

# Corrigendum: Bounding sea level projections within the framework of the possibility theory Environ. Res. Lett. (2017 12 014012)

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Corrigendum: Bounding sea level projections within the framework of the possibility theory *Environ. Res. Lett.* (2017 **12** 014012)

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#### Abstract

Figures 3 and 4 of the article 'Bounding probabilistic sea-level projections within the framework of the possibility theory' display a minimum value for sea level rise of 15 cm by 2100 with respect to the 1986–2005 mean for the RCP 8.5. The value of 15 cm is consistent with sea level rise rates dropping back to velocities observed during the 20th century according to recent studies, but not to the current sea level rise velocity of 3.4 mm yr<sup>-1</sup>, as incorrectly stated in the article. This error has no impact on the rest of the article, including its arguments and conclusions, but it is potentially confusing for scientists willing to reproduce the left side of figures 3 and 4. We apologise for any inconvenience caused.

#### Corrigendum

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 15 cm in 2100 with respect to a 1986–2005 mean.

This does not cohere with the justification provided for this value in section 2: '(...) the minimum value of future sea-level projections can be derived from linear extrapolations of the current rates of 3.4 mm yr<sup>-1</sup> (Cazenave *et al* 2014)'. The latter approach would result in a minimum value of 35 cm approximately.

The correct justification is as follows: '(...) the minimum value of future sea-level projections can be derived from linear extrapolations of past rates. In figures 3 and 4, we use a value of 15 cm, which would imply that the current sea level rise rate of 3.4 mm yr<sup>-1</sup> (Cazenave *et al* 2014) drops back to 20th century rates as estimated by Hay *et al* (2015) or Dangendorf *et al* (2017) as soon as 2020. This value of 15 cm is also equal to the minimum value in the probabilistic projections provided by Kopp *et al* (2014).'

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

The rest of the article (including figures, argument and conclusions) remains unchanged. This error has no impact on the rest of the article, including its argument and conclusions. We apologise for any inconvenience caused.

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