127328    .002216   .003000 |   .   .  v.   |
4801 rP 11  7 -1   255.472871   -.000676   .000200 |   .  *.   .   |
4802 rP 12  7 -1   254.822342    .000260   .001000 |   .  .v   .   |
4803 rP 13  7 -1   254.170550   -.000308   .000200 |   .  x.   .   |
4804 rP 14  7 -1   253.521042    .000927   .002000 |   .   . v .   |
4805 rP 15  7 -1   252.870307    .000205   .000500 |   .   v   .   |
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4806 rP 16  7 -1    252.220950    -.000090   .000200 |   .   v   .   |
4807 rP 17  7 -1    251.573297     .000188   .000500 |   .   v   .   |
4808 rP 18  7 -1    250.926799     .000344   .000500 |   .  .v   .   |
4809 rP 19  7 -1    250.281045    -.000151   .000200 |   .   v   .   |
4810 rP 20  7 -1    249.637425    -.000005   .000200 |   .   v   .   |
4811 rP 21  7 -1    248.995101    -.000136   .000200 |   .   v   .   |
4812 rP 22  7 -1    248.354490    -.000197   .000500 |   .   v   .   |
4813 rP 23  7 -1    247.713919    -.001920   .003000 |  .v   .   .   |
4814 rP 24  7 -1    247.078809     .000063   .000200 |   .   v   .   |
4815 rP 25  7 -1    246.443565     .000112   .000200 |   .   v   .   |
4816 rP 38  7 -1    238.359839    -.000438   .000200 |   .  *.   .   |
4817 rP 39  7 -1    237.752690     .000330   .000200 |   .  .x   .   |
4818 rP 40  7 -1    237.146536     .000122   .000200 |   .   v   .   |
4819 rP 47  7 -1    232.959453     .000302   .000200 |   .  .x   .   |
4820 rR  7  7 -1    268.204277     .000119   .000500 |   .   v   .   |
4821 rR  8  7 -1    268.896249    -.000131   .000200 |   .   v   .   |
4822 rR  9  7 -1    269.588531    -.000092   .000200 |   .   v   .   |
4823 rR 10  7 -1    270.281747     .000942   .002000 |   .   . v .   |
4824 rR 11  7 -1    270.972603    -.000453   .000300 |   .  x.   .   |
4825 rR 12  7 -1    271.665666     .000065   .000300 |   .   v   .   |
4826 rR 13  7 -1    272.358585    -.000091   .000200 |   .   v   .   |
4827 rR 14  7 -1    273.054667     .002177   .003000 |   .   .  v.   |
4828 rR 15  7 -1    273.747363     .000152   .000200 |   .   v   .   |
4829 rR 16  7 -1    274.441661    -.001314   .002000 |  . v  .   .   |
4830 rR 17  7 -1    275.139792    -.000098   .000200 |   .   v   .   |
4831 rR 18  7 -1    275.837800    -.000245   .000300 |   .   v   .   |
4832 rR 19  7 -1    276.537499    -.000014   .000200 |   .   v   .   |
4833 rR 20  7 -1    277.238124    -.000233   .000500 |   .   v   .   |
4834 rR 21  7 -1    277.940230    -.000402   .001000 |   .  v.   .   |
4835 rR 22  7 -1    278.644502     .000116   .000200 |   .   v   .   |
4836 rR 23  7 -1    279.349616    -.000046   .000200 |   .   v   .   |
4837 rR 25  7 -1    280.764866    -.000060   .000200 |   .   v   .   |
4838 rR 26  7 -1    281.473719    -.001258   .002000 |  . v  .   .   |
4839 rR 27  7 -1    282.186345    -.000332   .000300 |   .  x.   .   |
4840 rR 28  7 -1    282.899768    -.000279   .000200 |   .  x.   .   |

File # 4  2nu82h.wn    No. data :  966    .00500 cm-1 -> |----+----0----+----|
4841 rP  4  1  1    260.799292    -.000130   .000200 |   .   v   .   |
4842 rP  5  1  1    260.141405     .000014   .000200 |   .   v   .   |
4843 rP  6  1  1    259.486894    -.000173   .000200 |   .   v   .   |
4844 rP  7  1  1    258.836860     .000329   .000500 |   .  .v   .   |
4845 rP  8  1  1    258.189820    -.000057   .000200 |   .   v   .   |
4846 rP  9  1  1    257.547103    -.000111   .000200 |   .   v   .   |
4847 rP 10  1  1    256.909012     .000345   .000500 |   .  .v   .   |
4848 rP 11  1  1    256.273732    -.000638   .001000 |   .  v.   .   |
4849 rP 12  1  1    255.645334     .000864   .001000 |   .  . v  .   |
4850 rP 13  1  1    255.018865    -.000256   .000200 |   .  x.   .   |
4851 rP 14  1  1    254.398279    -.000207   .000200 |   .   x   .   |
4852 rP 15  1  1    253.782794     .000063   .000200 |   .   v   .   |
4853 rP 16  1  1    253.171861    -.000161   .000200 |   .   v   .   |
4854 rP 17  1  1    252.566250    -.000273   .000200 |   .  x.   .   |
4855 rP 18  1  1    251.964059    -.002333   .003000 |   v   .   .   |
4856 rP 19  1  1    251.371708    -.000069   .000200 |   .   v   .   |
4857 rP 20  1  1    250.782758    -.000056   .000200 |   .   v   .   |
4858 rP 21  1  1    250.198254    -.001370   .002000 |   . v  .   .   |
4859 rP 22  1  1    249.622310    -.000001   .000200 |   .   v   .   |
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4860 rP 23  1  1   249.050337   -.000621   .001000 |   .  v.   .   |
4861 rP 24  1  1   248.485243   -.000392   .000200 |   .  x.   .   |
4862 rR  1  1  1   264.823318    .000441   .000500 |   .   .v  .   |
4863 rR  2  1  1   265.504230   -.001660   .002000 |  . v  .   .   |
4864 rR  3  1  1   266.194074    .001557   .002000 |   .   . v .   |
4865 rR  4  1  1   266.882707   -.000110   .000200 |   .   v   .   |
4866 rR  5  1  1   267.577031    .000168   .000200 |   .   v   .   |
4867 rR  6  1  1   268.274234   -.000507   .001000 |   .  v.   .   |
4868 rR  7  1  1   268.976511   -.000042   .000200 |   .   v   .   |
4869 rR  8  1  1   269.682095   -.000319   .000200 |   .  x.   .   |
4870 rR  9  1  1   270.392778    .000325   .001000 |   .   .v  .   |
4871 rR 10  1  1   271.106684   -.000123   .000200 |   .   v   .   |
4872 rR 11  1  1   271.825403   -.000222   .000200 |   .   x   .   |
4873 rR 12  1  1   272.546871   -.002190   .003000 |  .v   .   .   |
4874 rR 13  1  1   273.277210   -.000062   .000200 |   .   v   .   |
4875 rR 14  1  1   274.010361   -.000057   .000200 |   .   v   .   |
4876 rR 15  1  1   274.748643   -.000012   .000200 |   .   v   .   |
4877 rR 16  1  1   275.492422    .000289   .000200 |   .   .x  .   |
4878 rR 17  1  1   276.240738   -.000254   .000200 |   .  x.   .   |
4879 rR 18  1  1   276.993711   -.001650   .002000 |  . v  .   .   |
4880 rR 19  1  1   277.755582    .000229   .000200 |   .   x   .   |
4881 rR 20  1  1   278.518516   -.002548   .003000 |  v    .   .   |
4882 rR 21  1  1   279.292489   -.000081   .000200 |   .   v   .   |
4883 rR 22  1  1   280.069802   -.000131   .000200 |   .   v   .   |
4884 rR 23  1  1   280.852922   -.000270   .000200 |   .  x.   .   |
4885 rR 24  1  1   281.642027   -.000346   .000200 |   .  x.   .   |
4886 rP  4 -1 -1   260.781111    .000284   .000300 |   .   .v  .   |
4887 rP  5 -1 -1   260.115073    .001691   .002000 |   .   . v .   |
4888 rP  6 -1 -1   259.447766    .000127   .000200 |   .   v   .   |
4889 rP  7 -1 -1   258.783592   -.000008   .000200 |   .   v   .   |
4890 rP  8 -1 -1   258.121336    .000066   .000200 |   .   v   .   |
4891 rP  9 -1 -1   257.460392   -.000260   .000500 |   . v.    .   |
4892 rP 10 -1 -1   256.801397   -.000352   .000500 |   . v.    .   |
4893 rP 11 -1 -1   256.143178   -.001386   .002000 |  . v  .   .   |
4894 rP 12 -1 -1   255.489138    .000038   .000200 |   .   v   .   |
4895 rP 13 -1 -1   254.835296   -.000065   .000200 |   .   v   .   |
4896 rP 14 -1 -1   254.184943    .001594   .002000 |   .   . v .   |
4897 rP 15 -1 -1   253.533465    .000398   .000500 |   .   .v  .   |
4898 rP 16 -1 -1   252.884269   -.000250   .000300 |   .   v   .   |
4899 rP 17 -1 -1   252.237649   -.000057   .000200 |   .   v   .   |
4900 rP 18 -1 -1   251.592821    .000189   .000200 |   .   v   .   |
4901 rP 19 -1 -1   250.949549    .000250   .000300 |   .   .v  .   |
4902 rP 20 -1 -1   250.307398   -.000311   .000300 |   .  x.   .   |
4903 rP 21 -1 -1   249.667352   -.000513   .000500 |   .  x.   .   |
4904 rP 22 -1 -1   249.029804    .000035   .000200 |   .   v   .   |
4905 rP 23 -1 -1   248.393230   -.000193   .000200 |   .   v   .   |
4906 rP 24 -1 -1   247.758887    .000057   .000200 |   .   v   .   |
4907 rP 25 -1 -1   247.125913   -.000077   .000200 |   .   v   .   |
4908 rP 26 -1 -1   246.495259    .000352   .000500 |   .   .v  .   |
4909 rP 27 -1 -1   245.865337   -.000245   .000200 |   .   x   .   |
4910 rP 28 -1 -1   245.238145    .000129   .000200 |   .   v   .   |
4911 rP 29 -1 -1   244.612322    .000110   .000200 |   .   v   .   |
4912 rP 30 -1 -1   243.988225    .000055   .000200 |   .   v   .   |
4913 rP 31 -1 -1   243.365788   -.000105   .000200 |   .   v   .   |
4914 rP 32 -1 -1   242.745136   -.000244   .000200 |   .   x   .   |
4915 rP 33 -1 -1   242.126570   -.000065   .000200 |   .   v   .   |
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4916 rP 34 -1 -1   241.509434   -.000223   .000200 |  .   x   .  |
4917 rP 35 -1 -1   240.894232   -.000216   .000200 |  .   x   .  |
4918 rP 36 -1 -1   240.280738   -.000270   .000200 |  .  x.   .  |
4919 rP 37 -1 -1   239.669103   -.000236   .000200 |  .   x   .  |
4920 rP 38 -1 -1   239.059214   -.000226   .000200 |  .   x   .  |
4921 rP 39 -1 -1   238.451313    .000000   .000200 |  .   v   .  |
4922 rP 40 -1 -1   237.844868   -.000090   .000200 |  .   v   .  |
4923 rP 41 -1 -1   237.240315   -.000060   .000200 |  .   v   .  |
4924 rP 42 -1 -1   236.637534   -.000031   .000200 |  .   v   .  |
4925 rP 43 -1 -1   236.036463   -.000064   .000200 |  .   v   .  |
4926 rP 44 -1 -1   235.437229   -.000033   .000200 |  .   v   .  |
4927 rP 45 -1 -1   234.839608   -.000161   .000200 |  .   v   .  |
4928 rP 46 -1 -1   234.244014   -.000034   .000200 |  .   v   .  |
4929 rP 47 -1 -1   233.650082   -.000017   .000200 |  .   v   .  |
4930 rP 48 -1 -1   233.057816   -.000105   .000200 |  .   v   .  |
4931 rP 49 -1 -1   232.467481   -.000033   .000200 |  .   v   .  |
4932 rP 50 -1 -1   231.878954    .000078   .000200 |  .   v   .  |
4933 rP 51 -1 -1   231.291902   -.000105   .000200 |  .   v   .  |
4934 rP 52 -1 -1   230.707031    .000126   .000200 |  .   v   .  |
4935 rP 53 -1 -1   230.123668    .000097   .000200 |  .   v   .  |
4936 rP 54 -1 -1   229.542129    .000128   .000200 |  .   v   .  |
4937 rP 55 -1 -1   228.962633    .000438   .000300 |  .  .x   .  |
4938 rP 56 -1 -1   228.384272    .000121   .000200 |  .   v   .  |
4939 rR  1 -1 -1   264.823318    .002309   .003000 |  .   .   v  |
4940 rR  2 -1 -1   265.499389   -.000867   .001000 |  . v .   .  |
4941 rR  3 -1 -1   266.180730   -.000442   .000200 |  .  *.   .  |
4942 rR  4 -1 -1   266.863559   -.000194   .000200 |  .   v   .  |
4943 rR  5 -1 -1   267.547849   -.000147   .000200 |  .   v   .  |
4944 rR  6 -1 -1   268.233326   -.000569   .000500 |  .  x.   .  |
4945 rR  7 -1 -1   268.921428   -.000018   .000200 |  .   v   .  |
4946 rR  8 -1 -1   269.610486   -.000158   .000200 |  .   v   .  |
4947 rR  9 -1 -1   270.301348   -.000137   .000200 |  .   v   .  |
4948 rR 10 -1 -1   270.994039    .000075   .000200 |  .   v   .  |
4949 rR 11 -1 -1   271.687945   -.000130   .000200 |  .   v   .  |
4950 rR 12 -1 -1   272.383730   -.000084   .000200 |  .   v   .  |
4951 rR 13 -1 -1   273.081199    .000023   .000200 |  .   v   .  |
4952 rR 14 -1 -1   273.780083   -.000073   .000200 |  .   v   .  |
4953 rR 15 -1 -1   274.480608   -.000140   .000200 |  .   v   .  |
4954 rR 16 -1 -1   275.182651   -.000296   .000500 |  . v.   .  |
4955 rR 17 -1 -1   275.887066    .000319   .000200 |  .  .x   .  |
4956 rR 18 -1 -1   276.592579    .000435   .000500 |  .  .v   .  |
4957 rR 19 -1 -1   277.299060   -.000071   .000200 |  .   v   .  |
4958 rR 20 -1 -1   278.007589   -.000114   .000200 |  .   v   .  |
4959 rR 21 -1 -1   278.718072    .000219   .000200 |  .   x   .  |
4960 rR 22 -1 -1   279.429509   -.000068   .000200 |  .   v   .  |
4961 rR 23 -1 -1   280.143434    .000566   .001000 |  .  .v   .  |
4962 rR 24 -1 -1   280.857367   -.000353   .000500 |  . v.   .  |
4963 rR 25 -1 -1   281.574105   -.000021   .000200 |  .   v   .  |
4964 rR 26 -1 -1   282.292023   -.000059   .000200 |  .   v   .  |
