[EE] Evening Poster | P (Space and Planetary Sciences) | P-EM Solar-Terrestrial Sciences, Space Electromagnetism & Space Environment

[P-EM12]Space Weather, Space Climate, and VarSITI

convener:Ryuho Kataoka(National Institute of Polar Research), Antti A Pulkkinen (NASA Goddard Space Flight Center), Kanya Kusano(名古屋大学宇宙地球環境研究所, 共同), Kazuo Shiokawa(Institute for Space-Earth Environmental Research, Nagoya University)

Thu. May 24, 2018 5:15 PM - 6:30 PM Poster Hall (International Exhibition Hall7, Makuhari Messe) Past, Present, and Future of Solar-Terrestrial Environment is the keynote of this session. We share the latest scientific papers to understand how the solar-terrestrial environment changes in various time scales, and discuss the necessary international collaboration projects associated with VarSITI. More specifically, welcomed papers include space climate studies using tree rings and ice cores; cutting-edge observational and modeling studies of geospace, heliosphere and the sun; simulation and statistical studies to predict the future space weather and space climate.

[PEM12-P15]High precision measurement of carbon-14 content in tree rings from the Maunder Minimum

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Keywords:grand solar minima, solar cycle, cosmogenic nuclide

Time series of cosmogenic nuclide such as carbon-14 in tree rings and beryllium-10 in polar ice cores provide the information on the variations of cosmic rays, solar activity, and heliospheric environment in the past. Carbon-14 in tree rings provide those information with no dating uncertainties for the past several thousand years. We are conducting high-precision measurement of carbon-14 in tree rings for around the grand solar minima, aiming at obtaining the information on the transition of solar cycle lengths as well as the detailed variations of galactic cosmic rays. In this paper, we present our recent results of the high-precision measurement using the Accelerator Mass Spectrometer at the Yamagata University.