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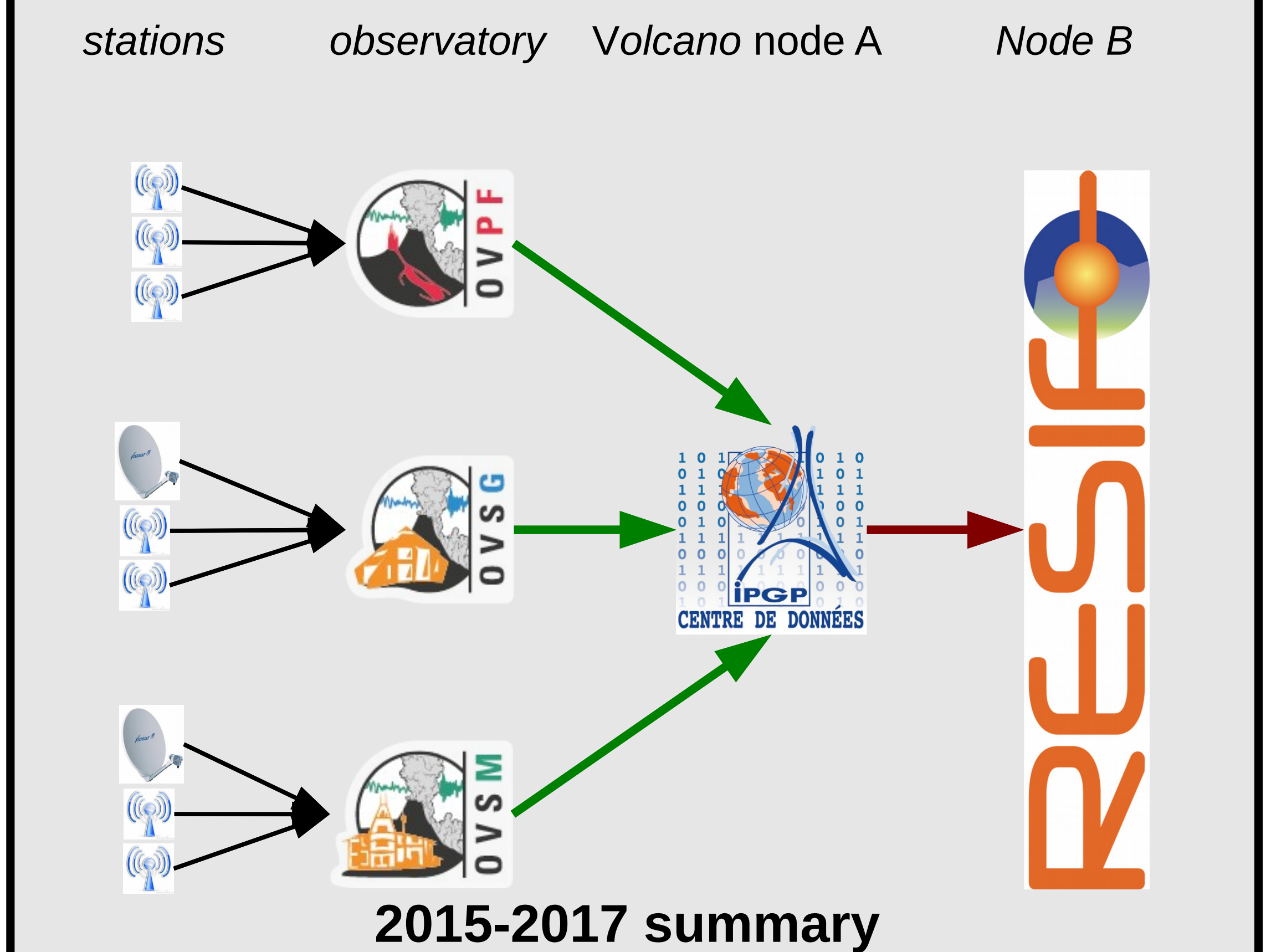
Volcano node A : what's new and what to expect ?