4965 rR 27 -1 -1   283.011425   -.000154   .000200 |  .   v   .  |
4966 rR 28 -1 -1   283.732452   -.000161   .000200 |  .   v   .  |
4967 rR 29 -1 -1   284.454881   -.000294   .000200 |  . x.   .  |
4968 rR 30 -1 -1   285.179098   -.000163   .000200 |  .   v   .  |
4969 rR 31 -1 -1   285.904762   -.000100   .000200 |  .   v   .  |
4970 rR 32 -1 -1   286.631804   -.000168   .000200 |  .   v   .  |
4971 rR 33 -1 -1   287.360332   -.000252   .000200 |  . x.   .  |
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4972 rR 34 -1 -1   288.090494   -.000197   .000200 |   .   v   .   |
4973 rR 35 -1 -1   288.822162   -.000124   .000200 |   .   v   .   |
4974 rR 36 -1 -1   289.555168   -.000193   .000200 |   .   v   .   |
4975 rR 37 -1 -1   290.289720   -.000190   .000200 |   .   v   .   |
4976 rR 38 -1 -1   291.025769   -.000155   .000200 |   .   v   .   |
4977 rR 39 -1 -1   291.763239   -.000157   .000200 |   .   v   .   |
4978 rR 40 -1 -1   292.502208   -.000110   .000200 |   .   v   .   |
4979 rR 41 -1 -1   293.242509   -.000174   .000200 |   .   v   .   |
4980 rR 42 -1 -1   293.984367   -.000115   .000200 |   .   v   .   |
4981 rR 43 -1 -1   294.727699   -.000009   .000200 |   .   v   .   |
4982 rR 44 -1 -1   295.472232   -.000120   .000200 |   .   v   .   |
4983 rR 45 -1 -1   296.218230   -.000176   .000200 |   .   v   .   |
4984 rR 46 -1 -1   296.965802   -.000060   .000200 |   .   v   .   |
4985 rR 47 -1 -1   297.714708   -.000002   .000200 |   .   v   .   |
4986 rR 48 -1 -1   298.464952    .000009   .000200 |   .   v   .   |
4987 rR 49 -1 -1   299.216635    .000084   .000200 |   .   v   .   |
4988 rR 50 -1 -1   299.969606    .000080   .000200 |   .   v   .   |
4989 rR 51 -1 -1   300.723933    .000075   .000200 |   .   v   .   |
4990 rR 52 -1 -1   301.479790    .000251   .000200 |   .   .x  .   |
4991 rR 53 -1 -1   302.236876    .000318   .000200 |   .   .x  .   |
4992 rP  4  2  1   260.857097   -.001088   .002000 |   . v .   .   |
4993 rP  5  2  1   260.195694    .000849   .001000 |   .   . v .   |
4994 rP  6  2  1   259.535174    .001423   .002000 |   .   . v .   |
4995 rP  7  2  1   258.874718   -.000063   .000200 |   .   v   .   |
4996 rP  8  2  1   258.217844    .000031   .000200 |   .   v   .   |
4997 rP  9  2  1   257.562759    .000015   .000200 |   .   v   .   |
4998 rP 10  2  1   256.909012   -.000487   .000500 |   .   v.  .   |
4999 rP 11  2  1   256.257850   -.000191   .000300 |   .   v   .   |
5000 rP 12  2  1   255.608465    .000083   .000200 |   .   v   .   |
5001 rP 13  2  1   254.960543   -.000034   .000200 |   .   v   .   |
5002 rP 14  2  1   254.314650   -.000071   .000200 |   .   v   .   |
5003 rP 15  2  1   253.670835   -.000110   .000200 |   .   v   .   |
5004 rP 16  2  1   253.029143   -.000264   .000500 |   .   v.  .   |
5005 rP 17  2  1   252.390278   -.000013   .000200 |   .   v   .   |
5006 rP 18  2  1   251.753636   -.000166   .000200 |   .   v   .   |
5007 rP 19  2  1   251.119994   -.000171   .000200 |   .   v   .   |
5008 rP 20  2  1   250.486793   -.002826   .003000 |  v.   .   .   |
5009 rP 21  2  1   249.862536    .000117   .000200 |   .   v   .   |
5010 rP 22  2  1   249.238885    .000062   .000200 |   .   v   .   |
5011 rP 23  2  1   248.618846   -.000240   .000200 |   .   x   .   |
5012 rP 24  2  1   248.003452    .000004   .000200 |   .   v   .   |
5013 rR  2  2  1   265.571684    .000156   .000200 |   .   v   .   |
5014 rR  3  2  1   266.255232    .000050   .000200 |   .   v   .   |
5015 rR  4  2  1   266.941250   -.000064   .000200 |   .   v   .   |
5016 rR  5  2  1   267.629753   -.000081   .000200 |   .   v   .   |
5017 rR  6  2  1   268.320602   -.000031   .000200 |   .   v   .   |
5018 rR  7  2  1   269.013705    .000108   .000200 |   .   v   .   |
5019 rR  8  2  1   269.708671    .000061   .000200 |   .   v   .   |
5020 rR  9  2  1   270.405582    .000005   .000200 |   .   v   .   |
5021 rR 10  2  1   271.104455    .000021   .000200 |   .   v   .   |
5022 rR 11  2  1   271.805103   -.000055   .000200 |   .   v   .   |
5023 rR 12  2  1   272.507801    .000026   .000200 |   .   v   .   |
5024 rR 13  2  1   273.212452    .000094   .000200 |   .   v   .   |
5025 rR 14  2  1   273.919019   -.000007   .000200 |   .   v   .   |
5026 rR 15  2  1   274.628125    .000191   .000200 |   .   v   .   |
5027 rR 16  2  1   275.338974   -.000298   .000500 |   .   v.  .   |
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5028 rR 17  2  1    276.053315     .000060    .000200 |   .   v   .   |
5029 rR 18  2  1    276.770132     .000014    .000200 |   .   v   .   |
5030 rR 19  2  1    277.488474    -.001639    .002000 |   . v .   .   |
5031 rR 20  2  1    278.213612     .000116    .000200 |   .   v   .   |
5032 rR 21  2  1    278.940280    -.000242    .000200 |   .   x   .   |
5033 rR 22  2  1    279.671071    -.000358    .000200 |   .  x.   .   |
5034 rR 23  2  1    280.406342    -.000085    .000200 |   .   v   .   |
5035 rR 24  2  1    281.145295    -.000396    .000200 |   .  x.   .   |
5036 rR 25  2  1    281.889353     .000005    .000200 |   .   v   .   |
5037 rR 26  2  1    282.637237    -.000243    .000200 |   .   x   .   |
5038 rR 27  2  1    283.390134     .000011    .000200 |   .   v   .   |
5039 rR 28  2  1    284.147046    -.000232    .000200 |   .   x   .   |
5040 rR 29  2  1    284.908561    -.000351    .000200 |   .  x.   .   |
5041 rR 30  2  1    285.674937    -.000035    .000200 |   .   v   .   |
5042 rR 31  2  1    286.446077     .000688    .000200 |   .   .*  .   |
5043 rP  5  3  1    260.263212     .000635    .001000 |   .   .v  .   |
5044 rP  6  3  1    259.602017    -.000087    .000200 |   .   v   .   |
5045 rP  7  3  1    258.944295     .000247    .000300 |   .   v   .   |
5046 rP  8  3  1    258.287287    -.001063    .002000 |   . v .   .   |
5047 rP  9  3  1    257.634425    -.000519    .001000 |   .  v.   .   |
5048 rP 10  3  1    256.983228    -.000542    .001000 |   .  v.   .   |
5049 rP 11  3  1    256.336487     .001715    .003000 |   .   . v .   |
5050 rP 12  3  1    255.688635     .000733    .001000 |   .   .v  .   |
5051 rP 13  3  1    255.042870    -.000262    .000200 |   .  x.   .   |
5052 rP 14  3  1    254.398279    -.002175    .002000 |   .x  .   .   |
5053 rP 15  3  1    253.758943    -.000940    .001000 |   . v .   .   |
5054 rP 16  3  1    253.121267    -.000195    .000200 |   .   v   .   |
5055 rP 17  3  1    252.485287     .000027    .001000 |   .   v   .   |
5056 rP 18  3  1    251.850260    -.001116    .002000 |   . v .   .   |
5057 rP 19  3  1    251.218413    -.001520    .002000 |  . v  .   .   |
5058 rP 20  3  1    250.588969    -.002107    .003000 |   .v  .   .   |
5059 rP 22  3  1    249.341590    -.000213    .000200 |   .   x   .   |
5060 rP 23  3  1    248.722047     .000279    .000500 |   .   .v  .   |
5061 rP 24  3  1    248.105474     .000402    .000500 |   .   .v  .   |
5062 rP 25  3  1    247.491945     .000020    .000200 |   .   v   .   |
5063 rP 26  3  1    246.882549     .000016    .000200 |   .   v   .   |
5064 rP 27  3  1    246.277035    -.000062    .000200 |   .   v   .   |
5065 rP 28  3  1    245.675683    -.000117    .000200 |   .   v   .   |
5066 rP 29  3  1    245.078851     .000045    .000200 |   .   v   .   |
5067 rP 30  3  1    244.485856    -.000394    .000300 |   .  x.   .   |
5068 rP 31  3  1    243.898155    -.000085    .000200 |   .   v   .   |
5069 rP 32  3  1    243.312896    -.001954    .002000 |   .v  .   .   |
5070 rP 33  3  1    242.735997    -.000126    .000200 |   .   v   .   |
5071 rP 34  3  1    242.161606    -.000469    .000200 |   .  *.   .   |
5072 rP 35  3  1    241.592289    -.000405    .000200 |   .  *.   .   |
5073 rR  3  3  1    266.322118     .000071    .000200 |   .   v   .   |
5074 rR  4  3  1    267.008350     .000013    .000200 |   .   v   .   |
5075 rR  5  3  1    267.697151    -.000018    .000200 |   .   v   .   |
5076 rR  6  3  1    268.388658     .000158    .000200 |   .   v   .   |
5077 rR  7  3  1    269.082218    -.000060    .000200 |   .   v   .   |
5078 rR  8  3  1    269.778425    -.000023    .000200 |   .   v   .   |
5079 rR  9  3  1    270.476790    -.000162    .000200 |   .   v   .   |
5080 rR 10  3  1    271.177752     .000019    .000200 |   .   v   .   |
5081 rR 11  3  1    271.880637    -.000105    .000200 |   .   v   .   |
5082 rR 12  3  1    272.585929    -.000011    .000200 |   .   v   .   |
5083 rR 13  3  1    273.293265    -.000040    .000200 |   .   v   .   |
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5084 rR 14  3  1   274.002791   -.000049   .000200 |   .   v   .   |
5085 rR 15  3  1   274.714717    .000147   .000200 |   .   v   .   |
5086 rR 16  3  1   275.428725    .000174   .000200 |   .   v   .   |
5087 rR 18  3  1   276.863807    .000178   .000200 |   .   v   .   |
5088 rR 19  3  1   277.585089    .000113   .000200 |   .   v   .   |
5089 rR 20  3  1   278.309028   -.000041   .000200 |   .   v   .   |
5090 rR 21  3  1   279.034633   -.001452   .002000 |   . v .   .   |
5091 rR 22  3  1   279.766168   -.000049   .000200 |   .   v   .   |
5092 rR 23  3  1   280.498629   -.001034   .002000 |   . v .   .   |
5093 rR 24  3  1   281.236488   -.000135   .000200 |   .   v   .   |
5094 rR 25  3  1   281.977166   -.000124   .000200 |   .   v   .   |
5095 rR 26  3  1   282.721044   -.000797   .001000 |   . v .   .   |
5096 rR 27  3  1   283.470184   -.000250   .000200 |   .  x.   .   |
5097 rR 28  3  1   284.222971   -.000231   .000200 |   .   x   .   |
5098 rR 29  3  1   284.979913   -.000333   .000200 |   .  x.   .   |
5099 rR 30  3  1   285.741361   -.000275   .000200 |   .  x.   .   |
5100 rR 31  3  1   286.507146   -.000264   .000200 |   .  x.   .   |
5101 rR 32  3  1   287.277287   -.000292   .000200 |   .  x.   .   |
5102 rR 33  3  1   288.051842   -.000284   .000200 |   .  x.   .   |
5103 rR 34  3  1   288.830413   -.000603   .000300 |   .  *.   .   |
5104 rR 35  3  1   289.613835   -.000363   .000200 |   .  x.   .   |
5105 rR 36  3  1   290.401703    .000093   .000500 |   .   v   .   |
5106 rR 37  3  1   291.192832   -.000348   .000200 |   .  x.   .   |
5107 rR 38  3  1   291.988631   -.000206   .000200 |   .   x   .   |
5108 rP  6  4  1   259.668453    .000068   .000200 |   .   v   .   |
5109 rP  7  4  1   259.010992    .000267   .000200 |   .  .x   .   |
5110 rP  8  4  1   258.355803    .000247   .000200 |   .   x   .   |
5111 rP  9  4  1   257.702968    .000125   .000200 |   .   v   .   |
5112 rP 10  4  1   257.053423    .000874   .001000 |   .   . v .   |
5113 rP 11  4  1   256.404742    .000104   .000200 |   .   v   .   |
5114 rP 12  4  1   255.759116    .000039   .000200 |   .   v   .   |
5115 rP 13  4  1   255.117282    .001445   .002000 |   .   . v .   |
5116 rP 14  4  1   254.474728   -.000170   .000500 |   .   v   .   |
5117 rP 15  4  1   253.836386    .000136   .000200 |   .   v   .   |
5118 rP 16  4  1   253.200014    .000117   .000200 |   .   v   .   |
5119 rP 17  4  1   252.566250    .000392   .000300 |   .  .x   .   |
5120 rP 18  4  1   251.936295    .002122   .002000 |   .   .  x.   |
5121 rP 19  4  1   251.305077    .000178   .000200 |   .   v   .   |
5122 rP 20  4  1   250.679847    .001736   .002000 |   .   . v .   |
5123 rP 21  4  1   250.054363    .000456   .000500 |   .  .v   .   |
5124 rP 22  4  1   249.432614    .000214   .000200 |   .   x   .   |
5125 rP 23  4  1   248.814016    .000292   .000200 |   .  .x   .   |
5126 rP 24  4  1   248.197980   -.000042   .000200 |   .   v   .   |
5127 rP 25  4  1   247.585714    .000261   .000200 |   .  .x   .   |
