

SPARC SOLARIS & HEPPA intercomparison activities: Overview of SOLARIS activities

Katja Matthes[†]; Kunihiro Koderu; SOLARIS consortium

[†] Helmholtz Centre Potsdam, GFZ, Germany

Leading author: matthes@gfz-potsdam.de

SPARC-SOLARIS is an international working group studying the effects of solar influence on climate, with special focus on the importance of middle atmosphere chemical and dynamical processes and their coupling to the Earth's surface, using state-of-the art chemistry-climate models (CCMs) as well as mechanistic models and observations. We foster and initiate detailed studies of the "top-down" solar UV and the "bottom-up" TSI mechanisms, as well as the impact of high energy particles. In addition, SOLARIS aims to provide a platform for the coordination and discussion of solar-related studies. This includes recommendations for the solar irradiance and solar proton flux data used to drive middle atmosphere and climate models within, e.g., the SPARC-CCMVal initiative and the CMIP5 simulations. The poster will highlight recent SOLARIS activities, coordinated model studies and future plans.