

In stage 2, there is one spreadsheet per MP per model and each of these spreadsheets has one set of gas requirements. In each file, some values are highlighted from the stage 1 collection. Every requirement needs to be signed off as correct.

MODEL: model A  
MP: DECK

CO2E is values imported from the collection stage 1

| Requirement Name                  | Requirement description  | Requirement Rationale  | Conformance Matrix | Conformance a Matrix required for MP? | Details of requirement implementation (mandatory / optional / otherwise optional) | Dataset                                    | Dataset version | Dataset modifications           | Conform? (and down stream tasks) | Note in 5 - data modification COPIED TO PUBLISHED CONFORMANCE DOCUMENTS |
|-----------------------------------|--|--|--------------------|---------------------------------------|---|--|-----------------|---------------------------------|----------------------------------|---|
| 1% per year CO2 increase          | Impose a 1% per year increase in the concentration of atmospheric carbon dioxide and quadrupling   | To derive the transient climate response.  | CONFORMS           | N                                     | NONE DETAIL   | NA   | NA              | NA                              |                                  |   |
| Historical Climate Ray Forcing    | CMIP5 recommends the use of the CRAC-CRS (Climate Ray induced Cascade Application for Carbon Ray induced location) model extended application for Carbon atmospheric (Johnson et al. 2010). The results of the CRAC-CRS model are presented in the Ussler and Knutson 2006 to give an idea of production rate as a function of the climate response via the barometric pressure and geopotential height response via geopotential height response via modulation pattern 5). | Climate ray (CR, predominantly positive and alpha particles), also included in the list, are the main source of ionization in the troposphere and lower stratosphere. While the connection between CR ionization and cloud production and therefore convection is still under debate, its chemical impact via ozone-depleting catalytic cycles and subsequent dynamical forcing are more well understood (Collis et al. 2011). | <mandatory>        | Y                                     | <mandatory>   | SOLARIS-HEVEN Stage Forcing Data for CMIP5 | 5.0.4.3         | <update>                        |                                  |   |
| Historical Open Burning Emissions | Emissions from fires in forests and grasslands   | Forest and savannah fires are significant sources of smoke and greenhouse products. They produce high quantities of carbon and polluted organic compounds, methyl chloride, carbon monoxide and nitrogen oxides.   | CONFORMS           | N                                     |   | Historical Emissions for CMIP 5 (5)        |                 | REGRESSED IN A TERRIBLE FASHION |                                  |   |