5128 rP 26  4  1   246.976384    .000201   .000200 |   .   x   .   |
5129 rP 27  4  1   246.370378   -.000003   .000200 |   .   v   .   |
5130 rP 28  4  1   245.768210   -.000008   .000200 |   .   v   .   |
5131 rP 29  4  1   245.169979    .000118   .000200 |   .   v   .   |
5132 rP 30  4  1   244.575707    .000240   .000300 |   .   v   .   |
5133 rP 31  4  1   243.985034   -.000148   .000200 |   .   v   .   |
5134 rP 32  4  1   243.399331    .000198   .000500 |   .   v   .   |
5135 rP 33  4  1   242.817151   -.000278   .000200 |   .  x.   .   |
5136 rP 34  4  1   242.239997   -.000159   .000200 |   .   v   .   |
5137 rP 35  4  1   241.667150   -.000229   .000200 |   .   x   .   |
5138 rP 36  4  1   241.098944   -.000193   .000200 |   .   v   .   |
5139 rP 37  4  1   240.535341   -.000110   .000300 |   .   v   .   |
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5140 rP 38  4  1   239.976217   -.000104   .000500 |   .   v   .   |
5141 rP 39  4  1   239.421195   -.000536   .000200 |   .   *.  .   |
5142 rP 40  4  1   238.871288   -.000364   .000200 |   .   x.  .   |
5143 rR  4  4  1   267.073689    .000162   .000200 |   .   v   .   |
5144 rR  5  4  1   267.762556    .000131   .000200 |   .   v   .   |
5145 rR  6  4  1   268.453998    .000102   .000200 |   .   v   .   |
5146 rR  7  4  1   269.148037    .000123   .000200 |   .   v   .   |
5147 rR  8  4  1   269.844589    .000139   .000200 |   .   v   .   |
5148 rR  9  4  1   270.543635    .000163   .000200 |   .   v   .   |
5149 rR 10  4  1   271.245114    .000167   .000200 |   .   v   .   |
5150 rR 11  4  1   271.949023    .000180   .000200 |   .   v   .   |
5151 rR 12  4  1   272.655365    .000235   .000200 |   .   x   .   |
5152 rR 13  4  1   273.363657   -.000128   .000300 |   .   v   .   |
5153 rR 14  4  1   274.074905    .000112   .000200 |   .   v   .   |
5154 rR 15  4  1   274.788440    .000290   .000200 |   .   .x  .   |
5155 rR 16  4  1   275.504003    .000137   .000200 |   .   v   .   |
5156 rR 17  4  1   276.222088    .000120   .000200 |   .   v   .   |
5157 rR 18  4  1   276.942141   -.000360   .001000 |   .   v.  .   |
5158 rR 19  4  1   277.665834    .000303   .000200 |   .   .x  .   |
5159 rR 20  4  1   278.391336    .000195   .000200 |   .   v   .   |
5160 rR 21  4  1   279.119585    .000149   .000200 |   .   v   .   |
5161 rR 22  4  1   279.850601    .000065   .000200 |   .   v   .   |
5162 rR 23  4  1   280.584718    .000143   .000200 |   .   v   .   |
5163 rR 24  4  1   281.321705    .000004   .000200 |   .   v   .   |
5164 rR 25  4  1   282.062200    .000133   .000200 |   .   v   .   |
5165 rR 26  4  1   282.805865    .000035   .000200 |   .   v   .   |
5166 rR 27  4  1   283.553153    .000008   .000200 |   .   v   .   |
5167 rR 28  4  1   284.304190    .000031   .000200 |   .   v   .   |
5168 rR 29  4  1   285.058912   -.000097   .000200 |   .   v   .   |
5169 rR 30  4  1   285.817789   -.000027   .000200 |   .   v   .   |
5170 rR 31  4  1   286.580531   -.000149   .000200 |   .   v   .   |
5171 rR 32  4  1   287.347378   -.000304   .000200 |   .   x.  .   |
5172 rR 33  4  1   288.118689   -.000191   .000200 |   .   v   .   |
5173 rR 34  4  1   288.893997   -.000312   .000200 |   .   x.  .   |
5174 rR 35  4  1   289.673616   -.000366   .000200 |   .   x.  .   |
5175 rR 36  4  1   290.457396   -.000499   .000200 |   .   *.  .   |
5176 rR 37  4  1   291.245611   -.000414   .000200 |   .   *.  .   |
5177 rR 38  4  1   292.037937   -.000399   .000200 |   .   x.  .   |
5178 rR 39  4  1   292.834279   -.000505   .000200 |   .   *.  .   |
5179 rR 40  4  1   293.634873   -.000439   .000200 |   .   *.  .   |
5180 rR 41  4  1   294.439419   -.000443   .000200 |   .   *.  .   |
5181 rR 42  4  1   295.247890   -.000482   .000200 |   .   *.  .   |
5182 rR 43  4  1   296.060281   -.000494   .000200 |   .   *.  .   |
5183 rR 44  4  1   296.876624   -.000386   .000200 |   .   x.  .   |
5184 rR 45  4  1   297.696601   -.000409   .000200 |   .   *.  .   |
5185 rR 46  4  1   298.520293   -.000423   .000200 |   .   *.  .   |
5186 rR 47  4  1   299.347639   -.000427   .000200 |   .   *.  .   |
5187 rR 48  4  1   300.178672   -.000331   .000200 |   .   x.  .   |
5188 rR 49  4  1   301.013130   -.000342   .000200 |   .   x.  .   |
5189 rR 50  4  1   301.851348   -.000072   .000200 |   .   v   .   |
5190 rR 51  4  1   302.692756   -.000042   .000200 |   .   v   .   |
5191 rR 52  4  1   303.537405   -.000152   .000200 |   .   v   .   |
5192 rR 53  4  1   304.385525   -.000126   .000200 |   .   v   .   |
5193 rP  7  5  1   259.077845    .001825   .002000 |   .   .   v.  |
5194 rP  8  5  1   258.419938   -.001260   .002000 |   . v .   .   |
5195 rP  9  5  1   257.769027    .000111   .000200 |   .   v   .   |
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5196 rP 10  5  1    257.119347     .000195    .000200 |   .   v   .   |
5197 rP 11  5  1    256.472145     .000260    .000200 |   .   .x  .   |
5198 rP 12  5  1    255.827078    -.000015    .000200 |   .   v   .   |
5199 rP 13  5  1    255.184803     .000046    .000200 |   .   v   .   |
5200 rP 14  5  1    254.546768     .001906    .002000 |   .   .   v.  |
5201 rP 17  5  1    252.638981    -.000777    .001000 |   . v .   .   |
5202 rP 18  5  1    252.010791     .001188    .001000 |   .   . x .   |
5203 rP 19  5  1    251.382184     .000259    .000200 |   .   .x  .   |
5204 rP 20  5  1    250.756889     .000124    .000200 |   .   v   .   |
5205 rP 21  5  1    250.134335     .000155    .000200 |   .   v   .   |
5206 rP 22  5  1    249.514300     .000061    .000200 |   .   v   .   |
5207 rP 23  5  1    248.896995    -.000033    .000200 |   .   v   .   |
5208 rP 24  5  1    248.282912     .000267    .000200 |   .   .x  .   |
5209 rP 25  5  1    247.671340     .000138    .000200 |   .   v   .   |
5210 rP 26  5  1    247.063203     .000383    .000200 |   .   .x  .   |
5211 rP 27  5  1    246.457847     .000216    .000200 |   .   x   .   |
5212 rQ  6  5  1    263.787174    -.000479    .001000 |   .  v.   .   |
5213 rQ  7  5  1    263.808553     .002554    .003000 |   .   .   v   |
5214 rQ  8  5  1    263.826541    -.000373    .001000 |   .  v.   .   |
5215 rQ  9  5  1    263.849913    -.000467    .001000 |   .  v.   .   |
5216 rQ 10  5  1    263.876133    -.000242    .000500 |   .   v   .   |
5217 rQ 11  5  1    263.904917     .000038    .000200 |   .   v   .   |
5218 rQ 12  5  1    263.936880     .001007    .001000 |   .   . x .   |
5219 rQ 13  5  1    263.971596     .002257    .003000 |   .   .   v   |
5220 rQ 14  5  1    264.007654     .002391    .003000 |   .   .   v   |
5221 rQ 15  5  1    264.043699     .000062    .000200 |   .   v   .   |
5222 rQ 16  5  1    264.084754     .000297    .000200 |   .   .x  .   |
5223 rQ 17  5  1    264.127761     .000028    .000200 |   .   v   .   |
5224 rQ 18  5  1    264.173899     .000418    .000500 |   .   .v  .   |
5225 rQ 19  5  1    264.222011     .000279    .000200 |   .   .x  .   |
5226 rQ 20  5  1    264.272494    -.000035    .000300 |   .   v   .   |
5227 rQ 21  5  1    264.326059     .000129    .000200 |   .   v   .   |
5228 rQ 22  5  1    264.383605     .001599    .002000 |   .   . v .   |
5229 rQ 23  5  1    264.440847     .000002    .000200 |   .   v   .   |
5230 rQ 24  5  1    264.502199    -.000346    .001000 |   .  v.   .   |
5231 rQ 25  5  1    264.567215    -.000002    .000200 |   .   v   .   |
5232 rQ 26  5  1    264.635029     .000047    .000200 |   .   v   .   |
5233 rQ 27  5  1    264.705831    -.000138    .000500 |   .   v   .   |
5234 rQ 28  5  1    264.780218    -.000091    .000300 |   .   v   .   |
5235 rQ 29  5  1    264.858481     .000344    .000200 |   .   .x  .   |
5236 rQ 30  5  1    264.939912     .000327    .000200 |   .   .x  .   |
5237 rQ 31  5  1    265.024679    -.000100    .000200 |   .   v   .   |
5238 rQ 32  5  1    265.113846     .000009    .000200 |   .   v   .   |
5239 rQ 33  5  1    265.206598    -.000267    .000300 |   .  v.   .   |
5240 rQ 34  5  1    265.303794    -.000161    .000200 |   .   v   .   |
5241 rQ 35  5  1    265.404982    -.000203    .000200 |   .   x   .   |
5242 rQ 36  5  1    265.510147    -.000468    .000300 |   .  x.   .   |
5243 rQ 37  5  1    265.620305     .000019    .000300 |   .   v   .   |
5244 rQ 38  5  1    265.734130    -.000096    .000300 |   .   v   .   |
5245 rQ 39  5  1    265.852173    -.000272    .000200 |   .  x.   .   |
5246 rQ 40  5  1    265.974895    -.000044    .000500 |   .   v   .   |
5247 rQ 41  5  1    266.100967    -.000725    .000500 |   .  x.   .   |
5248 rQ 42  5  1    266.232262    -.000414    .000200 |   .  *.   .   |
5249 rQ 43  5  1    266.367485    -.000371    .000200 |   .  x.   .   |
5250 rQ 44  5  1    266.506789    -.000401    .000500 |   .  v.   .   |
5251 rR  5  5  1    267.826344     .000200    .000200 |   .   v   .   |
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5252	rR	6	5	1	268.517772	.000140	.000200	. v .
5253	rR	7	5	1	269.211908	.000193	.000200	. v .
5254	rR	8	5	1	269.908556	.000178	.000200	. v .
5255	rR	9	5	1	270.607869	.000267	.000200	. .x .
5256	rR	10	5	1	271.309571	.000201	.000200	. x .
5257	rR	11	5	1	272.013854	.000194	.000200	. v .
5258	rR	12	5	1	272.721333	.000877	.001000	. . v .
5259	rR	13	5	1	273.429978	.000237	.000200	. x .
5260	rR	14	5	1	274.141781	.000279	.000200	. .x .
5261	rR	15	5	1	274.855881	.000149	.000200	. v .
5262	rR	16	5	1	275.572740	.000308	.000200	. .x .
5263	rR	17	5	1	276.291805	.000194	.000200	. v .
5264	rR	18	5	1	277.013498	.000210	.000200	. x .
5265	rR	19	5	1	277.737681	.000186	.000200	. v .
5266	rR	20	5	1	278.465665	.001386	.002000	. . v .
5267	rR	21	5	1	279.193839	.000142	.000200	. v .
5268	rR	22	5	1	279.925916	.000093	.000200	. v .
5269	rR	23	5	1	280.661019	.000274	.000200	. .x .
5270	rR	24	5	1	281.397980	-.000580	.001000	. v. .
5271	rR	25	5	1	282.137389	-.001990	.003000	.v . .
5272	rR	26	5	1	282.883668	.000348	.000200	. .x .
5273	rR	27	5	1	283.630612	.000106	.000200	. v .
5274	rR	28	5	1	284.381213	.000151	.000200	. v .
5275	rR	29	5	1	285.134923	-.000190	.000500	. v .
5276	rR	30	5	1	285.892796	.000018	.000200	. v .
5277	rR	31	5	1	286.654120	-.000051	.000200	. v .
5278	rR	32	5	1	287.419387	-.000004	.000200	. v .
5279	rR	33	5	1	288.188511	-.000016	.000200	. v .
5280	rR	34	5	1	288.961399	-.000253	.000200	. x. .
5281	rR	35	5	1	289.738570	-.000251	.000200	. x. .
5282	rR	36	5	1	290.519821	-.000253	.000200	. x. .
5283	rR	37	5	1	291.305459	.000025	.000500	. v .
5284	rR	38	5	1	292.094536	-.000371	.000200	. x. .
5285	rR	39	5	1	292.888074	-.000413	.000200	. *. .
5286	rR	40	5	1	293.685470	-.000684	.000500	. x. .
5287	rR	41	5	1	294.487695	-.000183	.000200	. v .
5288	rR	42	5	1	295.293279	-.000341	.000200	. x. .
5289	rP	10	6	1	257.184840	-.000057	.000200	. v .
5290	rP	11	6	1	256.537495	-.000601	.001000	. v. .
5291	rP	12	6	1	255.894107	.000259	.000200	. .x .
5292	rP	13	6	1	255.252351	.000210	.000200	. x .
5293	rP	14	6	1	254.611560	-.001407	.002000	. v . .
5294	rP	16	6	1	253.342525	.000334	.000200	. .x .
5295	rP	17	6	1	252.711223	.000633	.000500	. .x .
5296	rP	18	6	1	252.081453	-.000070	.000300	. v .
5297	rP	19	6	1	251.455085	.000077	.000200	. v .
5298	rP	20	6	1	250.831381	.000312	.000200	. .x .
5299	rP	21	6	1	250.210137	.000396	.000300	. .x .
5300	rP	22	6	1	249.591464	.000394	.000300	. .x .
5301	rP	23	6	1	248.975408	.000295	.000200	. .x .
5302	rP	24	6	1	248.362138	.000201	.000200	. x .
5303	rP	25	6	1	247.751782	.000160	.000200	. v .
5304	rP	26	6	1	247.146197	.001941	.002000	. . v.
5305	rP	27	6	1	246.540739	.000801	.001000	. . v .
5306	rP	28	6	1	245.939047	.000273	.000200	. .x .
5307	rP	29	6	1	245.340253	-.000624	.001000	. v. .

