

Exhibit G –Antenna Gain Patterns

To facilitate the FCC’s coordination efforts, provided in this exhibit is additional information regarding the antenna gain patterns for the space-based and Earth-based stations.

1.1 Satellite gain patterns

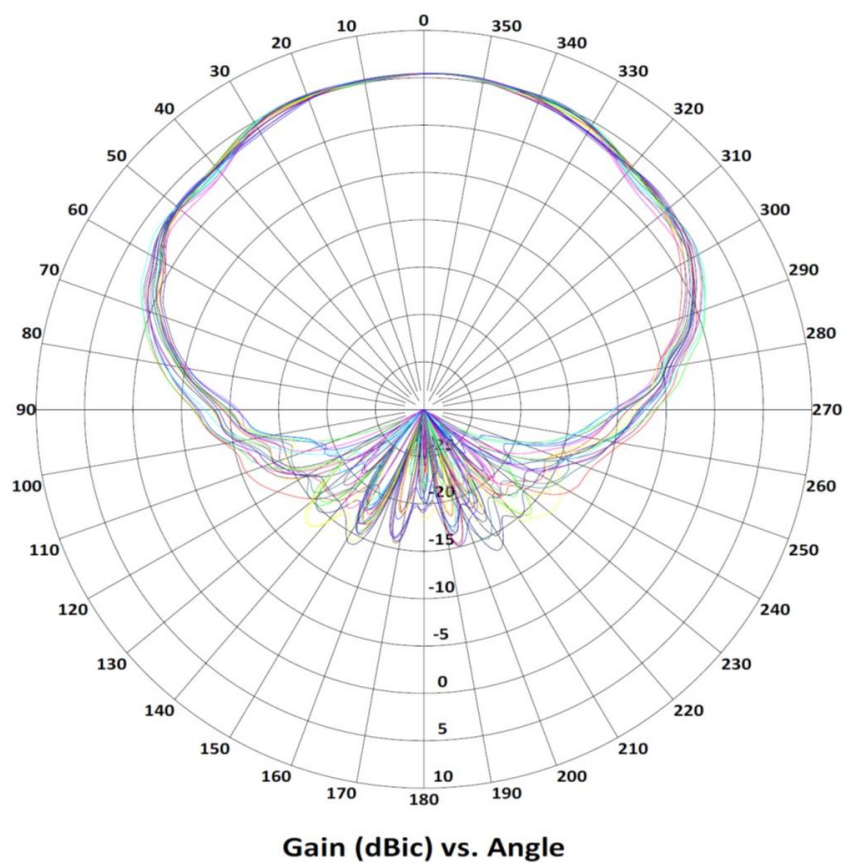


Figure 1.1-1. Space-based S-band receive antenna pattern at 2.081 GHz

