Comparisons of Co-incident Ionospheric Plasma Observations Between FORMOSAT-5/AIP and Millstone Hill Incoherent Scatter Radar

*Yi-Wun Chen¹, Chi-Kuang Chao¹

1. Graduate Institute of Space Science, National Central University, Taiwan

Advanced Ionospheric Probe (AIP) onboard FORMOSAT-5 satellite has routinely measured ionospheric plasma parameters, like ion concentration, velocity, and temperature in a sun-synchronous circular orbit at 720 km altitude along 2230 local-time sector since November 2017. AIP has found that the satellite has a much lower potential with respective to environmental plasma from measured current-voltage curves. A comparison study shall be performed to identify possible bias on the derived AIP parameters. Co-incident observations have been scheduled with Millstone Hill incoherent scatter radar during 30 January to 1 February 2019. In this poster, preliminary comparison results will be outlined and will be used to improve accuracy of the AIP measurement in the future.

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