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5308	rP	30	6	1	244.746666	.000302	.000200	|	.	.x	. |
5309	rP	31	6	1	244.155524	.000170	.000200	|	.	v	. |
5310	rP	32	6	1	243.566895	-.001072	.002000	|	.	v .	. |
5311	rP	33	6	1	242.984237	-.000081	.000200	|	.	v	. |
5312	rP	34	6	1	242.404785	.000266	.000300	|	.	.v	. |
5313	rP	35	6	1	241.828741	.000069	.000200	|	.	v	. |
5314	rP	36	6	1	241.257036	.000162	.000200	|	.	v	. |
5315	rP	37	6	1	240.689260	.000055	.000200	|	.	v	. |
5316	rP	38	6	1	240.125713	-.000025	.000200	|	.	v	. |
5317	rR	6	6	1	268.580623	.000200	.000200	|	.	v	. |
5318	rR	7	6	1	269.274669	.000187	.000200	|	.	v	. |
5319	rR	8	6	1	269.971362	.000206	.000200	|	.	x	. |
5320	rR	9	6	1	270.670534	.000099	.000200	|	.	v	. |
5321	rR	10	6	1	271.372533	.000224	.000200	|	.	x	. |
5322	rR	11	6	1	272.076949	.000183	.000200	|	.	v	. |
5323	rR	12	6	1	272.783965	.000170	.000200	|	.	v	. |
5324	rR	13	6	1	273.493598	.000210	.000200	|	.	x	. |
5325	rR	14	6	1	274.205717	.000181	.000200	|	.	v	. |
5326	rR	15	6	1	274.920423	.000189	.000200	|	.	v	. |
5327	rR	16	6	1	275.637740	.000258	.000200	|	.	.x	. |
5328	rR	17	6	1	276.357477	.000194	.000200	|	.	v	. |
5329	rR	18	6	1	277.079809	.000160	.000200	|	.	v	. |
5330	rR	19	6	1	277.804900	.000302	.000200	|	.	.x	. |
5331	rR	20	6	1	278.532141	-.000016	.000200	|	.	v	. |
5332	rR	21	6	1	279.262633	.000272	.000200	|	.	.x	. |
5333	rR	22	6	1	279.995088	-.000171	.000500	|	.	v	. |
5334	rR	23	6	1	280.731052	.000146	.000200	|	.	v	. |
5335	rR	24	6	1	281.469808	.000439	.000500	|	.	.v	. |
5336	rR	25	6	1	282.210924	.000197	.000200	|	.	v	. |
5337	rR	26	6	1	282.955131	.000068	.000200	|	.	v	. |
5338	rR	27	6	1	283.702428	-.000044	.000200	|	.	v	. |
5339	rR	28	6	1	284.453464	.000413	.000500	|	.	.v	. |
5340	rR	29	6	1	285.206937	.000034	.000200	|	.	v	. |
5341	rR	30	6	1	285.964033	-.000097	.000200	|	.	v	. |
5342	rR	31	6	1	286.723780	-.001055	.002000	|	.	v .	. |
5343	rR	32	6	1	287.489142	.000027	.000200	|	.	v	. |
5344	rR	33	6	1	288.257061	-.000002	.000200	|	.	v	. |
5345	rR	34	6	1	289.029770	.001009	.002000	|	.	. v	. |
5346	rR	35	6	1	289.804451	.000169	.000300	|	.	v	. |
5347	rR	36	6	1	290.583581	-.000108	.000200	|	.	v	. |
5348	rR	37	6	1	291.366791	-.000239	.000200	|	.	x	. |
5349	rR	38	6	1	292.154053	-.000288	.000200	|	.	x.	. |
5350	rR	39	6	1	292.945585	-.000061	.000200	|	.	v	. |
5351	rR	40	6	1	293.740592	-.000362	.000500	|	.	v.	. |
5352	rR	41	6	1	294.539970	-.000294	.000200	|	.	x.	. |
5353	rR	42	6	1	295.342787	-.000778	.000500	|	.	x .	. |
5354	rR	43	6	1	296.150639	-.000197	.000200	|	.	v	. |
5355	rR	44	6	1	296.961607	-.000440	.000200	|	.	*.	. |
5356	rP	9	7	1	257.900935	-.000206	.000500	|	.	v	. |
5357	rP	10	7	1	257.251705	-.000412	.001000	|	.	v.	. |
5358	rP	11	7	1	256.606423	.000721	.001000	|	.	.v	. |
5359	rP	12	7	1	255.961374	-.000515	.001000	|	.	v.	. |
5360	rP	13	7	1	255.320450	-.000223	.000500	|	.	v	. |
5361	rP	14	7	1	254.682479	.000429	.000500	|	.	.v	. |
5362	rP	15	7	1	254.046299	.000283	.000200	|	.	.x	. |
5363	rP	16	7	1	253.412802	.000231	.000200	|	.	x	. |

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5364 rP 17  7  1   252.781774    .000055   .000200 |   .   v   .   |
5365 rP 18  7  1   252.153101   -.000364   .000500 |   .  v.   .   |
5366 rP 19  7  1   251.527653   -.000171   .000200 |   .   v   .   |
5367 rP 20  7  1   250.905055    .000244   .000200 |   .   x   .   |
5368 rP 21  7  1   250.285022    .000569   .000500 |   .  .x   .   |
5369 rP 22  7  1   249.667352    .000571   .000500 |   .  .x   .   |
5370 rP 23  7  1   249.050337   -.001498   .002000 |   . v .   .   |
5371 rP 24  7  1   248.440294    .000630   .001000 |   .  .v   .   |
5372 rP 25  7  1   247.830556    .000229   .000200 |   .   x   .   |
5373 rP 26  7  1   247.224065    .000177   .000200 |   .   v   .   |
5374 rP 27  7  1   246.620534    .000112   .000200 |   .   v   .   |
5375 rP 28  7  1   246.019956   -.000055   .000200 |   .   v   .   |
5376 rP 29  7  1   245.422691   -.000054   .000200 |   .   v   .   |
5377 rP 30  7  1   244.828930    .000212   .000200 |   .   x   .   |
5378 rP 31  7  1   244.237561   -.000468   .000500 |   .  v.   .   |
5379 rP 32  7  1   243.650885    .000105   .000200 |   .   v   .   |
5380 rP 33  7  1   243.067041   -.000032   .000200 |   .   v   .   |
5381 rP 34  7  1   242.487361    .000352   .000500 |   .  .v   .   |
5382 rP 35  7  1   241.910712    .000024   .000200 |   .   v   .   |
5383 rP 36  7  1   241.337699   -.000504   .000500 |   .  x.   .   |
5384 rP 37  7  1   240.769714    .000071   .000200 |   .   v   .   |
5385 rP 38  7  1   240.205104    .000018   .000200 |   .   v   .   |
5386 rR  7  7  1   269.338476    .000103   .000200 |   .   v   .   |
5387 rR  8  7  1   270.035090    .000109   .000200 |   .   v   .   |
5388 rR  9  7  1   270.734310    .000090   .000200 |   .   v   .   |
5389 rR 10  7  1   271.436183    .000097   .000200 |   .   v   .   |
5390 rR 11  7  1   272.140686    .000114   .000200 |   .   v   .   |
5391 rR 12  7  1   272.847801    .000129   .000200 |   .   v   .   |
5392 rR 13  7  1   273.557437    .000055   .000200 |   .   v   .   |
5393 rR 14  7  1   274.269745    .000047   .000200 |   .   v   .   |
5394 rR 15  7  1   274.984694    .000077   .000200 |   .   v   .   |
5395 rR 16  7  1   275.702262    .000122   .000200 |   .   v   .   |
5396 rR 17  7  1   276.422343    .000072   .000200 |   .   v   .   |
5397 rR 18  7  1   277.144879   -.000137   .000200 |   .   v   .   |
5398 rR 19  7  1   277.870450    .000061   .000200 |   .   v   .   |
5399 rR 20  7  1   278.598447    .000040   .000200 |   .   v   .   |
5400 rR 21  7  1   279.329213    .000118   .000200 |   .   v   .   |
5401 rR 22  7  1   280.062393   -.000093   .000200 |   .   v   .   |
5402 rR 23  7  1   280.798716    .000099   .000200 |   .   v   .   |
5403 rR 24  7  1   281.537629    .000093   .000200 |   .   v   .   |
5404 rR 25  7  1   282.279210   -.000089   .000200 |   .   v   .   |
5405 rR 26  7  1   283.024005    .000037   .000200 |   .   v   .   |
5406 rR 27  7  1   283.771527   -.000086   .000200 |   .   v   .   |
5407 rR 28  7  1   284.522251   -.000059   .000200 |   .   v   .   |
5408 rR 29  7  1   285.276350    .000212   .000300 |   .   v   .   |
5409 rR 30  7  1   286.032939   -.000245   .000300 |   .   v   .   |
5410 rR 31  7  1   286.793533    .000001   .000200 |   .   v   .   |
5411 rR 32  7  1   287.557526    .000257   .000300 |   .  .v   .   |
5412 rR 33  7  1   288.324416   -.000063   .000200 |   .   v   .   |
5413 rR 34  7  1   289.095194   -.000050   .000200 |   .   v   .   |
5414 rR 35  7  1   289.870417    .000778   .001000 |   .  . v  .   |
5415 rR 36  7  1   290.647583   -.000149   .000200 |   .   v   .   |
5416 rR 37  7  1   291.429410   -.000175   .000200 |   .   v   .   |
5417 rR 38  7  1   292.215020   -.000227   .000200 |   .   x   .   |
5418 rR 39  7  1   293.004461   -.000299   .000200 |   .  x.   .   |
5419 rR 40  7  1   293.797824   -.000331   .000200 |   .  x.   .   |
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5420 rR 41  7  1   294.596303    .000852   .002000 |   .   . v  .   |
5421 rR 42  7  1   295.396274   -.000385   .000200 |   .  x.    .   |
5422 rR 43  7  1   296.201455   -.000325   .000200 |   .  x.    .   |
5423 rR 44  7  1   297.010424   -.000381   .000200 |   .  x.    .   |
5424 rR 45  7  1   297.823310   -.000407   .000200 |   .  *.    .   |
5425 rR 46  7  1   298.640081   -.000412   .000200 |   .  *.    .   |
5426 rR 47  7  1   299.460565   -.000539   .000200 |   .  *.    .   |
5427 rR 48  7  1   300.284918   -.000598   .000200 |   .  *.    .   |
5428 rR 49  7  1   301.113154   -.000536   .000200 |   .  *.    .   |
5429 rR 50  7  1   301.945013   -.000572   .000200 |   .  *.    .   |
5430 rR 51  7  1   302.780728   -.000429   .000200 |   .  *.    .   |
5431 rR 52  7  1   303.619867   -.000494   .000200 |   .  *.    .   |
5432 rP 39  8  1   239.735323   -.000398   .000200 |   .  x.    .   |
5433 rP 41  8  1   238.624318   -.000054   .000200 |   .   v    .   |
5434 rP 42  8  1   238.071724   -.003079   .003000 |  x.   .    .   |
5435 rP 43  8  1   237.528931   -.000434   .000200 |   .  *.    .   |
5436 rP 44  8  1   236.987679   -.000417   .000200 |   .  *.    .   |
5437 rP 45  8  1   236.450326   -.000695   .000500 |   .  x.    .   |
5438 rP 46  8  1   235.918244    .000087   .000500 |   .   v    .   |
5439 rP 47  8  1   235.388303   -.001212   .001000 |   . x .    .   |
5440 rP 48  8  1   234.866000    .000906   .002000 |   .   . v  .   |
5441 rP 49  8  1   234.344410   -.000480   .000200 |   .  *.    .   |
5442 rP 50  8  1   233.828550   -.000340   .000200 |   .  x.    .   |
5443 rP 51  8  1   233.316313   -.000764   .000500 |   . x .    .   |
5444 rP 52  8  1   232.807758   -.001669   .002000 |  . v  .    .   |
5445 rP 53  8  1   232.305517   -.000397   .000200 |   .  x.    .   |
5446 rP 54  8  1   231.807491    .000982   .002000 |   .   . v  .   |
5447 rP 55  8  1   231.311075   -.000103   .000200 |   .   v    .   |
5448 rP 56  8  1   230.819143   -.000746   .000500 |   .  x.    .   |
5449 rP 57  8  1   230.331780   -.000824   .001000 |   . v .    .   |
5450 rP 58  8  1   229.849808    .000519   .001000 |   .  .v    .   |
5451 rP 59  8  1   229.369334   -.000571   .000500 |   .  x.    .   |
5452 rP 60  8  1   228.894866    .000450   .000200 |   .  .*    .   |
5453 rP 61  8  1   228.423790    .001006   .001000 |   .  . x   .   |
5454 rP 62  8  1   227.955176    .000203   .000200 |   .   x    .   |
5455 rP 63  8  1   227.491553    .000607   .000200 |   .  .*    .   |
5456 rR  8  8  1   270.117303    .000013   .000200 |   .   v    .   |
5457 rR  9  8  1   270.816284   -.000060   .000200 |   .   v    .   |
5458 rR 10  8  1   271.518048    .000012   .000200 |   .   v    .   |
5459 rR 11  8  1   272.222451    .000088   .000200 |   .   v    .   |
5460 rR 12  8  1   272.929499    .000176   .000200 |   .   v    .   |
5461 rR 13  8  1   273.639009    .000096   .000200 |   .   v    .   |
5462 rR 14  8  1   274.351364    .000233   .000200 |   .   x    .   |
5463 rR 15  8  1   275.065904   -.000074   .000200 |   .   v    .   |
5464 rR 16  8  1   275.783294   -.000162   .000200 |   .   v    .   |
5465 rR 17  8  1   276.503406   -.000161   .000200 |   .   v    .   |
5466 rR 18  8  1   277.226130   -.000188   .000200 |   .   v    .   |
5467 rR 19  8  1   277.951566   -.000153   .000200 |   .   v    .   |
5468 rR 20  8  1   278.679907    .000124   .000200 |   .   v    .   |
5469 rR 21  8  1   279.410663    .000134   .000200 |   .   v    .   |
5470 rR 22  8  1   280.143674   -.000305   .000200 |   .  x.    .   |
5471 rR 23  8  1   280.880132   -.000030   .000200 |   .   v    .   |
5472 rR 24  8  1   281.618620   -.000493   .000500 |   .  v.    .   |
5473 rR 25  8  1   282.360448   -.000425   .000500 |   .  v.    .   |
5474 rR 26  8  1   283.104890   -.000599   .000500 |   .  x.    .   |
5475 rR 27  8  1   283.853165    .000151   .000200 |   .   v    .   |
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5476 rR 28  8  1    284.603326    -.000182   .000200 |   .    v    .   |
5477 rR 29  8  1    285.357083     .000050   .000200 |   .    v    .   |
5478 rR 30  8  1    286.113573    -.000085   .000200 |   .    v    .   |
5479 rR 32  8  1    287.636810     .000310   .000500 |   .    .v   .   |
5480 rR 33  8  1    288.401476    -.001388   .002000 |   . v  .    .   |
5481 rR 34  8  1    289.172437    -.000186   .000500 |   .    v    .   |
5482 rR 35  8  1    289.946019     .000171   .000200 |   .    v    .   |
5483 rR 36  8  1    290.725593     .002984   .030000 |   .    .    .v  |
5484 rR 37  8  1    291.501778    -.001191   .002000 |   . v  .    .   |
5485 rR 38  8  1    292.287008     .000021   .000200 |   .    v    .   |
5486 rR 39  8  1    293.074215    -.000497   .001000 |   .    v.   .   |
5487 rR 40  8  1    293.865903    -.000287   .000500 |   .    v.   .   |
5488 rR 41  8  1    294.662321     .000867   .001000 |   .    . v  .   |
5489 rR 42  8  1    295.460479    -.000053   .000200 |   .    v    .   |
5490 rR 43  8  1    296.263048    -.000393   .000200 |   .    x.   .   |
5491 rR 44  8  1    297.069850    -.000341   .000200 |   .    x.   .   |
5492 rR 45  8  1    297.880486    -.000296   .000200 |   .    x.   .   |
5493 rR 46  8  1    298.694991    -.000218   .000200 |   .    x    .   |
5494 rR 47  8  1    299.514968     .001509   .002000 |   .    .  v .   |
5495 rR 48  8  1    300.335056    -.000455   .000200 |   .    *.   .   |
5496 rR 49  8  1    301.161040    -.000302   .000200 |   .    x.   .   |
5497 rR 50  8  1    301.990778    -.000142   .000200 |   .    v    .   |
5498 rR 51  8  1    302.824048    -.000166   .000200 |   .    v    .   |
5499 rR 52  8  1    303.661054    -.000131   .000200 |   .    v    .   |
5500 rR 53  8  1    304.501256    -.000539   .000200 |   .    *.   .   |
5501 rR 54  8  1    305.345605    -.000398   .000200 |   .    x.   .   |
5502 rR 55  8  1    306.193495    -.000271   .000200 |   .    x.   .   |
5503 rR 56  8  1    307.044826    -.000215   .000200 |   .    x    .   |
5504 rR 57  8  1    307.899578    -.000206   .000200 |   .    x    .   |
5505 rR 58  8  1    308.757868    -.000083   .000200 |   .    v    .   |
5506 rR 59  8  1    309.619621     .000123   .000200 |   .    v    .   |