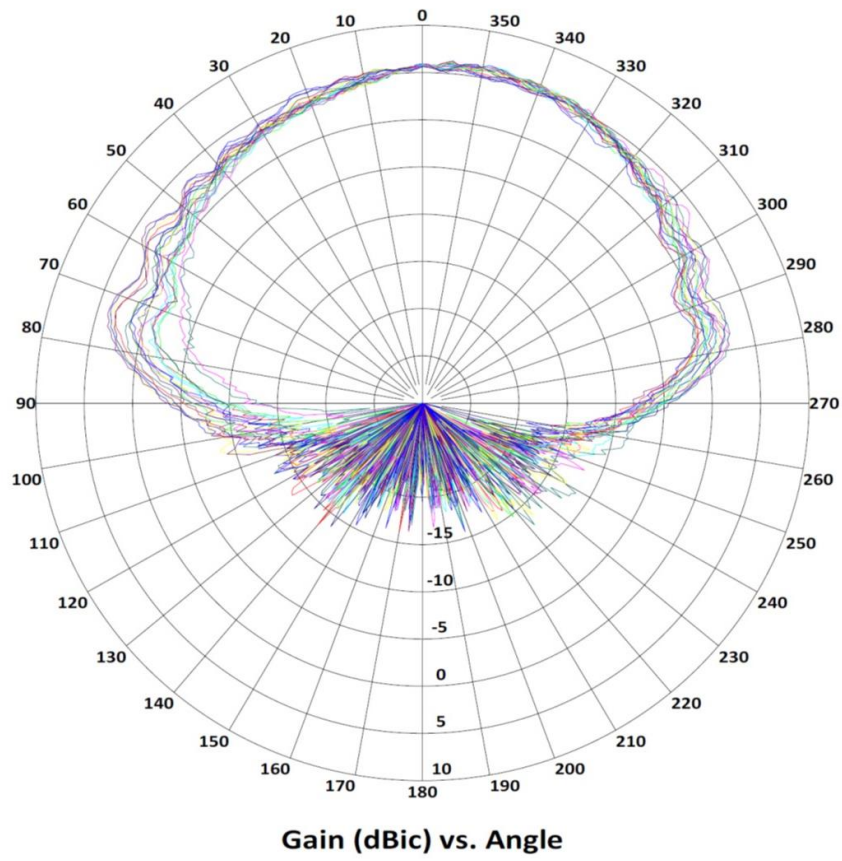


Figure 1.1-2. Space-based X-band transmit antenna pattern at 8.260 GHz

1.2 Ground station patterns

1.2.1 KSAT stations

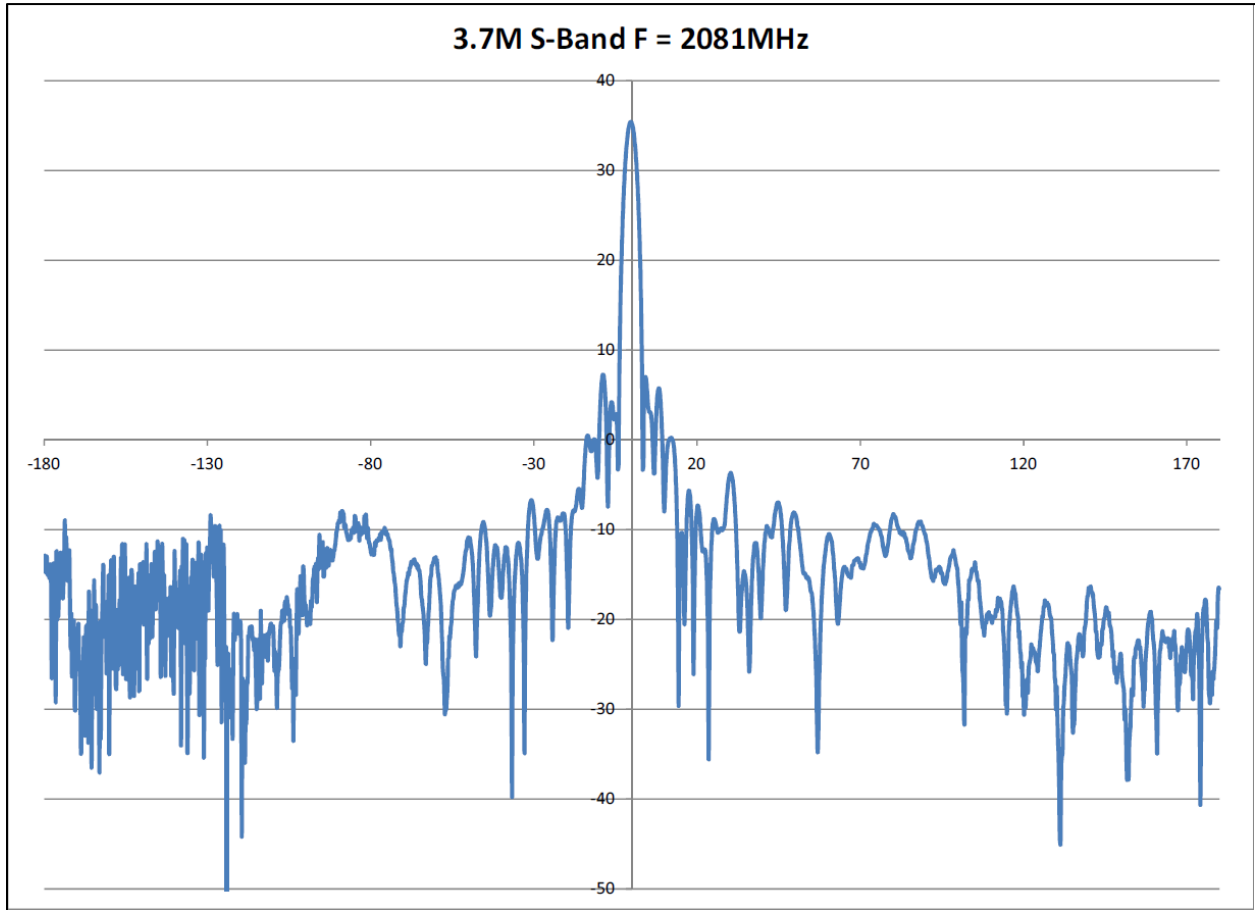


Figure 1.2-1. Svalbard, Norway, Troll, Antarctica, Hartebeesthoek, South Africa, and Punta Arenas, Chile 3.7 m dish: S-band at 2.081 GHz