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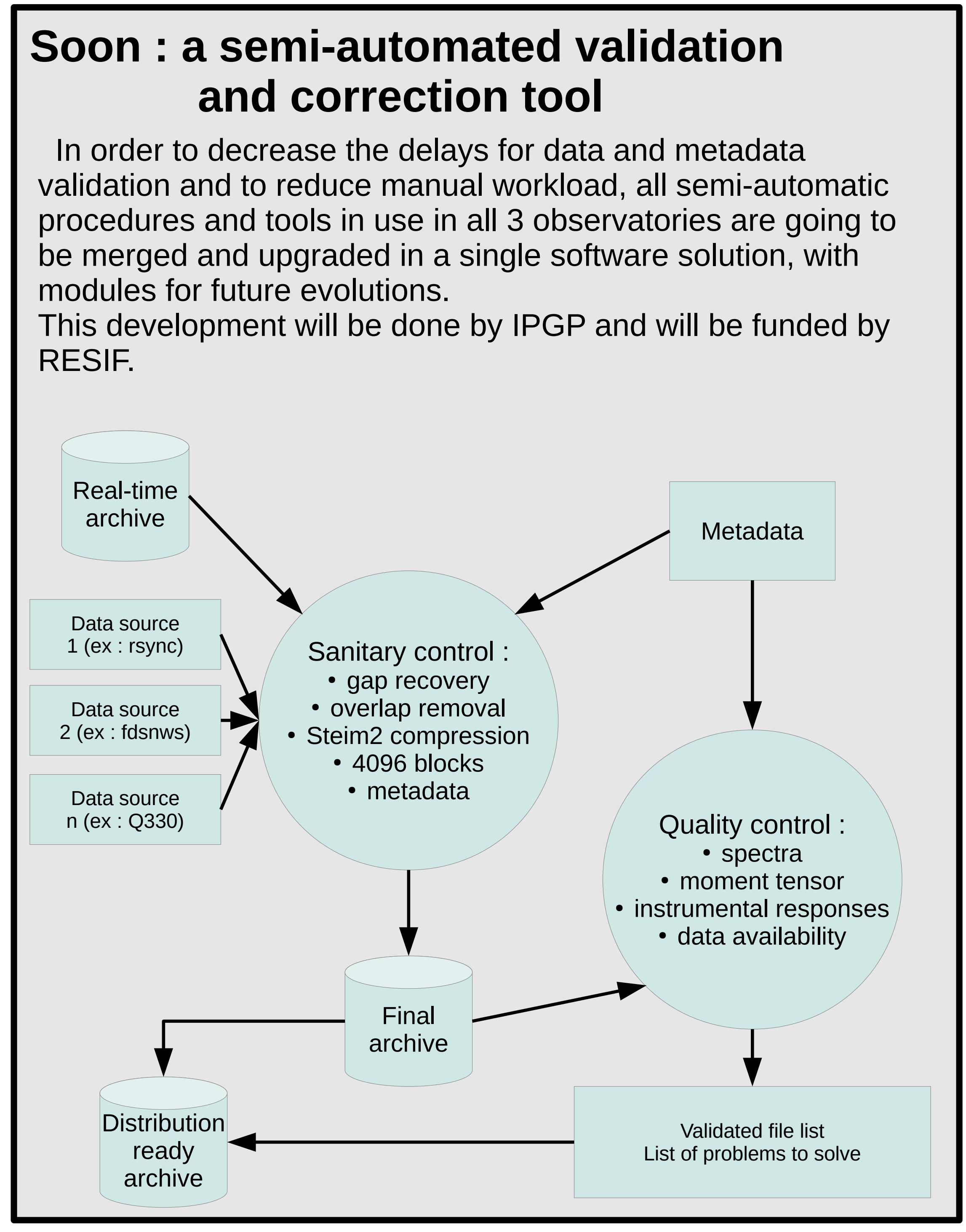
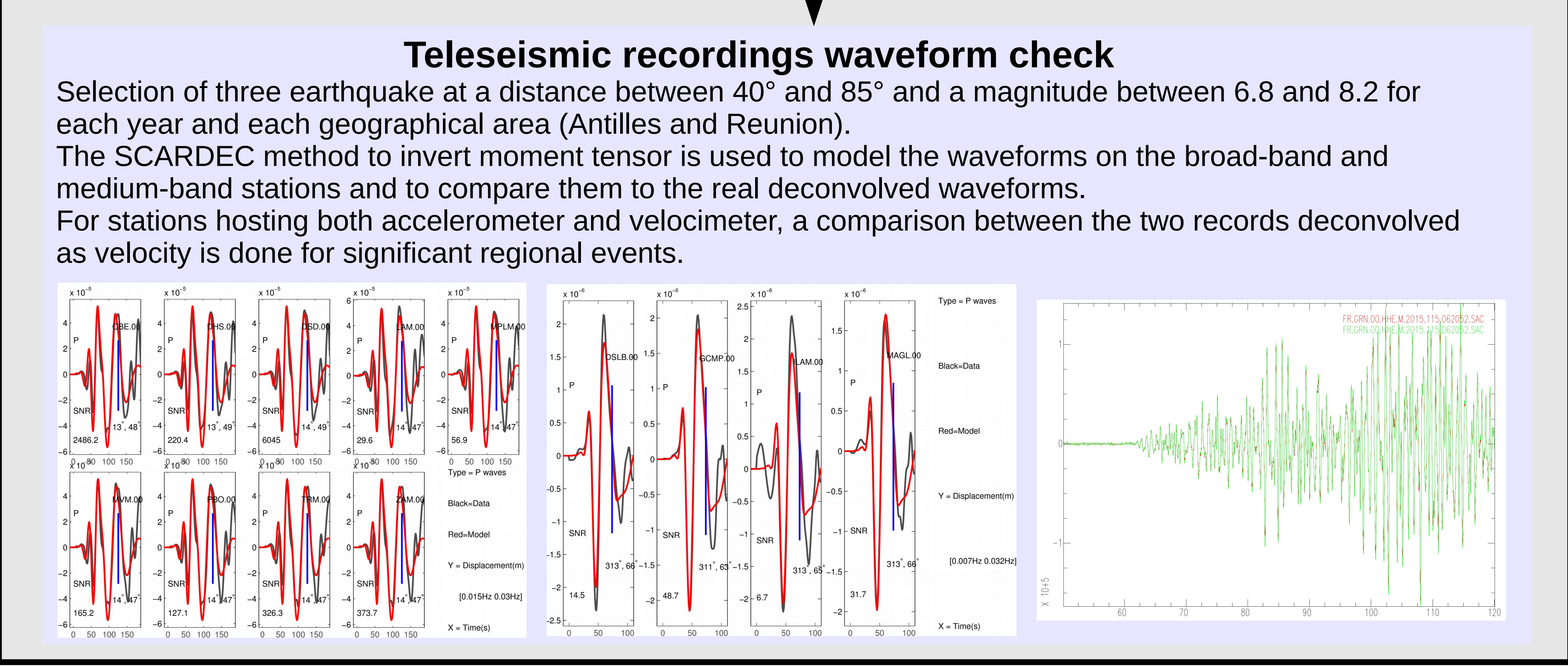
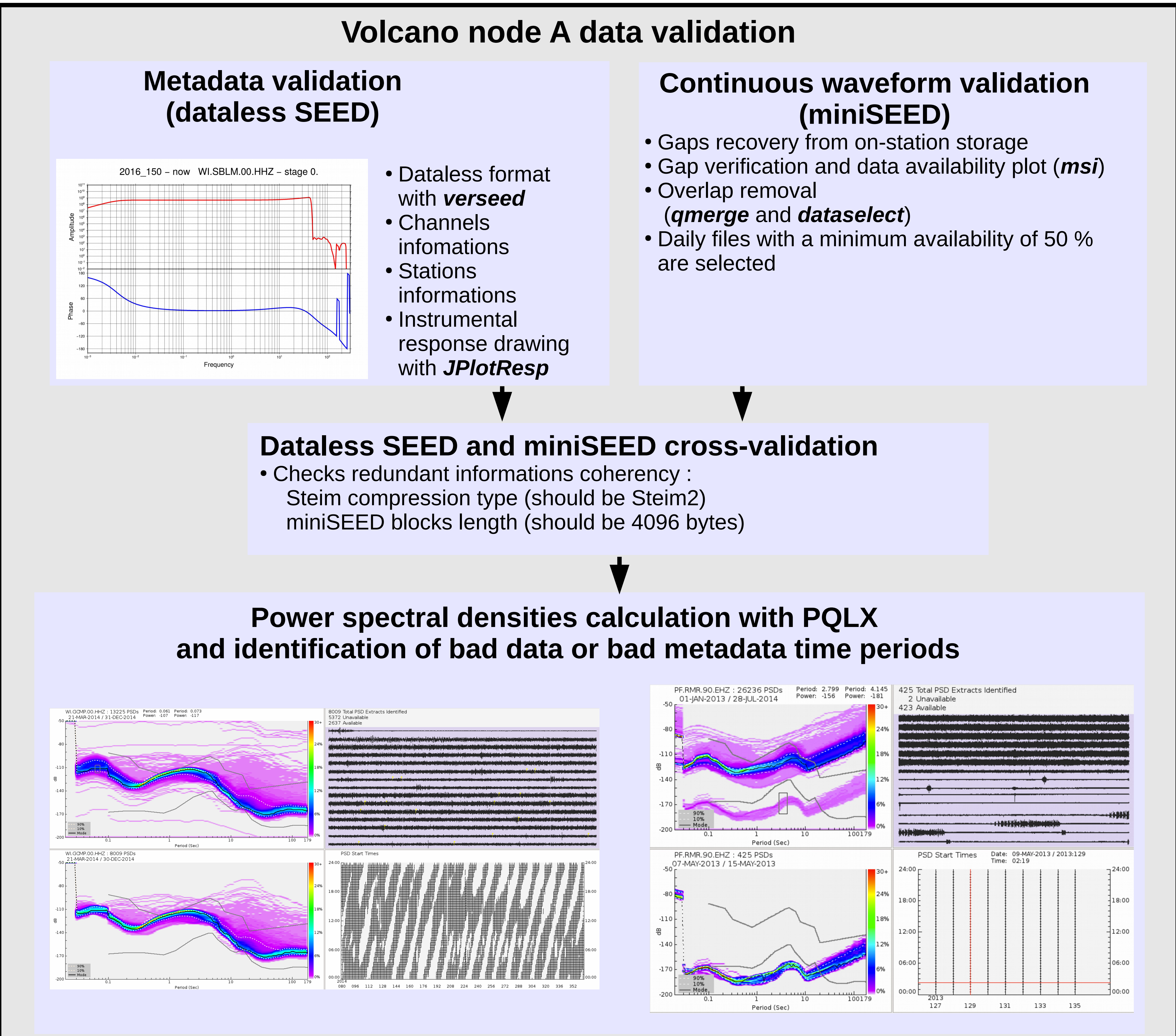
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Volcano node A collect seismological data from the 3 IPGP volcanic and seismic observatories. Those observatories operate analog short-period, digital short-period 3 component, medium-band and broad-band seismic stations.