5507 rR 60  8  1    310.484603     .000223   .000200 |   .    x    .   |
5508 rR 61  8  1    311.353527     .000972   .000500 |   .    . x  .   |
5509 rR 62  8  1    312.224882     .000901   .000200 |   .    . *  .   |
5510 rR 63  8  1    313.100082     .001468   .000500 |   .    .  *.   |
5511 rR 64  8  1    313.977592     .001179   .000200 |   .    . * .   |
5512 rR  9  9  1    270.783043    -.000165   .000200 |   .    v    .   |
5513 rR 10  9  1    271.484516    -.000265   .000200 |   .    x.   .   |
5514 rR 11  9  1    272.188799    -.000214   .000200 |   .    x    .   |
5515 rR 12  9  1    272.895770    -.000133   .000500 |   .    v    .   |
5516 rR 13  9  1    273.604781    -.000672   .000200 |   .    *.   .   |
5517 rR 14  9  1    274.317079    -.000587   .000200 |   .    *.   .   |
5518 rR 15  9  1    275.032356    -.000187   .000500 |   .    v    .   |
5519 rR 16  9  1    275.749588    -.000502   .000200 |   .    *.   .   |
5520 rR 17  9  1    276.470173    -.000138   .000500 |   .    v    .   |
5521 rR 18  9  1    277.191903    -.001313   .001000 |   . x  .    .   |
5522 rR 19  9  1    277.918697    -.000116   .001000 |   .    v    .   |
5523 rR 20  9  1    278.645520    -.001595   .002000 |   . v  .    .   |
5524 rR 21  9  1    279.377245    -.000895   .001000 |   . v  .    .   |
5525 rR 22  9  1    280.111561    -.000346   .000200 |   .    x.   .   |
5526 rR 23  9  1    280.848596     .000156   .000200 |   .    v    .   |
5527 rR 24  9  1    281.588485     .000718   .001000 |   .    .v   .   |
5528 rR 25  9  1    282.329761    -.000161   .000200 |   .    v    .   |
5529 rR 26  9  1    283.075268     .000326   .000200 |   .    .x   .   |
5530 rR 27  9  1    283.823092     .000221   .000200 |   .    x    .   |
5531 rR 28  9  1    284.572974    -.000782   .001000 |   . v  .    .   |
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5532 rR 30  9  1   286.084741    .000136   .000200 |   .   v   .   |
5533 rR 31  9  1   286.844666   -.000016   .000200 |   .   v   .   |
5534 rR 32  9  1   287.607845   -.000098   .000200 |   .   v   .   |
5535 rR 33  9  1   288.374622    .000173   .000200 |   .   v   .   |
5536 rR 34  9  1   289.144255   -.000008   .000200 |   .   v   .   |
5537 rR 35  9  1   289.920227    .002780   .003000 |   .   .   .v  |
5538 rR 36  9  1   290.694456    .000395   .000200 |   .   .x  .   |
5539 rR 37  9  1   291.474213    .000051   .000200 |   .   v   .   |
5540 rR 38  9  1   292.258145    .000344   .000200 |   .   .x  .   |
5541 rR 39  9  1   293.046301    .001275   .001000 |   .   . x .   |
5542 rR 40  9  1   293.835354   -.000524   .001000 |   . v.    .   |
5543 rR 41  9  1   294.630729    .000339   .000200 |   .   .x  .   |
5544 rR 42  9  1   295.428949    .000360   .000200 |   .   .x  .   |
5545 rR 43  9  1   296.230867    .000373   .000200 |   .   .x  .   |
5546 rR 44  9  1   297.036378    .000262   .000200 |   .   .x  .   |
5547 rR 45  9  1   297.846027    .000571   .000200 |   .   .*  .   |
5548 rR 46  9  1   298.658816    .000307   .000200 |   .   .x  .   |
5549 rR 48  9  1   300.296032    .000335   .000200 |   .   .x  .   |
5550 rR 49  9  1   301.119970    .000187   .000200 |   .   v   .   |
5551 rR 50  9  1   301.947788    .000302   .000200 |   .   .x  .   |
5552 rR 51  9  1   302.780711    .001946   .002000 |   .   .  v.   |
5553 rR 52  9  1   303.613025   -.000547   .001000 |   . v.    .   |
5554 rR 53  9  1   304.452174    .000323   .000200 |   .   .x  .   |
5555 rR 54  9  1   305.293509   -.000031   .000200 |   .   v   .   |
5556 rR 55  9  1   306.138573    .000004   .000200 |   .   v   .   |
5557 rR 56  9  1   306.986893    .000037   .000200 |   .   v   .   |
5558 rR 57  9  1   307.838375    .000066   .000200 |   .   v   .   |
5559 rR 58  9  1   308.692371   -.000446   .000500 |   . v.    .   |
5560 rR 59  9  1   309.550339    .000090   .000200 |   .   v   .   |
5561 rR 60  9  1   310.410452    .000010   .000200 |   .   v   .   |
5562 rR 61  9  1   311.273749    .000560   .001000 |   .   .v  .   |
5563 rR 62  9  1   312.137071   -.001140   .001000 |   . x .   .   |
5564 rR 63  9  1   313.005318    .000195   .000200 |   .   v   .   |
5565 rR 64  9  1   313.873553    .000190   .000200 |   .   v   .   |
5566 rR 65  9  1   314.742096    .000035   .000200 |   .   v   .   |
5567 rR 66  9  1   315.610154    .000367   .001000 |   .   .v  .   |
5568 rR 67  9  1   316.473571   -.000454   .000200 |   .   *.  .   |
5569 rR 68  9  1   317.329507   -.000480   .000200 |   .   *.  .   |
5570 rR 10 10  1   271.568389   -.000244   .000200 |   .   x   .   |
5571 rR 11 10  1   272.272851    .000026   .000200 |   .   v   .   |
5572 rR 12 10  1   272.979706    .000007   .000200 |   .   v   .   |
5573 rR 13 10  1   273.689080   -.000178   .000200 |   .   v   .   |
5574 rR 14 10  1   274.401319   -.000184   .000200 |   .   v   .   |
5575 rR 15 10  1   275.116607    .000169   .001000 |   .   v   .   |
5576 rR 16 10  1   275.833278   -.000791   .000500 |   . x .   .   |
5577 rR 17 10  1   276.552971   -.001430   .001000 |   . x .   .   |
5578 rR 18 10  1   277.276672   -.000769   .000500 |   . x .   .   |
5579 rR 19 10  1   278.002799   -.000399   .000200 |   .   x.  .   |
5580 rR 20 10  1   278.731207   -.000476   .000200 |   .   *.  .   |
5581 rR 21 10  1   279.462531   -.000379   .000200 |   .   x.  .   |
5582 rR 22 10  1   280.197232    .000336   .001000 |   .   .v  .   |
5583 rR 23 10  1   280.933496   -.000162   .000200 |   .   v   .   |
5584 rR 24 10  1   281.672674   -.000547   .000500 |   .   x.  .   |
5585 rR 25 10  1   282.415218   -.000392   .000200 |   .   x.  .   |
5586 rR 26 10  1   283.160678   -.000178   .000200 |   .   v   .   |
5587 rR 27 10  1   283.908213   -.000780   .001000 |   . v .   .   |
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5588 rR 28 10  1    284.660065     .000006    .000200 |   .   v   .   |
5589 rR 29 10  1    285.414219     .000124    .000200 |   .   v   .   |
5590 rR 30 10  1    286.171337     .000189    .000200 |   .   v   .   |
5591 rR 31 10  1    286.931545     .000280    .000200 |   .   .x  .   |
5592 rR 32 10  1    287.694756     .000258    .000200 |   .   .x  .   |
5593 rR 33 10  1    288.461341     .000439    .000200 |   .   .*  .   |
5594 rR 34 10  1    289.230950     .000420    .000200 |   .   .*  .   |
5595 rR 35 10  1    290.003985     .000545    .000200 |   .   .*  .   |
5596 rR 36 10  1    290.778868    -.000817    .002000 |   . v .   .   |
5597 rR 37 10  1    291.561650     .002328    .002000 |   .   .   x   |
5598 rR 11 11  1    272.327755    -.000074    .000200 |   .   v   .   |
5599 rR 12 11  1    273.034460    -.000055    .000200 |   .   v   .   |
5600 rR 13 11  1    273.744032     .000138    .000200 |   .   v   .   |
5601 rR 14 11  1    274.455585    -.000385    .001000 |   .  v.   .   |
5602 rR 15 11  1    275.171381     .000635    .001000 |   .  .v   .   |
5603 rR 16 11  1    275.887565    -.000662    .001000 |   .  v.   .   |
5604 rR 17 11  1    276.608513     .000095    .000200 |   .   v   .   |
5605 rR 18 11  1    277.330794    -.000531    .001000 |   .  v.   .   |
5606 rR 19 11  1    278.057786     .000828    .001000 |   .   . v .   |
5607 rR 20 11  1    278.785074    -.000250    .000200 |   .   x   .   |
5608 rR 22 11  1    280.250489     .000183    .000500 |   .   v   .   |
5609 rR 23 11  1    280.986985     .000034    .000200 |   .   v   .   |
5610 rR 24 11  1    281.726332    -.000056    .000200 |   .   v   .   |
5611 rR 25 11  1    282.468592    -.000047    .001000 |   .   v   .   |
5612 rR 26 11  1    283.213163    -.000564    .002000 |   .  v.   .   |
5613 rR 27 11  1    283.961590    -.000090    .000200 |   .   v   .   |
5614 rR 28 11  1    284.712583     .000054    .000200 |   .   v   .   |
5615 rR 29 11  1    285.466401     .000094    .000200 |   .   v   .   |
5616 rR 30 11  1    286.223199     .000149    .000200 |   .   v   .   |
5617 rR 31 11  1    286.983366     .000567    .001000 |   .  .v   .   |
5618 rR 32 11  1    287.746424     .000828    .002000 |   . .v .  .   |
5619 rR 33 11  1    288.511368    -.000118    .001000 |   .   v   .   |
5620 pP  1  1 -1    262.653363     .001068    .001000 |   . .x .  .   |
5621 pP  2  1 -1    261.980035    -.001646    .002000 |   .v .  .  .  |
5622 pP  3  1 -1    261.313797     .000082    .000200 |   .   v   .   |
5623 pP  4  1 -1    260.648479     .000012    .000200 |   .   v   .   |
5624 pP  5  1 -1    259.986088     .000054    .000200 |   .   v   .   |
5625 pP  6  1 -1    259.326564     .000029    .000200 |   .   v   .   |
5626 pP  7  1 -1    258.670119     .000004    .000200 |   .   v   .   |
5627 pP  8  1 -1    258.016976     .000037    .000200 |   .   v   .   |
5628 pP  9  1 -1    257.367160    -.000027    .000200 |   .   v   .   |
5629 pP 10  1 -1    256.721196     .000141    .000200 |   .   v   .   |
5630 pP 11  1 -1    256.079023     .000278    .000200 |   .   .x  .   |
5631 pP 12  1 -1    255.440367    -.000091    .000200 |   .   v   .   |
5632 pP 13  1 -1    254.806594     .000205    .000200 |   .   x   .   |
5633 pP 14  1 -1    254.176663    -.000055    .000200 |   .   v   .   |
5634 pP 15  1 -1    253.551586    -.000016    .000200 |   .   v   .   |
5635 pP 16  1 -1    252.931182     .000010    .000200 |   .   v   .   |
5636 pP 17  1 -1    252.316010     .000484    .001000 |   .   .v  .   |
5637 pP 18  1 -1    251.704777     .000052    .000200 |   .   v   .   |
5638 pP  2  2 -1    261.908548     .000302    .000200 |   .   .x  .   |
5639 pP  3  2 -1    261.240432     .000133    .000200 |   .   v   .   |
5640 pP  4  2 -1    260.575185     .000161    .000200 |   .   v   .   |
5641 pP  5  2 -1    259.912672     .000171    .000200 |   .   v   .   |
5642 pP  6  2 -1    259.252972     .000139    .000200 |   .   v   .   |
5643 pP  7  2 -1    258.596273     .000129    .000200 |   .   v   .   |
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5644 pP  8  2 -1   257.942702    .000125   .000200 |   .   v   .   |
5645 pP  9  2 -1   257.292417    .000122   .000200 |   .   v   .   |
5646 pP 10  2 -1   256.645598    .000123   .000200 |   .   v   .   |
5647 pP 11  2 -1   256.002235   -.000075   .000200 |   .   v   .   |
5648 pP 12  2 -1   255.363022    .000025   .000200 |   .   v   .   |
5649 pP 13  2 -1   254.727776    .000035   .000200 |   .   v   .   |
5650 pP 14  2 -1   254.096883    .000143   .000200 |   .   v   .   |
5651 pP 15  2 -1   253.470230    .000046   .000200 |   .   v   .   |
5652 pP 16  2 -1   252.848235   -.000011   .000200 |   .   v   .   |
5653 pP 17  2 -1   252.231029   -.000044   .000200 |   .   v   .   |
5654 pP 18  2 -1   251.618755   -.000031   .000200 |   .   v   .   |
5655 pP 19  2 -1   251.011212   -.000256   .000200 |   .   x.  .   |
5656 pP 20  2 -1   250.409181    .000015   .000200 |   .   v   .   |
5657 pP 21  2 -1   249.811835   -.000051   .000200 |   .   v   .   |
5658 pP 22  2 -1   249.219691    .000094   .000200 |   .   v   .   |
5659 pP 23  2 -1   248.632243    .000013   .000200 |   .   v   .   |
5660 pP 24  2 -1   248.049695    .000015   .000200 |   .   v   .   |
5661 pP 25  2 -1   247.471835    .000017   .000200 |   .   v   .   |
5662 pP 26  2 -1   246.898804    .000318   .000200 |   .   .x  .   |
5663 pR  2  2 -1   265.287299    .000517   .000500 |   .   .x  .   |
5664 pR  3  2 -1   265.971787    .001484   .002000 |   .   . v .   |
5665 pR  4  2 -1   266.656702    .000152   .000200 |   .   v   .   |
5666 pR  5  2 -1   267.344646   -.000974   .002000 |   . v .   .   |
5667 pR  6  2 -1   268.037562   -.000067   .000200 |   .   v   .   |
5668 pR  7  2 -1   268.732446   -.000269   .000500 |   . v.    .   |
5669 pR  8  2 -1   269.433600    .002568   .003000 |   .   .   v   |
5670 pR  9  2 -1   270.132889    .000136   .000200 |   .   v   .   |
5671 pR 10  2 -1   270.838195    .000136   .000200 |   .   v   .   |
5672 pR 11  2 -1   271.547258    .000116   .000200 |   .   v   .   |
5673 pR 12  2 -1   272.259493   -.000702   .001000 |   . v.    .   |
5674 pR 13  2 -1   272.979530    .002124   .003000 |   .   . v.    |
5675 pR 14  2 -1   273.700422    .001472   .002000 |   .   . v .   |
5676 pR 15  2 -1   274.425000    .000014   .000200 |   .   v   .   |
5677 pR 16  2 -1   275.155803    .000161   .000200 |   .   v   .   |
5678 pR 18  2 -1   276.631278    .000098   .000200 |   .   v   .   |
5679 pR 19  2 -1   277.376309    .000162   .000200 |   .   v   .   |
5680 pR 20  2 -1   278.125811   -.000090   .000200 |   .   v   .   |
5681 pR 21  2 -1   278.880016   -.000370   .000200 |   . x.    .   |
5682 pP  3  3 -1   261.165667    .000354   .000200 |   .   .x  .   |
5683 pP  4  3 -1   260.500445    .000401   .000200 |   .   .*  .   |
5684 pP  5  3 -1   259.837871    .000384   .000200 |   .   .x  .   |
5685 pP  6  3 -1   259.178050    .000308   .000200 |   .   .x  .   |
5686 pP  7  3 -1   258.521224    .000294   .000200 |   .   .x  .   |
5687 pP  8  3 -1   257.867514    .000322   .000200 |   .   .x  .   |
5688 pP  9  3 -1   257.216986    .000296   .000200 |   .   .x  .   |
5689 pP 10  3 -1   256.570088    .000486   .000200 |   .   .*  .   |
5690 pP 11  3 -1   255.926347    .000228   .000200 |   .   x   .   |
5691 pP 12  3 -1   255.286386   -.000059   .000500 |   .   v   .   |