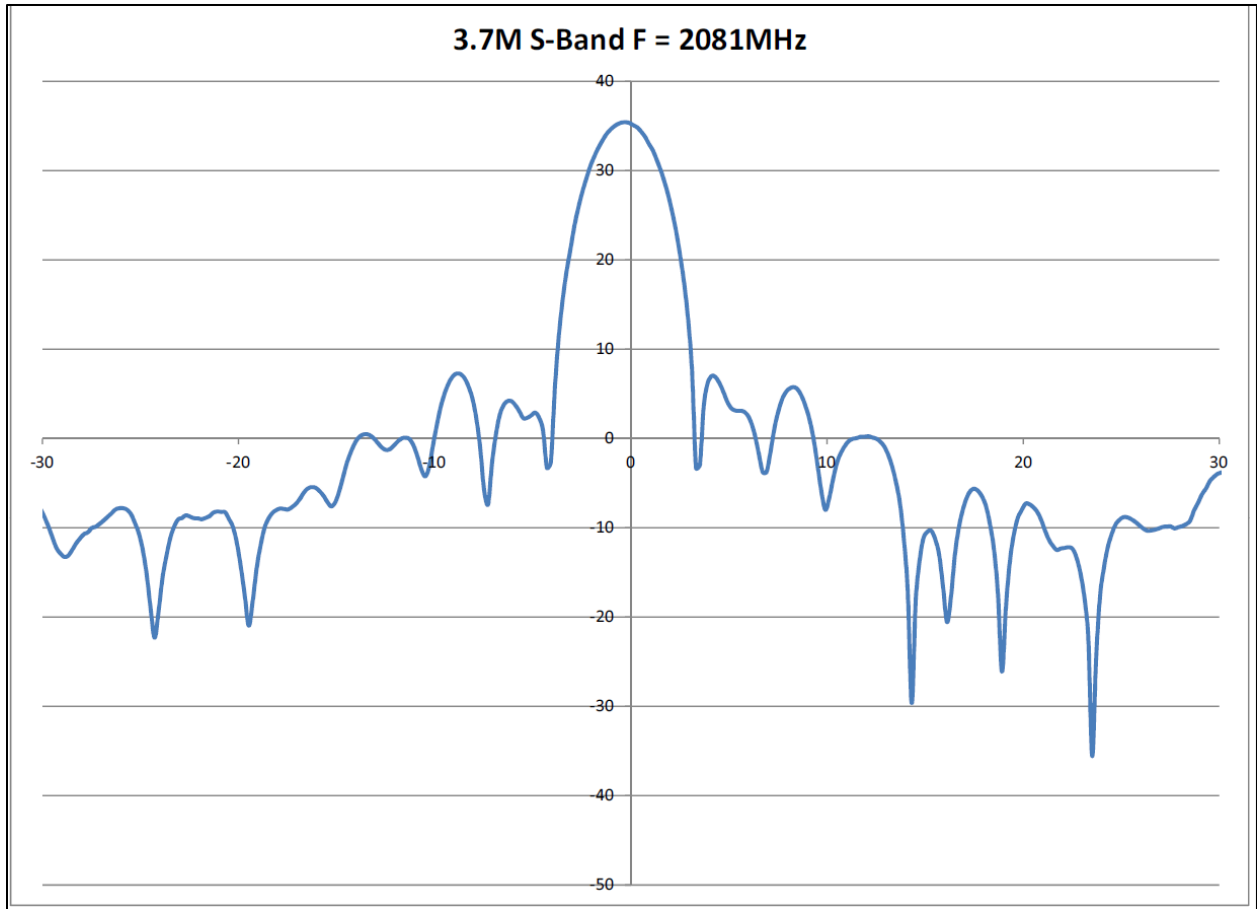


Figure 1.2-2. Svalbard, Norway, Troll, Antarctica, Hartebeesthoek, South Africa, and Punta Arenas, Chile 3.7 m dish: S-band at 2.081 GHz zoomed in

