

*Interactive comment on “**ModelE2-TOMAS development and evaluation using aerosol optical depths, mass and number concentrations**” by Y. H. Lee et al.*

The comments from the Exec Editor, Dr. Lunt, are shown in italics with our response shown after each.

*This highlights some requirements of papers published in GMD, which is also available on the GMD website in the ‘Manuscript Types’ section:*

*In particular, please note that for your paper, the following requirements have not been met in the Discussions paper – please correct this in your revised submission to GMD.*

*“– The paper must be accompanied by the code, or means of accessing the code, for the purpose of peer-review. If the code is normally distributed in a way which could compromise the anonymity of the referees, then the code must be made available to the editor. The referee/editor is not required to review the code in any way, but they may do so if they so wish. “*

*“– All papers must include a section at the end of the paper entitled “Code availability”.*

*In this section, instructions for obtaining the code (e.g. from a supplement, or from a website) should be included; alternatively, contact information should be given where the code can be obtained on request, or the reasons why the code is not available should be clearly stated. ”*

Response) The ModelE2-TOMAS code can be provided upon the request. However, it is not a trivial task to compile and run the model in a new computer environment, as the model has been developed and simulated in a NASA NCCS supercomputer ([http://www.nccs.nasa.gov/discover\\_front.html](http://www.nccs.nasa.gov/discover_front.html)).

It is worth note that the previous version of ModelE2 (NASA GISS ModelE, which has been used for IPCC AR4 simulations) has been publicly available: see the details in <http://www.giss.nasa.gov/tools/modelE/>. Making a “public” version of ModelE (ModelE2) is beyond the responsibility of climate/chemistry modeling experts like us. Computer experts have been involved on this to make the codes friendlier in any kind of compute environments. With NASA’s ongoing effort, ModelE2 model code will be available to public within next a few years. Unfortunately, the TOMAS aerosol microphysics model was not a part of standard version of ModelE2.