5692 pP 13  3 -1   254.649531   -.001256   .002000 |   . v .   .   |
5693 pP 14  3 -1   254.019432    .000082   .000500 |   .   v   .   |
5694 pP 15  3 -1   253.389930   -.002405   .003000 |   v   .   .   |
5695 pP 16  3 -1   252.770333    .000411   .000200 |   .   .*  .   |
5696 pP 17  3 -1   252.153101    .000827   .000500 |   .   . x .   |
5697 pP 18  3 -1   251.539851    .000329   .000200 |   .   .x  .   |
5698 pP 19  3 -1   250.932712    .000945   .001000 |   .   . v .   |
5699 pP 20  3 -1   250.329611    .000538   .000200 |   .   .*  .   |
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5700 pP 21  3 -1   249.731850    .000386   .000200 |   .   .x   .   |
5701 pP 22  3 -1   249.139346    .000416   .000200 |   .   .*   .   |
5702 pP 23  3 -1   248.552086    .000662   .000200 |   .   .*   .   |
5703 pR  7  3 -1   268.655940    .000164   .000200 |   .   v    .   |
5704 pR  8  3 -1   269.354291    .000487   .000200 |   .   .*   .   |
5705 pR  9  3 -1   270.055370    .000144   .000200 |   .   v    .   |
5706 pR 10  3 -1   270.759960   -.000265   .001000 |   .   v.   .   |
5707 pR 11  3 -1   271.469308    .000313   .000200 |   .   .x   .   |
5708 pR 12  3 -1   272.182079    .000351   .000200 |   .   .x   .   |
5709 pR 13  3 -1   272.899068    .000454   .000200 |   .   .*   .   |
5710 pR 14  3 -1   273.620123    .000295   .000200 |   .   .x   .   |
5711 pR 15  3 -1   274.345880    .000351   .000200 |   .   .x   .   |
5712 pP  4  4 -1   260.424072    .000495   .000200 |   .   .*   .   |
5713 pP  5  4 -1   259.761470    .000468   .000200 |   .   .*   .   |
5714 pP  6  4 -1   259.101732    .000520   .000200 |   .   .*   .   |
5715 pP  7  4 -1   258.444849    .000511   .000200 |   .   .*   .   |
5716 pP  8  4 -1   257.790980    .000446   .000200 |   .   .*   .   |
5717 pP  9  4 -1   257.141786    .001811   .002000 |   .   .   v.   |
5718 pP 10  4 -1   256.493328    .000473   .000200 |   .   .*   .   |
5719 pP 11  4 -1   255.849649    .000266   .000200 |   .   .x   .   |
5720 pP 12  4 -1   255.210125    .000348   .000200 |   .   .x   .   |
5721 pP 13  4 -1   254.574824    .000566   .000200 |   .   .*   .   |
5722 pP 15  4 -1   253.316887    .000563   .000200 |   .   .*   .   |
5723 pP 16  4 -1   252.694531    .000241   .000200 |   .   x    .   |
5724 pR  4  4 -1   266.502368   -.000054   .001000 |   .   v    .   |
5725 pR  5  4 -1   267.190780   -.000178   .001000 |   .   v    .   |
5726 pR  6  4 -1   267.883675    .001241   .001000 |   .   . x  .   |
5727 pR  7  4 -1   268.576376   -.000628   .002000 |   .   v.   .   |
5728 pR  8  4 -1   269.274669   -.000176   .001000 |   .   v    .   |
5729 pR  9  4 -1   269.976476    .000330   .000200 |   .   .x   .   |
5730 pR 10  4 -1   270.681199    .000089   .000200 |   .   v    .   |
5731 pR 11  4 -1   271.390244    .000305   .000200 |   .   .x   .   |
5732 pR 12  4 -1   272.104109    .001273   .001000 |   .   . x  .   |
5733 pR 13  4 -1   272.820418    .000429   .000200 |   .   .*   .   |
5734 pP  5  5 -1   259.683642    .000550   .000200 |   .   .*   .   |
5735 pP  6  5 -1   259.023805    .000581   .000200 |   .   .*   .   |
5736 pP  7  5 -1   258.366848    .000569   .000200 |   .   .*   .   |
5737 pP  8  5 -1   257.712834    .000391   .000200 |   .   .x   .   |
5738 pP  9  5 -1   257.062512    .000584   .000200 |   .   .*   .   |
5739 pP 10  5 -1   256.415264    .000296   .000300 |   .   .v   .   |
5740 pP 11  5 -1   255.772347    .000540   .000200 |   .   .*   .   |
5741 pP 12  5 -1   255.133287    .000590   .000200 |   .   .*   .   |
5742 pP 13  5 -1   254.498622    .000743   .000200 |   .   .*   .   |
5743 pP 14  5 -1   253.865947   -.001626   .003000 |   . v .    .   |
5744 pP 15  5 -1   253.242830    .000862   .000300 |   .   . *  .   |
5745 pP 16  5 -1   252.621783    .000567   .000200 |   .   .*   .   |
5746 pP 17  5 -1   252.005850    .000427   .000200 |   .   .*   .   |
5747 pP 18  5 -1   251.395271    .000615   .000200 |   .   .*   .   |
5748 pP 19  5 -1   250.789254    .000311   .000200 |   .   .x   .   |
5749 pP 20  5 -1   250.188192   -.000085   .010000 |   .   v    .   |
5750 pP 21  5 -1   249.593139    .000511   .000200 |   .   .*   .   |
5751 pP 22  5 -1   249.002478    .000536   .000200 |   .   .*   .   |
5752 pP 23  5 -1   248.416725    .000573   .000200 |   .   .*   .   |
5753 pP 24  5 -1   247.835786    .000611   .000200 |   .   .*   .   |
5754 pP 25  5 -1   247.260069    .001147   .000500 |   .   . *  .   |
5755 pP 26  5 -1   246.688371    .001078   .000200 |   .   . *  .   |
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5756 pP 27  5 -1    246.121298      .001115    .000200 |    .    . *  .    |
5757 pQ  5  5 -1    263.060097      .000883    .000500 |    .    . x  .    |
5758 pQ  6  5 -1    263.075706      .000910    .000500 |    .    . x  .    |
5759 pQ  7  5 -1    263.094579      .001155    .001000 |    .    . x  .    |
5760 pQ  8  5 -1    263.114153     -.001149    .002000 |    .  v .    .    |
5761 pQ  9  5 -1    263.140770      .000117    .000500 |    .    v    .    |
5762 pQ 10  5 -1    263.173229      .003513    .003000 |    .    .    . x  |
5763 pQ 11  5 -1    263.202936      .000203    .000500 |    .    v    .    |
5764 pQ 12  5 -1    263.240408      .000470    .000200 |    .    .*   .    |
5765 pQ 13  5 -1    263.282149      .000605    .000200 |    .    .*   .    |
5766 pQ 14  5 -1    263.326716     -.001018    .002000 |    .  v .    .    |
5767 pQ 15  5 -1    263.379078      .000423    .000200 |    .    .*   .    |
5768 pQ 16  5 -1    263.434521      .000114    .000500 |    .    v    .    |
5769 pQ 17  5 -1    263.495613      .000558    .000200 |    .    .*   .    |
5770 pQ 18  5 -1    263.559664     -.000957    .002000 |    .  v .    .    |
5771 pQ 19  5 -1    263.631871      .000771    .000300 |    .    . *  .    |
5772 pQ 20  5 -1    263.707197      .000740    .000200 |    .    .*   .    |
5773 pQ 21  5 -1    263.787174      .000534    .000200 |    .    .*   .    |
5774 pP  6  6 -1    258.944295      .000483    .000200 |    .    .*   .    |
5775 pP  7  6 -1    258.287287      .000625    .000200 |    .    .*   .    |
5776 pP  8  6 -1    257.633647      .000901    .000300 |    .    . *  .    |
5777 pP  9  6 -1    256.983228      .000862    .000200 |    .    . *  .    |
5778 pP 10  6 -1    256.336487      .000644    .000200 |    .    .*   .    |
5779 pP 11  6 -1    255.694025      .000525    .000200 |    .    .*   .    |
5780 pP 12  6 -1    255.056103      .000472    .000200 |    .    .*   .    |
5781 pP 13  6 -1    254.422969      .000490    .000200 |    .    .*   .    |
5782 pP 14  6 -1    253.794445      .000223    .000200 |    .    x    .    |
5783 pP 15  6 -1    253.171861      .000897    .001000 |    .    . v  .    |
5784 pP 16  6 -1    252.551489     -.001259    .002000 |    . v  .    .    |
5785 pP 17  6 -1    251.936295     -.003272    .003000 | x .    .    .    |
5786 pP 18  6 -1    251.332017      .000637    .002000 |    .    .v   .    |
5787 pP 19  6 -1    250.727682     -.000445    .000200 |    . *  .    .    |
5788 pP  7  7 -1    258.205642      .000279    .000200 |    .    .x   .    |
5789 pP  8  7 -1    257.551190      .000252    .000200 |    .    .x   .    |
5790 pP  9  7 -1    256.901224      .000367    .000200 |    .    .x   .    |
5791 pP 10  7 -1    256.257850      .002140    .002000 |    .    .    x.   |
5792 pP 11  7 -1    255.616070      .000193    .000200 |    .    v    .    |
5793 pP 12  7 -1    254.981736      .000265    .000200 |    .    .x   .    |
5794 pP 14  7 -1    253.729132      .000661    .000200 |    .    .*   .    |
5795 pP 20  8 -1    249.642735      .000215    .000200 |    .    x    .    |
5796 pP 21  8 -1    248.999716      .000105    .000200 |    .    v    .    |
5797 pP 22  8 -1    248.356706     -.001728    .002000 |    . v  .    .    |
5798 pP 23  8 -1    247.718719     -.000304    .000200 |    .   x.    .    |
5799 pP 24  8 -1    247.080789     -.000620    .000500 |    .   x.    .    |
5800 pP 25  8 -1    246.444495     -.001127    .001000 |    . x  .    .    |
5801 pP 26  8 -1    245.811530     -.000160    .000200 |    .    v    .    |
5802 pP 27  8 -1    245.178298     -.001343    .001000 |    . x  .    .    |
5803 pP 28  8 -1    244.548643     -.000854    .001000 |    . v  .    .    |
5804 pP 29  8 -1    243.921218     -.000063    .000200 |    .    v    .    |
5805 pP 30  8 -1    243.294919     -.000093    .000200 |    .    v    .    |
5806 pP 31  8 -1    242.670890      .000184    .000200 |    .    v    .    |

File # 5  MeNC_v8.fre  No. data :   96    .20000  MHz -> |----+----0----+----|
5807 qR  6  1  1   141091.5170        .0205      .0200 |    .    .x   .    |
5808 qR  6 -1 -1   141479.9480        .0338      .0200 |    .    . x  .    |
5809 qR  6  2  1   141335.1860        .0223      .0200 |    .    .x   .    |
```

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5810 qR  6  3  1   141301.1900      .0385     .0200 |   .   . x .   |
5811 qR  6  4  1   141277.2210      .0418     .0200 |   .   . * .   |
5812 qR  6  5  1   141251.2220      .0281     .0200 |   .   .x  .   |
5813 qR  6  6  1   141220.6550      .0398     .0200 |   .   . x .   |
5814 qR  6  0 -1   141229.8900      .0117     .0200 |   .   .v  .   |
5815 qR  6  1 -1   141244.7980      .0116     .0200 |   .   .v  .   |
5816 qR  6  2 -1   141236.9390      .0133     .0200 |   .   .v  .   |
5817 qR  6  3 -1   141218.3810      .0210     .0200 |   .   .x  .   |
5818 qR  6  4 -1   141191.6590     -.0261     .0200 |   .  x.   .   |
5819 qR  6  5 -1   141157.7810     -.0120     .0200 |   .  v.   .   |
5820 qR  6  6 -1   141117.0830      .0010     .0200 |   .   v   .   |
5821 qR  9  1  1   201549.4920      .0111     .0200 |   .   .v  .   |
5822 qR  9 -1 -1   202104.0410      .0291     .0200 |   .   .x  .   |
5823 qR  9  2  1   201959.5690      .0176     .0200 |   .   .v  .   |
5824 qR  9  3  1   201886.0970      .0082     .0200 |   .   v   .   |
5825 qR  9  4  1   201840.3900     -.0036     .0200 |   .   v   .   |
5826 qR  9  5  1   201797.1290      .0040     .0200 |   .   v   .   |
5827 qR  9  6  1   201749.6730      .0052     .0200 |   .   v   .   |
5828 qR  9  7  1   201695.6710      .0214     .0200 |   .   .x  .   |
5829 qR  9  8  1   201634.0510      .0231     .0200 |   .   .x  .   |
5830 qR  9  9  1   201564.3200      .0380     .0200 |   .   . x .   |
5831 qR 14  1  1   302288.1880     -.0041     .0200 |   .   v   .   |
5832 qR 14 -1 -1   303118.7060      .0078     .0200 |   .   v   .   |
5833 qR 14  2  1   303023.6090      .0109     .0200 |   .   .v  .   |
5834 qR 14  3  1   302901.3240      .0042     .1000 |   .   v   .   |
5835 qR 14  4  1   302808.4510      .0159     .0200 |   .   .v  .   |
5836 qR 14  5  1   302726.3850      .0025     .0200 |   .   v   .   |
5837 qR 14  6  1   302643.4880     -.0011     .0200 |   .   v   .   |
5838 qR 14  7  1   302554.1970      .0035     .0200 |   .   v   .   |
5839 qR 14  8  1   302455.7080      .0046     .0200 |   .   v   .   |
5840 qR 14  9  1   302346.5130      .0115     .0200 |   .   .v  .   |
5841 qR 14 10  1   302225.6990      .0137     .0200 |   .   .v  .   |
5842 qR 14 11  1   302092.4530      .0208     .0200 |   .   .x  .   |
5843 qR 14 12  1   301948.5530      .0329     .0200 |   .   . x .   |
5844 qR 14 13  1   301790.2700      .0462     .0200 |   .   . * .   |
5845 qR 14 14  1   301619.5960      .0588     .0200 |   .   .  * .  |
5846 qR 18  1  1   382848.6960     -.0255     .0200 |   .  x.   .   |
5847 qR 18 -1 -1   383898.9230      .0000     .0200 |   .   v   .   |
5848 qR 18  2  1   383836.9660     -.0234     .0200 |   .  x.   .   |
5849 qR 18  3  1   383716.0680     -.0298     .0200 |   .  x.   .   |
5850 qR 18  4  1   383595.6360     -.0163     .0200 |   .  v.   .   |
5851 qR 18  5  1   383481.1670     -.0399     .0200 |   . x .   .   |
5852 qR 18  6  1   383366.0570     -.0369     .0200 |   . x .   .   |
5853 qR 18  7  1   383244.6070     -.0487     .0200 |   . * .   .   |
5854 qR 18  8  1   383113.2420     -.0211     .0200 |   .  x.   .   |
5855 qR 18  9  1   382969.6170     -.0377     .0200 |   . x .   .   |
5856 qR 18 10  1   382812.3080     -.0335     .0200 |   . x .   .   |
5857 qR 18 11  1   382639.6490     -.0186     .0200 |   .  v.   .   |
5858 qR 18 12  1   382456.5110     -.0108     .0200 |   .  v.   .   |
5859 qR 18 13  1   382253.1980     -.0377     .0200 |   . x .   .   |
5860 qR 18 14  1   382035.1870     -.0210     .0200 |   .  x.   .   |
5861 qR 18 16  1   381551.7020     -.0183     .0500 |   .  v.   .   |
5862 qR  9  0 -1   201684.8580      .0052     .1000 |   .   v   .   |
5863 qR  9  1 -1   201731.2280      .1754     .2000 |   .   .   .  v|
5864 qR  9  2 -1   201731.2280     -.0923     .1000 |   v   .   .   |
5865 qR  9  3 -1   201711.0040     -.0077     .0200 |   .   v   .   |
```

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5866 qR  9  4 -1   201676.7440      -.0205     .0200 |   .  x.   .   |
5867 qR  9  5 -1   201630.9600      -.0213     .0200 |   .  x.   .   |
5868 qR  9  6 -1   201574.7290      -.0168     .0200 |   .  v.   .   |
5869 qR  9  7 -1   201508.6170      -.0294     .0200 |   .  x.   .   |
5870 qR  9  8 -1   201433.1170      -.0329     .0200 |   . x .   .   |