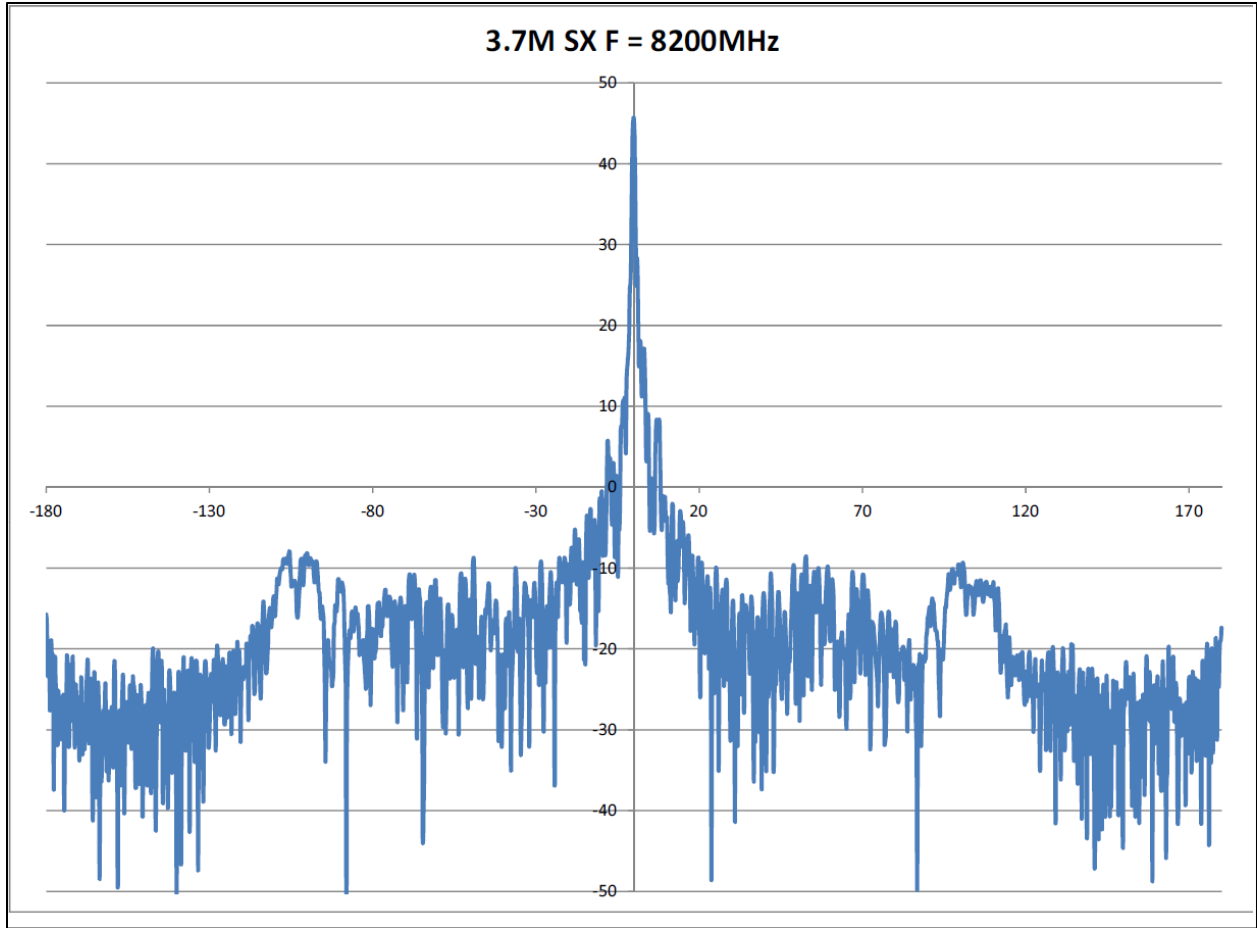


Figure 1.2-3. Svalbard, Norway, Troll, Antarctica, Hartebeesthoek, South Africa, and Punta Arenas, Chile 3.7 m dish: X-band at 8.200 GHz