- Seismic data are distributed under 4 distinct network codes :
- WI (180 channels) for the Antilles broad-band network (643 GB of available data as of 01/09/2017);
 - MQ (72 channels) for the local network in Martinique (286 GB of available data as of 01/09/2017);
 - GL (112 channels) for the local network in Guadeloupe (259 GB of available data as of 01/09/2017);
 - PF (179 channels) for the local network in La Réunion (1745 GB of available data as of 01/09/2017).



- Validation of all the initial metadata has been performed in 2015. Since then, updates are sent routinely to node B after validation.
- Real-time data transfert to the node B is working since end of 2015 for all the qualified stations of the 4 networks. This represents around 3GB of data per day for an average 500 channels.
- Data validation is performed yearly, within the framework of a Phd school training. Validated data are, after archival and last verifications at IPGP datacenter, sent to node B. Today, around 3TB of data have been validated for all the networks.
- The server used for data validation has been upgraded in 2016. It allows a more rapid and efficient work.
- Centralized storage bay at IPGP have been extended at the beginning of 2017 to achieve a 40TB capacity.
- All acquired data from all three observatories (including seismic data) are copied on an external data storage area (USPC Cumulus cloud) for safety.
- The IPGP data center virtualization platform is currently upgraded and services are being migrated from the old platform.



IPGP volcanic and seismic observatories are situated on tropical islands which are threatened by hurricanes. In 2017, two major hurricanes (above Saffir-Simpson category 3) have impacted the Antilles : IRMA on september 6th, 2017 and MARIA on september 18th and 19th, 2017, both category 5.

Those two hurricanes have caused damages on IPGP monitoring networks, particularly on OVSG network :

- Saint-Barthélémy broad-band station (WI.SBLM) has ceased transmission since IRMA eye passage.
- MARIA has damaged part of OVSG roof, leading to water invasion and electric damages on the installations.
- Some of Soufrière stations solar panels were wiped out and Wifi antennae damaged.
- VSAT reception antennae – the hub – have been damaged by MARIA. It's now out of service.

However, despite the electric shutdown in Martinique observatory (less than 24 hours) caused by rain infiltration, the vast majority of the regional broad-band network (WI network) have not been impacted. The three reception hubs (Guadeloupe, Martinique, Trinidad) design allowed to quickly route the data distribution of all the network from Martinique observatory.