

# IAC 2017: Space Weather Laboratory



## *Applications to Ionospheric Research*

GNSS Antenna and Receiver

IITI-ISRO MoU



IRNSS Antenna and Receiver



**GNSS Facility:** GPS (L1=1575.42 MHz, L2=1227.60 MHz and L5=1176.45 MHz Coarse/Acquisition signals)

GLONASS(G1=1602 MHz and G2=1246 MHz Coarse/Acquisition signals)

GALILEO(Frequencies: L1, E5a=L5, E5b=1207.14 MHz)

**IRNSS Facility:** The receiver has dual-frequency mode of operation in IRNSS using L5(1176.45 MHz) and S1(2492.028 MHz) band. In addition, it can process L1(1575.42 MHz) Coarse/Acquisition signals from GPS.

The system supports 34 channels: 11 channels for L5 and S band each and 12 channels for L1 band. Receiver generates navigation solution using various modes: L5 only, S only, L5+S, L5+L1, L5+S, and L5+S+L1.