1.2.2 ATLAS stations

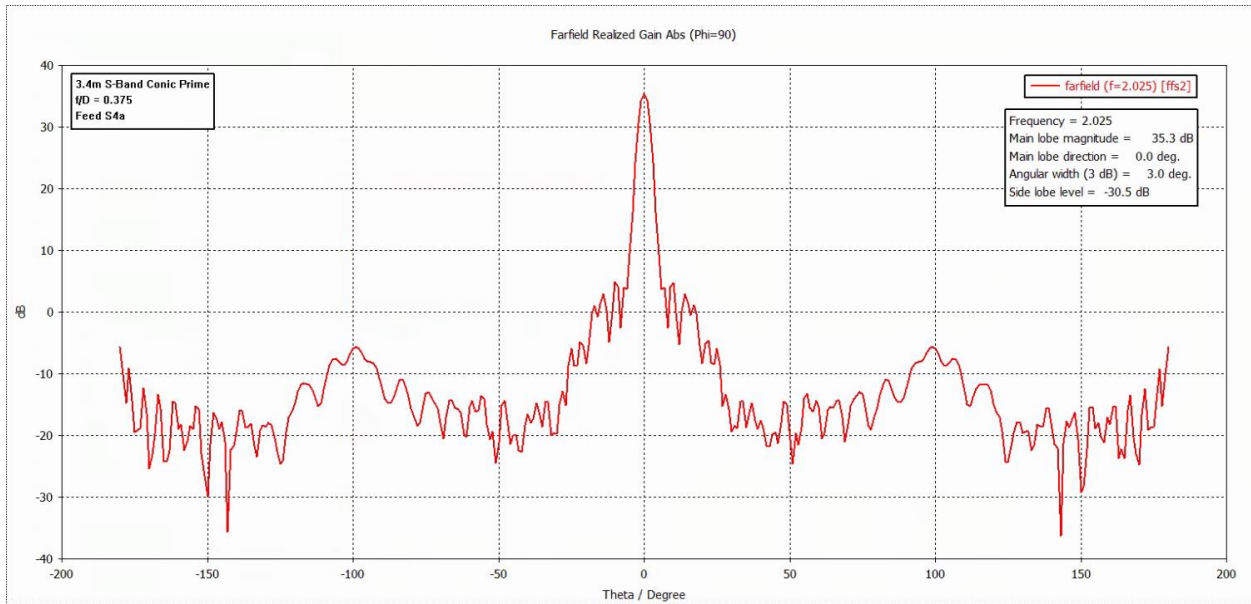
