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Corrigendum to the minimum bounds for future sea-level rise in ” Bounding sea level projections within the framework of the possibility theory ”

Gonéri Le Cozannet, Jean-Charles Manceau, Jeremy Rohmer

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Corrigendum to the minimum bounds for future sea-level rise in “Bounding sea level projections within the framework of the possibility theory”

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3 **Corrigendum to the minimum bounds for future sea-level rise in “Bounding sea level projections**
4 **within the framework of the possibility theory”**
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6 Gonéri Le Cozannet (1), Jean-Charles Manceau (1), Jeremy Rohmer (1)

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8 (1) BRGM, French Geological Survey, Orléans, France
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12 **Abstract:**

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14 Figures 3 and 4 of the article “Bounding probabilistic sea-level projections within the framework of the possibility
15 theory” display a minimum value for sea level rise of 15cm by 2100 with respect to the 1986–2005 mean for the
16 RCP 8.5. The value of 15cm is consistent with sea level rise rates dropping back to velocities observed during the
17 20th century according to recent studies, but not to the current sea level rise velocity of 3.4mm/yr, as incorrectly
18 stated in the article. This error has no impact on the rest of the article, including its arguments and conclusions,
19 but it is potentially confusing for scientists willing to reproduce the left side of Figures 3 and 4. We apology for
20 any inconvenient caused.
21

22
23 **Corrigendum**

24
25 In Figures 3 and 4 of Le Cozannet et al. (2017), we present a minimum value of sea level under RCP 8.5 equal to
26 15cm in 2100 with respect to a 1986-2005 mean.

27
28 This does not cohere with the justification provided for this value in section 2: “(...) the minimum value of future
29 sea-level projections can be derived from linear extrapolations of the current rates of 3.4mm/yr (Cazenave et al
30 2014)”. The latter approach would result in a minimum value of 35cm approximately.

31
32 The following correct justification is as follows: “(...) the minimum value of future sea-level projections can be
33 derived from linear extrapolations of **past rates. In Figures 3 and 4, we use a value of 15cm, which would imply**
34 **that the current sea level rise rate of 3.4mm/yr (Cazenave et al 2014) drops back to 20th century rates as**
35 **estimated by Hay et al. (2016) or Dangendorf et al. (2017) as soon as 2020. This value of 15cm is also equal to**
36 **the minimum value in the probabilistic projections provided by Kopp et al (2014).”**
37

38
39 Without this correction, the published version of the article is potentially confusing for scientists willing to
40 reproduce the left side of Figures 3 and 4. This error is due to failure of the authors (1) to summarize the lowest
41 bound of the possibility distribution appropriately, during the process of making the argument as concise as
42 possible; (2) to identify the resulting discrepancy between Figure 3 and 4 and the sentence mentioned above
43 during later edits and proof-readings.

44
45 The rest of the article (including figures, argument and conclusions) remains unchanged. This error has no impact
46 on the rest of the article, including its argument and conclusions. We apology for any inconvenient caused.
47

48 **References**

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4 framework of the possibility theory. *Environmental Research Letters*, 12(1), 014012.
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