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3 Correction to “Long Term and Recent Changes in Sea Level in the Falkland Islands”

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14 AGU Index Terms: 4556 Sea Level; 1724 History of Geophysics: Ocean Sciences; 4513 Decadal  
15 Ocean Variability; 1225 Global Change from Geodesy

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17 Keywords: Southern Ocean sea level changes; James Clark Ross discoveries; Southern Ocean  
18 circulation

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21 In paragraph [47] of *Woodworth et al.* [2010] we adopted a value of -0.52 mm/yr for the estimated

22 rate of present-day sea level change in the Falkland Islands due to glacial isostatic adjustment

23 (GIA). This value was used to remove the contributions of GIA to our measurements of historical

24 and recent rates of sea level change. However, it was based on a mis-reading of the data file of

25 *Peltier* [2004] on the Permanent Service for Mean Sea Level web site

26 ([http://www.psmsl.org/train\\_and\\_info/geo\\_signals/gia/peltier](http://www.psmsl.org/train_and_info/geo_signals/gia/peltier)). More reasonable values to apply to

27 the observed changes since the mid-19<sup>th</sup> century and in recent years would be -0.69 and -0.61  
28 mm/yr respectively. Consequently, the long-term rate of sea level change between 1842 and the  
29 early 1980s, after correction for air pressure effects and for GIA, reported as  $+0.75 \pm 0.35$  mm/yr  
30 in paragraphs [1,47,55,61] should be  $+0.92 \pm 0.35$  mm/yr, the corresponding rate between 1842 and  
31 the mid-point of recent data of  $1.06 \pm 0.22$  mm/yr in paragraphs [48,55] should be  $1.23 \pm 0.22$   
32 mm/yr, and the corresponding rate since 1992 reported as  $2.51 \pm 0.58$  mm/yr in paragraphs [1,52]  
33 becomes  $2.60 \pm 0.58$  mm/yr. The middle of paragraph [63] becomes “The Stanley data suggest that  
34 the rate of change of sea level in East Falkland since 1992 has been approximately 2.6 mm/yr, a  
35 rate supported by information from satellite altimetry.” These small GIA model corrections have no  
36 bearing on the main findings of our paper on the difference in the rates of sea level change between  
37 the historical (1842 to present day) and recent (last two decades) epochs.

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#### 39 References

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43 Woodworth, P.L., D.T. Pugh, and R.M. Bingley (2010), Long term and recent changes in sea level  
44 in the Falkland Islands, *J. Geophys. Res.*, 115, C09025, doi:10.1029/2010JC006113.

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