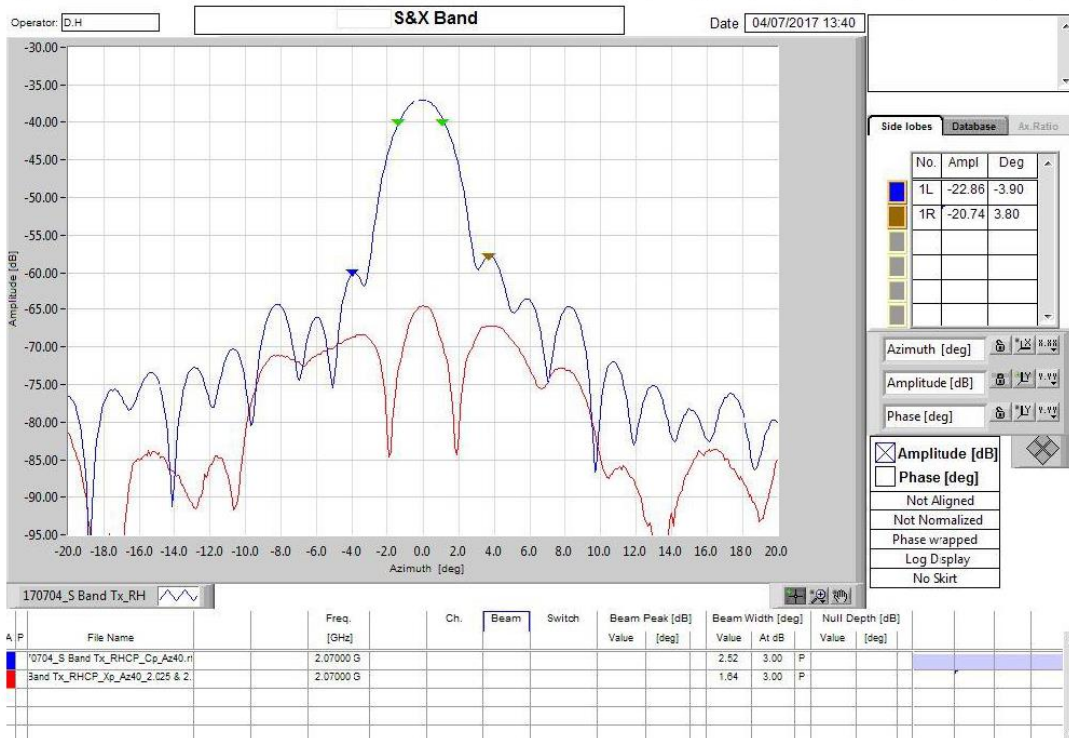
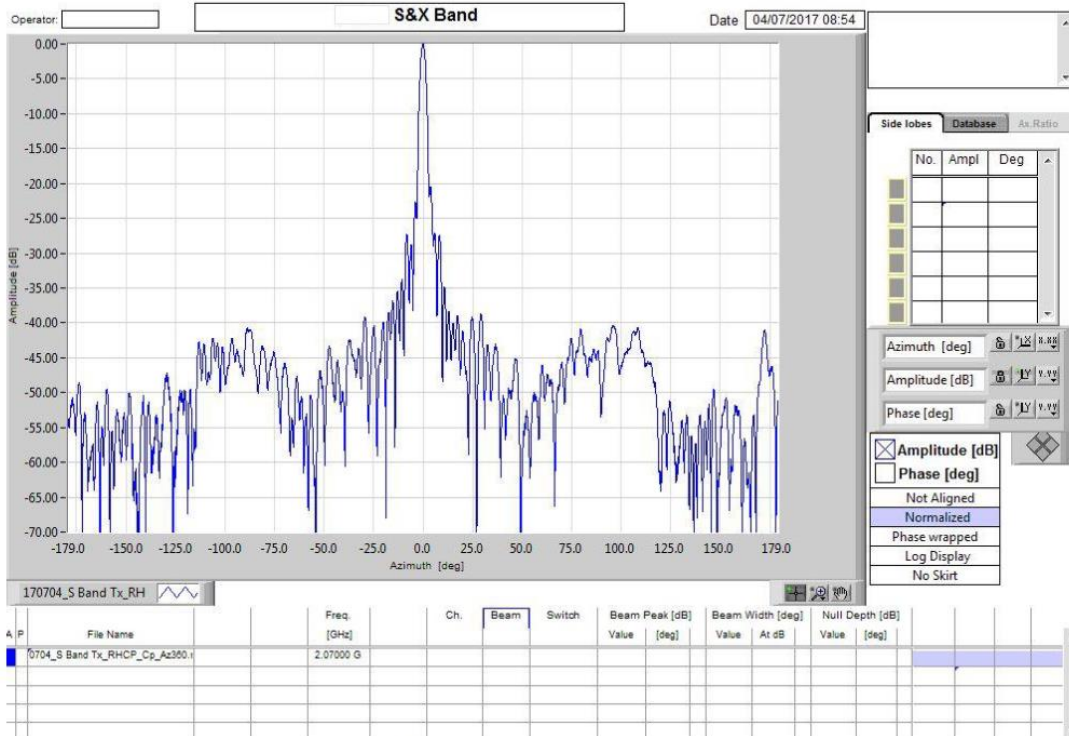