5871 qR  9  9 -1   201350.6590      -.0402     .0200 |   . * .   .   |
5872 qR 14  0 -1   302369.6860      -.0085     .0200 |   .   v   .   |
5873 qR 14  1 -1   302451.1790      -.0052     .0200 |   .   v   .   |
5874 qR 14  2 -1   302476.0990      -.0044     .0200 |   .   v   .   |
5875 qR 14  3 -1   302463.0240      -.0126     .0200 |   .  v.   .   |
5876 qR 14  4 -1   302423.6790      -.0111     .0200 |   .  v.   .   |
5877 qR 14  5 -1   302363.6500      -.0203     .0200 |   .  x.   .   |
5878 qR 14  6 -1   302285.8230      -.0087     .0500 |   .   v   .   |
5879 qR 14  7 -1   302191.7760      -.0161     .0200 |   .  v.   .   |
5880 qR 14  8 -1   302082.7070      -.0216     .0200 |   .  x.   .   |
5881 qR 14  9 -1   301962.7570      -.0139     .0200 |   .  v.   .   |
5882 qR 14 10 -1   301823.3410      -.0170     .0200 |   .  v.   .   |
5883 qR 14 11 -1   301666.2200      -.0208     .0200 |   .  x.   .   |
5884 qR 14 12 -1   301499.5170      -.0085     .0200 |   .   v   .   |
5885 qR 14 13 -1   301319.3410      -.0048     .0200 |   .   v   .   |
5886 qR 14 14 -1   301125.6980      -.0141     .0200 |   .  v.   .   |
5887 qR 18  0 -1   382893.4550      -.0246     .0200 |   .  x.   .   |
5888 qR 18  1 -1   382962.8360      -.0144     .0200 |   .  v.   .   |
5889 qR 18  2 -1   382997.4230      -.0245     .0200 |   .  x.   .   |
5890 qR 18  3 -1   382991.7300      -.0160     .0200 |   .  v.   .   |
5891 qR 18  4 -1   382952.4320      -.0239     .0200 |   .  x.   .   |
5892 qR 18  5 -1   382885.2790      -.0129     .0200 |   .  v.   .   |
5893 qR 18  6 -1   382793.9350      -.0265     .0200 |   .  x.   .   |
5894 qR 18  7 -1   382680.8510      -.0016     .0200 |   .   v   .   |
5895 qR 18  8 -1   382547.8090       .0126     .0200 |   .  .v   .   |
5896 qR 18  9 -1   382400.4740       .0230     .0200 |   .  .x   .   |
5897 qR 18 10 -1   382226.2560       .0106     .0200 |   .  .v   .   |
5898 qR 18 11 -1   382030.8610       .0354     .0200 |   .  . x  .   |
5899 qR 18 12 -1   381822.7260       .0473     .0200 |   .  . *  .   |
5900 qR 18 13 -1   381597.1520       .0035     .0200 |   .   v   .   |
5901 qR 18 14 -1   381354.3450      -.0036     .0200 |   .   v   .   |
5902 qR 18 15 -1   381094.4820      -.0016     .0500 |   .   v   .   |

File # 6  MeNC_v82.fr+ No. data :   42    .50000  MHz -> |----+----0----+----|
5903 qR  6  0  2   141829.4190      -.0616     .0200 |   .  *.   .   |
5904 qR  6  1  2   141840.8460      -.0195     .0200 |   .   v   .   |
5905 qR  6 -2 -2   141832.8270       .0408     .0200 |   .  .*   .   |
5906 qR  6  2  2   141858.9880       .0701     .0200 |   .  .*   .   |
5907 qR  6  3  2   141844.4510       .0705     .0200 |   .  .*   .   |
5908 qR  9  1  2   202640.6800      -.0441     .0200 |   .  *.   .   |
5909 qR  9  2  2   202684.2340      -.0103     .0200 |   .   v   .   |
5910 qR  9 -2 -2   202607.9490       .0473     .0200 |   .  .*   .   |
5911 qR  9  3  2   202642.7820       .0728     .0200 |   .  .*   .   |
5912 qR  9  4  2   202629.4300       .1120     .0200 |   .  . *  .   |
5913 qR  9  5  2   202607.4790       .1667     .1000 |   .  . x  .   |
5914 qR  9  6  2   202576.5840       .1432     .0200 |   .  . *  .   |
5915 qR  9  7  2   202536.7140       .1058     .0200 |   .  . *  .   |
5916 qR  9  8  2   202487.6660       .0256     .0200 |   .  .x   .   |
5917 qR  9  9  2   202427.1530      -.0725     .0200 |   .  *.   .   |
5918 qR 14  0  2   303983.2340      -.0651     .0200 |   .  *.   .   |
5919 qR 14  1  2   303986.1810      -.0687     .0200 |   .  *.   .   |
```

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5920 qR 14  2  2   304122.4710      -.1383     .0200  |   . *  .    .   |
5921 qR 14 -2 -2   303873.7340      -.0130     .0200  |   .    v    .   |
5922 qR 14  3  2   303998.5580      -.0289     .0200  |   .   x.    .   |
5923 qR 14  4  2   303967.3330       .0718     .0200  |   .    .*   .   |
5924 qR 14  5  2   303927.9070       .0749     .0200  |   .    .*   .   |
5925 qR 14  6  2   303876.8600       .0783     .0200  |   .    . *  .   |
5926 qR 14  7  2   303813.2890       .0684     .0200  |   .    .*   .   |
5927 qR 14  8  2   303736.5770       .0303     .0200  |   .    .x   .   |
5928 qR 14  9  2   303642.8810      -.0576     .0200  |   .   *.    .   |
5929 qR 14 10  2   303541.6600      -.1149     .0200  |   . * .    .   |
5930 qR 14 11  2   303430.4060      -.3305     .5000  | v .    .    .   |
5931 qR 18  0  2   385065.0680      -.0041     .0200  |   .    v    .   |
5932 qR 18  1  2   385038.3850      -.1020     .0200  |   . * .    .   |
5933 qR 18  2  2   385326.6700      -.3379     .3000  | x .    .    .   |
5934 qR 18 -2 -2   384854.1550      -.0730     .0200  |   .   *.    .   |
5935 qR 18  3  2   385129.0250      -.2447     .2000  |   x    .    .   |
5936 qR 18  4  2   385062.0610      -.5170     .5000  x    .    .    .   |
5937 qR 18  5  2   385000.2420      -.0866     .0200  |   . * .    .   |
5938 qR 18  6  2   384927.6790      -.0526     .0200  |   .   *.    .   |
5939 qR 18  7  2   384841.3310       .0032     .0200  |   .    v    .   |
5940 qR 18  8  2   384739.4890       .0256     .0200  |   .    .x   .   |
5941 qR 18  9  2   384616.6870       .0079     .0200  |   .    v    .   |
5942 qR 18 10  2   384486.4780       .0198     .0200  |   .    v    .   |
5943 qR 18 11  2   384342.5930       .0763     .0200  |   .    . *  .   |
5944 qR 18 12  2   384175.7540      -.1503     .5000  |   . v  .    .   |

File # 7  MeNC_v82.fr- No. data :   28    .50000  MHz -> |----+----0----+----|
5945 qR  6  1 -2   141811.4390      -.2525     .0200  |   *    .    .   |
5946 qR  6  2 -2   141786.7650      -.1027     .0200  |   . * .    .   |
5947 qR  6  3 -2   141755.3130       .0033     .0200  |   .    v    .   |
5948 qR  6  4 -2   141716.2170      -.0374     .0200  |   .   x.    .   |
5949 qR  6  5 -2   141667.9780       .1846     .0200  |   .    .*   .   |
5950 qR  9  1 -2   202606.7420      -.3424     .5000  | v .    .    .   |
5951 qR  9 -1  2   202606.7420       .1625     .5000  |   .    . v  .   |
5952 qR  9  2 -2   202577.7110      -.1176     .0200  |   . * .    .   |
5953 qR  9  3 -2   202542.0500      -.0881     .0200  |   . * .    .   |
5954 qR  9  4 -2   202502.2060      -.0671     .0200  |   .   *.    .   |
5955 qR  9  5 -2   202465.7420      -.0141     .0200  |   .    v    .   |
5956 qR  9  6 -2   202469.2240       .2601     .0200  |   .    .    *   |
5957 qR  9  7 -2   201861.7800      -.0996     .0200  |   . * .    .   |
5958 qR  9  8 -2   202051.2350      -.4109     .0200  | * .    .    .   |
5959 qR 14  1 -2   303966.6580      -.3949     .5000  | v .    .    .   |
5960 qR 14  2 -2   303941.9890       .0254     .0200  |   .    .x   .   |
5961 qR 14  3 -2   303913.9110       .0452     .0200  |   .    .*   .   |
5962 qR 14  4 -2   303890.1460      -.0727     .0200  |   .   *.    .   |
5963 qR 14  5 -2   303884.4750      -.3031     .0200  |  *.    .    .   |
5964 qR 14  6 -2   303905.6430      -.2178     .0200  |   .*   .    .   |
5965 qR 14  7 -2   302686.3810       .0438     .0200  |   .    .*   .   |
5966 qR 18  1 -2   385062.0610      -.1458     .2000  |   . v  .    .   |
5967 qR 18  2 -2   385045.7910       .3131     .0200  |   .    .    .*  |
5968 qR 18  3 -2   385023.1010       .3907     .0200  |   .    .    . * |
5969 qR 18  4 -2   384998.4270       .2470     .0200  |   .    .    *   |
5970 qR 18  5 -2   384972.2580       .1024     .0200  |   .    . *  .   |
5971 qR 18  7 -2   383330.4260       .1536     .0200  |   .    . * .    |
5972 qR 18  8 -2   383263.7920      -.0063     .0200  |   .    v    .   |
```

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```
File # 8  MeNC_v80.fre No. data :   36    .50000  MHz -> |----+----0----+----|
5973 qR  6  0  0   141804.8550        .0046      .0200  |    .    v    .    |
5974 qR  6  1  0   141801.7520       -.0196      .0200  |    .    v    .    |
5975 qR  6  2  0   141792.4380       -.0026      .0200  |    .    v    .    |
5976 qR  6  3  0   141777.0190        .0590      .0200  |    .    .*   .    |
5977 qR  6  4  0   141755.3130       -.1481      .0200  |    . *  .    .    |
5978 qR  6  6  0   141695.7640       -.0972      .0200  |    .  * .    .    |
5979 qR  9  0  0   202528.9600       -.0061      .0200  |    .    v    .    |
5980 qR  9  1  0   202524.0210       -.0451      .0200  |    .   *.    .    |
5981 qR  9  2  0   202509.1290       -.0211      .0200  |    .    x    .    |
5982 qR  9  3  0   202484.0970        .0150      .0200  |    .    v    .    |
5983 qR  9  4  0   202448.4590        .0441      .0200  |    .    .*   .    |
5984 qR  9  5  0   202401.2110        .0185      .0200  |    .    v    .    |
5985 qR  9  6  0   202339.9490       -.0760      .0200  |    .  * .    .    |
5986 qR  9  7  0   202257.3120       -.2571      .0200  |    *    .    .    |
5987 qR  9  8  0   202116.6100       -.6533      .5000  x    .    .    .    |
5988 qR  9  9  0   202569.8350       -.1248      .0200  |    .  * .    .    |
5989 qR 14  0  0   303620.9680        .0309      .0200  |    .    .x   .    |
5990 qR 14  1  0   303612.0340       -.0454      .0200  |    .   *.    .    |
5991 qR 14  2  0   303585.0010        .0022      .0200  |    .    v    .    |
5992 qR 14  3  0   303538.8860        .0368      .0200  |    .    .x   .    |
5993 qR 14  4  0   303471.6330        .0391      .0200  |    .    .x   .    |
5994 qR 14  5  0   303379.5790        .0571      .0200  |    .    .*   .    |
5995 qR 14  6  0   303255.4460        .1257      .0200  |    .    . * .    |
5996 qR 14  7  0   303086.1860        .1875      .5000  |    .    .  v.    |
5997 qR 14  8  0   302860.8450       -.1127      .0200  |    . * .    .    |
5998 qR 14  9  0   303852.0390       -.1405      .0200  |    . *  .    .    |
5999 qR 18  0  0   384376.4600        .0916      .0200  |    .    . * .    |
6000 qR 18  1  0   384364.0810       -.0123      .0200  |    .    v    .    |
6001 qR 18  2  0   384326.6650        .0068      .0200  |    .    v    .    |
6002 qR 18  3  0   384263.0090       -.0871      .0200  |    . *  .    .    |
6003 qR 18  4  0   384171.2030        .0085      .0200  |    .    v    .    |
6004 qR 18  5  0   384048.2140        .0427      .0200  |    .    .*   .    |
6005 qR 18  6  0   383890.9800        .1550      .0200  |    .    . * .    |
6006 qR 18  7  0   383700.8870        .2269      .0200  |    .    .    *    |
6007 qR 18  8  0   383494.1450       -.0469      .0200  |    .   *.    .    |
6008 qR 18  9  0   384802.1580        .1704      .0200  |    .    . * .    |

File # 9  MeNC_v8.fr0  No. data :   55    .20000  MHz -> |----+----0----+----|
6009 qR  1  1  1    40313.6300        .0445      .0300  |    .    . x .    |
6010 qR  2  1  1    60470.1450        .0550      .0300  |    .    .  x .   |
6011 qR  3  1  1    80626.2700        .0214      .0600  |    .    .v   .    |
6012 qR  4  1  1   100781.9670        .0209      .0900  |    .    .v   .    |
6013 qR  5  1  1   120937.0960        .0288      .0600  |    .    .v   .    |
6014 qR  6  1  1   141091.4940       -.0025      .0600  |    .    v    .    |
6015 qR  1 -1 -1    40424.6120       -.0121      .0300  |    .   v.    .    |
6016 qR  2 -1 -1    60636.6790        .0414      .0300  |    .    . x .    |
6017 qR  3 -1 -1    80848.3040        .0113      .0600  |    .    .v   .    |
6018 qR  4 -1 -1   101059.4670       -.0032      .0900  |    .    v    .    |
6019 qR  5 -1 -1   121270.0740        .0235      .0600  |    .    .v   .    |
6020 qR  6 -1 -1   141479.9160        .0018      .0600  |    .    v    .    |
6021 qR  2  2  1    60556.5680        .0049      .0300  |    .    v    .    |
6022 qR  3  2  1    80745.9240        .0179      .0600  |    .    .v   .    |
6023 qR  4  2  1   100938.4770        .0479      .0900  |    .    . v .    |
6024 qR  5  2  1   121134.7480        .0202      .0600  |    .    .v   .    |
6025 qR  6  2  1   141335.1840        .0203      .0600  |    .    .v   .    |
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6026 qR  3  3  1    80735.9300        .0579      .0600  |    .    . v .    |
6027 qR  4  3  1   100922.5110        .0307      .0900  |    .    . v .    |
6028 qR  5  3  1   121110.8400        .0286      .0600  |    .    .v   .    |
6029 qR  6  3  1   141301.1720        .0205      .0600  |    .    .v   .    |
6030 qR  6  3  1   141301.1900        .0385      .0200  |    .    . x .    |
6031 qR  4  4  1   100908.4260        .0498      .0900  |    .    . v .    |
6032 qR  5  4  1   121092.2260        .0214      .0600  |    .    .v   .    |
6033 qR  6  4  1   141277.1920        .0128      .0600  |    .    .v   .    |
6034 qR  5  5  1   121070.9360        .0140      .0600  |    .    .v   .    |
6035 qR  6  5  1   141251.2200        .0261      .0600  |    .    .v   .    |
6036 qR  6  6  1   141220.6420        .0268      .0600  |    .    .v   .    |
6037 qR  1  0 -1    40366.7470        .0258      .0300  |    .    .v   .    |
6038 qR  2  0 -1    60547.4510        .0182      .0300  |    .    .v   .    |
6039 qR  3  0 -1    80725.0220        .0285      .0600  |    .    .v   .    |
6040 qR  4  0 -1   100898.4540        .0181      .0900  |    .    .v   .    |
