

## ***Interactive comment on “A new Geoengineering Model Intercomparison Project (GeoMIP) experiment designed for climate and chemistry models” by S. Tilmes et al.***

### **Anonymous Referee #1**

Received and published: 22 August 2014

This manuscript describes the G4SSA experiment of GeoMIP. It is a necessary document for the experiment. It is short, clear and deserves to be published in GMD. I have one minor comment.

Abstract (L5 and L16): How will an intercomparison of model simulations with prescribed aerosol concentrations from a single model help us understand the composition of the atmosphere? The composition will be the same in every model. It seems like the earlier G4 GeoMIP experiment (described in L5-6) does more to understand the composition of the atmosphere than this new intercomparison. Oh, now I see when reading Section 3 that you're referring to ozone changes (not aerosol changes) when you are referring to composition. Are there many models that could not participate in the G3  
C1467

and G4 experiments because they don't have aerosols that do have ozone chemistry? Regardless, good to be more specific about what you mean about composition.

---

Interactive comment on Geosci. Model Dev. Discuss., 7, 5447, 2014.