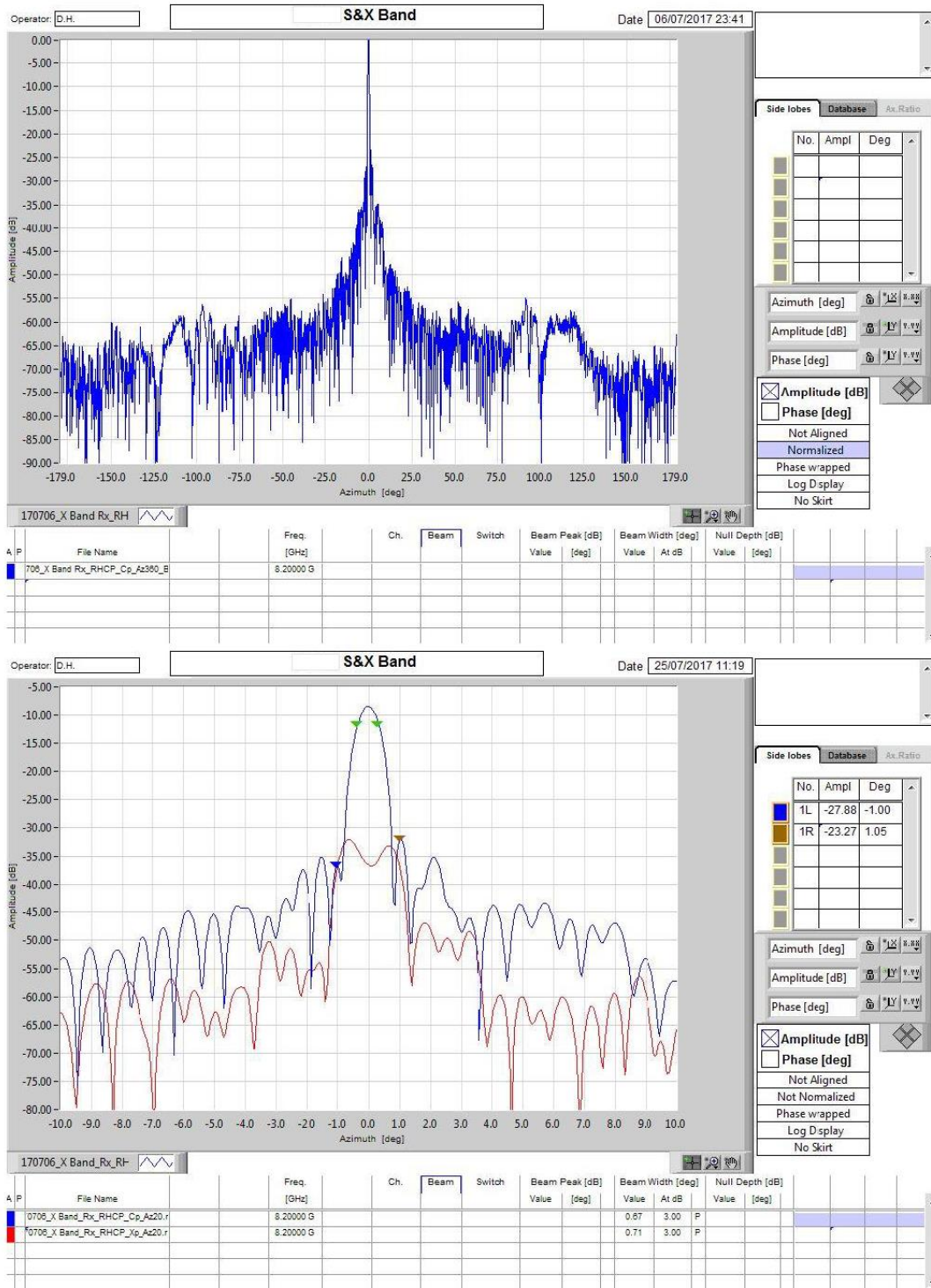
Figure 1.2-4. Chitose, Japan 3.4 m dish: S-band at 2.025 GHz

