



PROGRESS: Fusion of forecasts from the Sun to the Earth

Robertus Erdelyi (1), Richard Boynton (1), Simon Walker (1), Tony Arber (2), Keith Bennett (2), Natalia Ganushkina (3), Stepan Dubyagin (3), Peter Wintoft (4), Magnus Wik (4), Michael Liemohn (5), Bart van der Holst (5), Yuri Shprits (6), Angelica Tibocho (6), and Volodya Krasnoselskikh (7)

(1) University of Sheffield, Sheffield, United Kingdom (simon.walker@sheffield.ac.uk), (2) University of Warwick, Coventry, UK, (3) FMI, Helsinki, Finland, (4) IRF-Lund, Sweden, (5) University of Michigan, Ann Arbor, Michigan, USA, (6) GFZ, Potsdam, Germany, (7) LPC2E, Orleans, France

PROGRESS, PRediction Of Geospace Radiation Environment and Solar wind parameterS, is an Horizon 2020 funded project that aims to provide accurate and reliable forecasts of the geospace environment and its response to space weather events. PROGRESS focuses on three broad topics, 1) the forecast of the state of the solar wind at L1 based on GONG magnetograms, 2) the evolution of geomagnetic activity as expressed by the geomagnetic indices Kp, Dst, and AE, and 3) the characterisation of the electron environment of the radiation belts.

This presentation provides an overview of the tools and models developed and shows examples for the forecasts generated.