



## Corrigendum to

# “A new Geoengineering Model Intercomparison Project (GeoMIP) experiment designed for climate and chemistry models” published in Geosci. Model Dev., 8, 43–49, 2015

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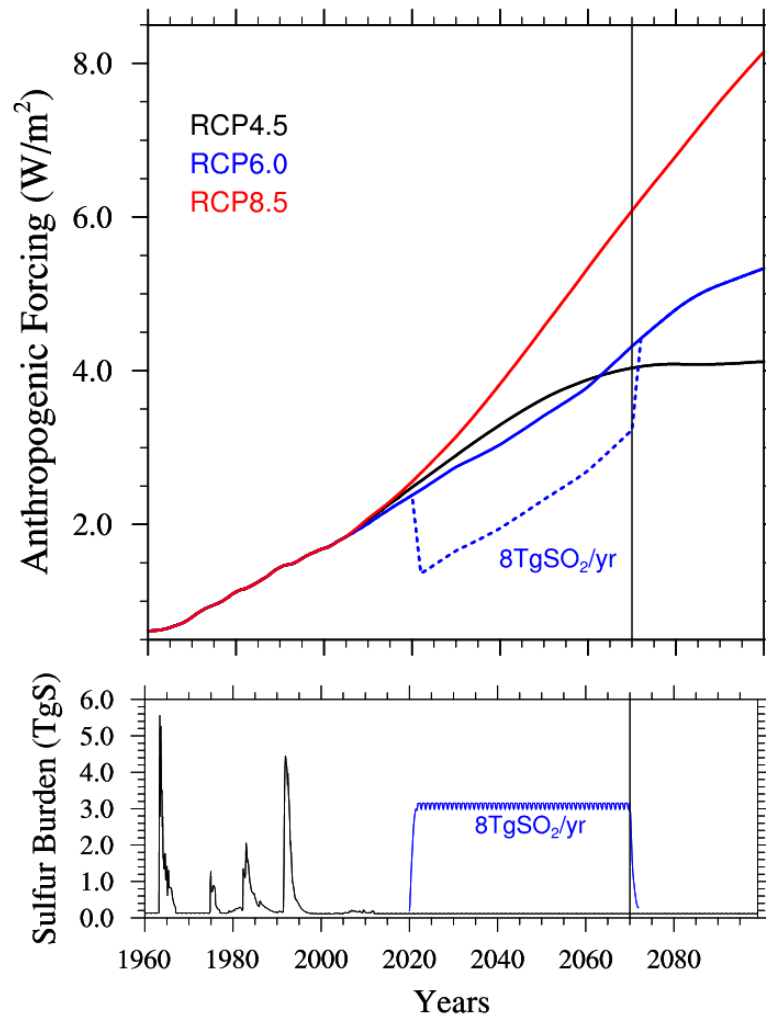
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During the production of the bottom panel of Fig. 1, the calculation of the total sulfur burden (in the form of H<sub>2</sub>SO<sub>4</sub>) based on the emission of 8 Tg SO<sub>2</sub> per year had a mistake. This resulted in a wrong illustration of the actual aerosol burden of the Geoengineering Model Intercomparison Project (GeoMIP) experiment G4 specified stratospheric aerosol (G4SSA) that is provided to the community, available at <http://dx.doi.org/doi:10.5065/D64B2ZCW>. The amount of aerosol in the data set has not changed, only the graph of it. The revised Fig. 1 shows the stratospheric sulfur burden (instead of the total atmospheric burden) for the prescribed aerosol data sets recommended by the Chemistry Climate Model Initiative (CCMI) for reference simulations (black) and for G4SSA (blue). Modeling groups are advised to only use the provided mass for the stratosphere and zero out aerosol mass from this distribution below the tropopause of their model. Based on the revised Fig. 1, the data set that is discussed in this paper has the same stratospheric burden of  $3.10 \pm 0.06$  Tg S for each year between 2022 and 2071.

## References

Meinshausen, M., Smith, S. J., Calvin, K., Daniel, J. S., Kainuma, M. L. T., Lamarque, J.-F., Matsumoto, K., Montzka, S. A., Raper, S. C. B., Riahi, K., Thomson, A., Velders, G. J. M., and Vuuren, D. P.: The RCP greenhouse gas concentrations and their extensions from 1765 to 2300, *Climatic Change*, 109, 213–241, doi:10.1007/s10584-011-0156-z, 2011.



**Figure 1.** Top panel: total anthropogenic radiative forcing of the CMIP5 model experiments RCP4.5 (black), RCP6.0 (blue), and RCP8.5 (red) (Meinshausen et al., 2011). The dashed line indicates the radiative forcing of the GeoMIP experiment for CCMI, using a prescribed aerosol distribution assuming an emission of 8 Tg SO<sub>2</sub> per year. The amount of radiative forcing reduction due to the enhanced aerosol burden is estimated based on the ECHAM5-HAM model (see text). Bottom panel: stratospheric sulfur burden in Tg S (in the form of sulfate aerosol), based on the CCMI-recommended aerosol data set (black) and the new GeoMIP experiment data set (blue), based on an 8 Tg SO<sub>2</sub> per year emission case.