Chitose, Japan 3.4 m dish: X-band not available at this station



Graph 2 – S-Band Tx RHCP ±180° CP; ±20° CP & XP @2070MHz

Figure 1.2-5. Tahiti, French Polynesia and Harmon, Guam 3.7 m dish: S-band at 2.070 GHz



Graph 14 – X-Band Rx RHCP ±180° CP; ±10° CP & XP @8200MHz

Figure 1.2-6. Tahiti, French Polynesia and Harmon, Guam 3.7 m dish: X-band at 8.200 GHz

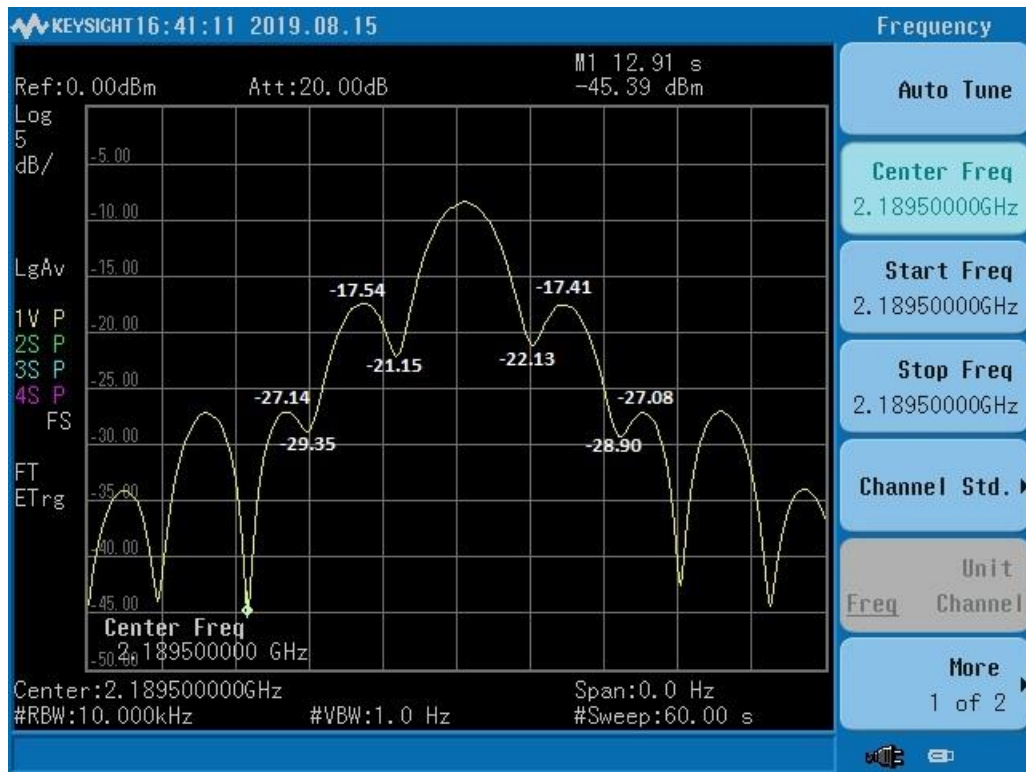


Figure 1.2-7. Dubai, United Arab Emirates and Longovilo, Chile 7.6 m dish: S-band at 8.1895 GHz

Dubai, United Arab Emirates and Longovilo, Chile 7.6 m dish: X-band pending information

Fairbanks, Alaska 9.1 m dish: S-band and X-band pending information