6041 qR  5  0 -1   121066.9460        .0165      .0600  |    .    .v   .    |
6042 qR  6  0 -1   141229.8880        .0097      .0600  |    .    v    .    |
6043 qR  1  1 -1    40364.4300        .0238      .0300  |    .    .v   .    |
6044 qR  2  1 -1    60545.0880       -.0483      .0300  |    . x .    .    |
6045 qR  3  1 -1    80724.1120        .0086      .0600  |    .    v    .    |
6046 qR  4  1 -1   100900.7460        .0139      .0900  |    .    .v   .    |
6047 qR  5  1 -1   121074.4820        .0155      .0600  |    .    .v   .    |
6048 qR  6  1 -1   141244.7840       -.0024      .0600  |    .    v    .    |
6049 qR  2  2 -1    60538.7450        .0452      .0300  |    .    . x .    |
6050 qR  3  2 -1    80716.2480       -.0054      .0600  |    .    v    .    |
6051 qR  4  2 -1   100892.1090        .0220      .0900  |    .    .v   .    |
6052 qR  5  2 -1   121065.7620       -.0186      .0600  |    .    v.   .    |
6053 qR  6  2 -1   141236.9400        .0143      .0600  |    .    .v   .    |
6054 qR  3  3 -1    80703.9700        .0354      .0600  |    .    . v .    |
6055 qR  4  3 -1   100877.2980        .0206      .0900  |    .    .v   .    |
6056 qR  5  3 -1   121048.8560       -.0103      .0600  |    .    v.   .    |
6057 qR  6  3 -1   141218.3660        .0060      .0600  |    .    v    .    |
6058 qR  4  4 -1   100857.2970        .0142      .0900  |    .    .v   .    |
6059 qR  5  4 -1   121025.3640       -.0286      .0600  |    .    v.   .    |
6060 qR  6  4 -1   141191.6760       -.0091      .0600  |    .    v    .    |
6061 qR  5  5 -1   120995.8980       -.0322      .0600  |    . v .    .    |
6062 qR  6  5 -1   141157.7700       -.0230      .0600  |    .    v.   .    |
6063 qR  6  6 -1   141117.0900        .0080      .0600  |    .    v    .    |

File #10  MeNC_v88.fr0 No. data :   79    .50000  MHz -> |----+----0----+----|
6064 qR  1  0  0    40524.5570        .0557      .0300  |    .    .x   .    |
6065 qR  2  0  0    60785.2150       -.0614      .0300  |    .    *.   .    |
6066 qR  3  0  0    81044.2500       -.0323      .0600  |    .    v.   .    |
6067 qR  4  0  0   101300.9220       -.0106      .0900  |    .    v    .    |
6068 qR  5  0  0   121554.6780        .0321      .0600  |    .    .v   .    |
6069 qR  6  0  0   141804.8260       -.0244      .0600  |    .    v    .    |
6070 qR  1  1  0    40523.7820        .0693      .1000  |    .    .v   .    |
6071 qR  2  1  0    60784.0120       -.0665      .0300  |    .    *.   .    |
6072 qR  3  1  0    81042.6040       -.0527      .0600  |    .    v.   .    |
6073 qR  4  1  0   101298.8250       -.0300      .0900  |    .    v.   .    |
6074 qR  5  1  0   121552.0980        .0121      .0600  |    .    v    .    |
6075 qR  6  1  0   141801.6860       -.0856      .0600  |    . x .    .    |
6076 qR  2  2  0    60780.4060       -.0578      .1000  |    .    v.   .    |
6077 qR  3  2  0    81037.7950        .0474      .0600  |    .    .v   .    |
6078 qR  4  2  0   101292.6180        .0437      .0900  |    .    .v   .    |
6079 qR  5  2  0   121544.3500        .0127      .0600  |    .    v    .    |
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6080 qR  6  2  0   141792.4300     -.0106     .0600 |   .   v   .   |
6081 qR  3  3  0    81029.8590      .1686     .2000 |   .   . v .   |
6082 qR  4  3  0   101282.2620      .0283     .0900 |   .   .v  .   |
6083 qR  5  3  0   121531.5760      .0422     .0600 |   .   .v  .   |
6084 qR  6  3  0   141776.9780      .0180     .0600 |   .   v   .   |
6085 qR  4  4  0   101268.1380      .0558     .0890 |   .   .v  .   |
6086 qR  5  4  0   121513.9440      .0553     .0600 |   .   .v  .   |
6087 qR  6  4  0   141755.3740     -.0871     .2000 |   . v .   .   |
6088 qR  5  5  0   121491.8880      .0331     .0600 |   .   .v  .   |
6089 qR  6  5  0   141728.2300      .0130     .0600 |   .   v   .   |
6090 qR  6  6  0   141695.7720     -.0892     .0600 |   . x .   .   |
6091 qR  1  0  2    40520.0200      .0049     .0300 |   .   v   .   |
6092 qR  2  0  2    60780.4060     -.0691     .1000 |   .  v.   .   |
6093 qR  3  0  2    81041.4470     -.0303     .0600 |   .  v.   .   |
6094 qR  4  0  2   101303.1510     -.0485     .0900 |   .  v.   .   |
6095 qR  5  0  2   121565.7660     -.0477     .0600 |   .  v.   .   |
6096 qR  6  0  2   141829.4300     -.0506     .0600 |   .  v.   .   |
6097 qR  1  1  2    40523.7820     -.0788     .1000 |   . v .   .   |
6098 qR  2  1  2    60786.1370     -.0094     .0300 |   .   v   .   |
6099 qR  3  1  2    81048.8670      .0102     .0600 |   .   v   .   |
6100 qR  4  1  2   101312.1570      .0277     .0900 |   .   .v  .   |
6101 qR  5  1  2   121576.0840     -.0098     .0600 |   .   v   .   |
6102 qR  6  1  2   141840.8400     -.0255     .0600 |   .  v.   .   |
6103 qR  2 -2 -2    60788.0220      .1036     .0300 |   .   . * .   |
6104 qR  3 -2 -2    81050.0540      .0652     .0600 |   .   .x  .   |
6105 qR  4 -2 -2   101311.6080      .0364     .0900 |   .   .v  .   |
6106 qR  5 -2 -2   121572.5560      .0113     .0600 |   .   v   .   |
6107 qR  6 -2 -2   141832.8240      .0378     .0600 |   .   .v  .   |
6108 qR  2  2  2    60789.7710     -.0199     .0300 |   .   v   .   |
6109 qR  3  2  2    81054.6920      .0235     .0600 |   .   v   .   |
6110 qR  4  2  2   101320.9440      .0183     .0900 |   .   v   .   |
6111 qR  5  2  2   121588.9500      .0505     .0600 |   .   .v  .   |
6112 qR  6  2  2   141858.9320      .0141     .0600 |   .   v   .   |
6113 qR  3  3  2    81052.0360      .0624     .0600 |   .   .x  .   |
6114 qR  4  3  2   101315.7210      .0902     .0900 |   .   . x .   |
6115 qR  5  3  2   121579.7780      .0438     .0600 |   .   .v  .   |
6116 qR  6  3  2   141844.4600      .0795     .0600 |   .   . x .   |
6117 qR  4  4  2   101310.4320      .1119     .0900 |   .   . x .   |
6118 qR  5  4  2   121573.2860      .1441     .0600 |   .   . * .   |
6119 qR  6  4  2   141836.4920      .1138     .0600 |   .   . x .   |
6120 qR  5  5  2   121561.1380      .1215     .0600 |   .   . * .   |
6121 qR  6  5  2   141822.1100      .1252     .0600 |   .   . * .   |
6122 qR  6  6  2   141801.6860      .4912     .5000 |   .   .   .   v
6123 qR  1  1 -2    40514.0590     -.0838     .0300 |   . * .   .   |
6124 qR  2  1 -2    60771.7250     -.0725     .0300 |   . *.    .   |
6125 qR  3  1 -2    81029.8590     -.2929     .2000 |  x.   .   .   |
6126 qR  4  1 -2   101289.2520     -.1854     .0900 |  .*   .   .   |
6127 qR  5  1 -2   121549.6580     -.2214     .0600 |  .*   .   .   |
6128 qR  6  1 -2   141811.4080     -.2835     .0600 |  *.   .   .   |
6129 qR  2  2 -2    60759.6020     -.0657     .0300 |   . *.    .   |
6130 qR  3  2 -2    81014.2820     -.0430     .0600 |   . v.    .   |
6131 qR  4  2 -2   101270.1330     -.0794     .0900 |   . v .   .   |
6132 qR  5  2 -2   121527.5380     -.0931     .0600 |   . x .   .   |
6133 qR  6  2 -2   141786.7660     -.1017     .0600 |   . x .   .   |
6134 qR  3  3 -2    80993.7330     -.0534     .0600 |   . v.    .   |
6135 qR  4  3 -2   101245.3590     -.0305     .0900 |   . v.    .   |
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6136 qR  5  3 -2   121499.0440       -.0539      .0600  |    .   v.    .    |
6137 qR  6  3 -2   141755.3740        .0643      .2000  |    .    .v   .    |
6138 qR  4  4 -2   101213.6070        .0160      .0900  |    .    v    .    |
6139 qR  5  4 -2   121463.0880        .0092      .0600  |    .    v    .    |
6140 qR  6  4 -2   141716.2400       -.0144      .0600  |    .    v    .    |
6141 qR  5  5 -2   121416.4100        .1883      .0600  |    .    .   *.    |
6142 qR  6  5 -2   141667.9880        .1946      .0600  |    .    .   *.    |

 99.it. step   StDev  :  1.39916E+00
-----------------------------------------------------------------
     Data file       All / NZW    STD cm-1      MHz        Std/N
  1  nu8.wn          2705  2705    1.40E-04    4.21E+00    5.07E-01
  2  2nu80_a.wn      1202  1202    2.29E-04    6.86E+00    7.98E-01
  3  2nu80h.wn        933   933    2.38E-04    7.15E+00    8.48E-01
  4  2nu82h.wn        966   966    2.84E-04    8.51E+00    9.57E-01
  5  MeNC_v8.fre       96    96    7.86E-07    2.36E-02    9.35E-01
  6  MeNC_v82.fr+      42    42    2.35E-06    7.05E-02    2.71E+00
  7  MeNC_v82.fr-      28    28    6.38E-06    1.91E-01    6.45E+00
  8  MeNC_v80.fre      36    36    3.19E-06    9.56E-02    3.35E+00
  9  MeNC_v8.fr0       55    55    1.03E-06    3.10E-02    4.68E-01
 10  MeNC_v88.fr0      79    79    2.58E-06    7.74E-02    1.03E+00

 Adjusted parameters    cm-1        error          MHz            err_%
 ~~~~~~~~~~~~~~~~~~~
  2 B0      3.3532817044D-01                  1.0052885645D+04
  3 A0      5.2472340000D+00                  1.5730811786D+05
  4 DJ0     1.5651018040D-07                  4.6920571684D-03
  5 DJK0    7.5892924440D-06                  2.2752126363D-01
  6 DK0     8.5626000000D-05                  2.5670029009D+00
  7 HJ0    -2.7357071869D-14                 -8.2014438193D-10
  8 HJK0    7.9758079847D-11                  2.3910870803D-06
  9 HKJ0    2.0772630291D-10                  6.2274778941D-06
 11 LJ0     1.8231373120D-18                  5.4656281604D-14
 12 LJJK0  -9.7065996268D-16                 -2.9099653609D-11

 31 E    8  2.6731941492D+02 / 1.0717372D-05   8.0140344471D+06     .000004
 32 B    8  3.3663134670D-01 / 6.1187973D-09   1.0091953887D+04     .000002
 33 A    8  5.2472537062D+00 / 6.1679193D-07   1.5730870863D+05     .000012
 34 DJ0  8  1.6295581364D-07 / 5.7995373D-12   4.8852923916D-03     .003559
 35 DJK0 8  7.5924062782D-06 / 1.4930939D-10   2.2761461403D-01     .001967
 36 DK0  8  8.5556213459D-05 / 7.6249142D-09   2.5649107530D+00     .008912
 37 HJ0     4.5793795416D-15 / 1.0874666D-15   1.3728634489D-10   23.747030
 38 HJK  8  7.8727419942D-11 / 2.8285681D-14   2.3601886736D-06     .035929
 39 HKJ  8  2.0337222392D-10 / 7.4696977D-13   6.0969458899D-06     .367292
 40 HK   8  4.2087260364D-11 / 2.3229690D-11   1.2617443235D-06   55.194113
 41 LJ0     1.8231373120D-18                  5.4656281604D-14
 42 LJJK0  -9.7065996268D-16                 -2.9099653609D-11
 46 Adz  8  4.8702548295D+00 / 1.3093806D-06   1.4600656664D+05     .000027
 47 EtaJ 8  1.9601735000D-05 / 1.0485712D-09   5.8764523166D-01     .005349
 48 EtaK 8  3.3784704701D-04 / 3.3329153D-08   1.0128399665D+01     .009865
 49 TauJ 8 -2.3476009823D-10 / 4.4965805D-13  -7.0379306889D-06     .191539
 50 TauJK8 -1.4869331287D-09 / 6.6615888D-12  -4.4577133753D-05     .448009

 56 E   80  5.2463313292D+02 / 1.5325621D-05   1.5728105647D+07     .000003
 57 B   80  3.3794298985D-01 / 1.2907825D-08   1.0131275959D+04     .000004
 58 A   80  5.2481717736D+00 / 1.5176876D-06   1.5733623160D+05     .000029
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59 DJ0 80  1.6968392184D-07 / 1.2667753D-11   5.0869960011D-03     .007465
60 DJK080  7.6403276046D-06 / 7.4740078D-10   2.2905125925D-01     .009782
61 DK0 80  8.2815000637D-05 / 4.1680128D-08   2.4827312600D+00     .050329
62 HJ0    -2.7357071869D-14                  -8.2014438193D-10
63 HJK 80  1.3378365448D-10 / 2.1048186D-13   4.0107330618D-06     .157330
64 HKJ 80  1.1728136350D-09 / 8.2603825D-12   3.5160068242D-05     .704322
65 HK  80 -4.8672887179D-08 / 3.4131431D-10  -1.4591764485D-03     .701241
66 LJ0     1.8231373120D-18                   5.4656281604D-14
67 LJJK0  -9.7065996268D-16                  -2.9099653609D-11

71 E   82  5.4529538735D+02 / 2.0160421D-05   1.6347544451D+07     .000004
72 B   82  3.3789992395D-01 / 9.0557013D-09   1.0129984876D+04     .000003
73 A   82  5.2461393966D+00 / 1.7195550D-06   1.5727530247D+05     .000033
74 DJ  82  1.6954403699D-07 / 9.9316066D-12   5.0828023588D-03     .005858
75 DJK 82  7.5967189066D-06 / 4.6583712D-10   2.2774390337D-01     .006132
76 DK  82  8.4744950103D-05 / 3.7944518D-08   2.5405896895D+00     .044775
77 HJ0    -2.7357071869D-14                  -8.2014438193D-10
78 HJK 82  3.0044396565D-11 / 2.6990821D-13   9.0070834953D-07     .898365
79 HKJ 82  1.5418565511D-10 / 3.9205368D-12   4.6223696534D-06    2.542738
80 HK  82 -2.4635382870D-09 / 1.8195403D-10  -7.3855019845D-05    7.385882
81 LJ0     1.8231373120D-18                   5.4656281604D-14
82 LJJK0  -9.7065996268D-16                  -2.9099653609D-11
86 Azet82  4.8720352909D+00 / 1.3611844D-06   1.4605994353D+05     .000028
87 EtaJ82  1.9607980586D-05 / 8.8386197D-10   5.8783246964D-01     .004508
88 EtaK82  3.3637543720D-04 / 6.4417957D-08   1.0084281913D+01     .019151

146 q22  8  2.3151525205D-04 / 4.1240831D-09   6.9406526475D+00     .001781
147 q22J 8 -1.4399095035D-09 / 3.3116954D-12  -4.3167400937D-05     .229993
151 q22JJ8  1.0577217037D-14 / 5.9001782D-16   3.1709698944D-10    5.578195
155 q22 88  2.3244419105D-04 / 2.5292422D-09   6.9685015383D+00     .001088
156 q22J88 -1.4604537268D-09 / 1.5287093D-12  -4.3783301255D-05     .104674
177 Frm812  7.9415225965D-01 / 2.2133286D-04   2.3808085795D+04     .027870
178 FrJ812 -7.6939324159D-06 / 6.3344912D-08  -2.3065829106D-01     .823310
189 C28-88  1.5835826429D-06 / 4.1932097D-08   4.7474613296D-02    2.647926
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