R010-15

Zoom meeting C : 11/4 AM2 (10:45-12:30)

11:30-11:45

太陽活動極小期の発生プロセスの詳細解析に向けて

#宮原 ひろ子¹⁾,門叶 冬樹²⁾,森谷 透²⁾,堀内 一穂³⁾ 1)武蔵野美大・教養文化,²⁾山形大・理,³⁾弘前大・理工

Towards a detailed analysis of the onset process of the grand solar minimum

#Hiroko Miyahara¹⁾, Fuyuki Tokanai²⁾, Toru Moriya²⁾, Kazuho Horiuchi³⁾

1) Humanities and Sciences, Musashino Art Univ., ²⁾ Yamagata Univ., ³⁾ Hirosaki Univ.

In this presentation, we report our recent attempts to reveal the detailed onset process of the grand solar minima. Annually measured carbon-14 data have suggested that solar cycles got lengthened during the grand minimum and that it had even started a few cycles before the onset. In order to accurately determine the transition of the cycle lengths around the onset of the grand minima, we are improving the precision of the measurements with Accelerator Mass Spectrometer at Yamagata Univ. We have also developed a new methodology to reconstruct past solar and cosmic-ray variations using carbonate deposits. We introduce the present status of our experiments and discuss future prospects.