

Spacecraft: Cassini

DSS: 63

Monitor File: S99SROI2017_110_0520_63_MON.ecsv

APPLICABLE_START_TIME = 2017-110T05:20:09.455;

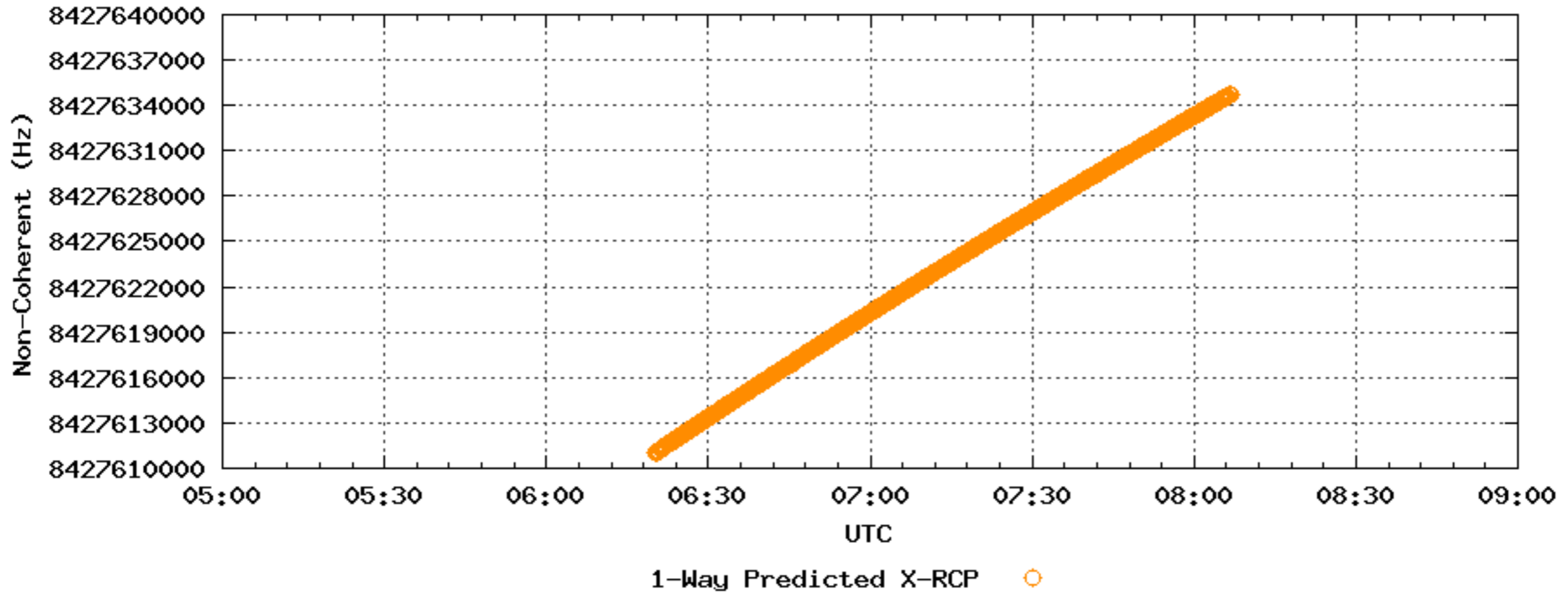
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60 minutes omitted from beginning of file

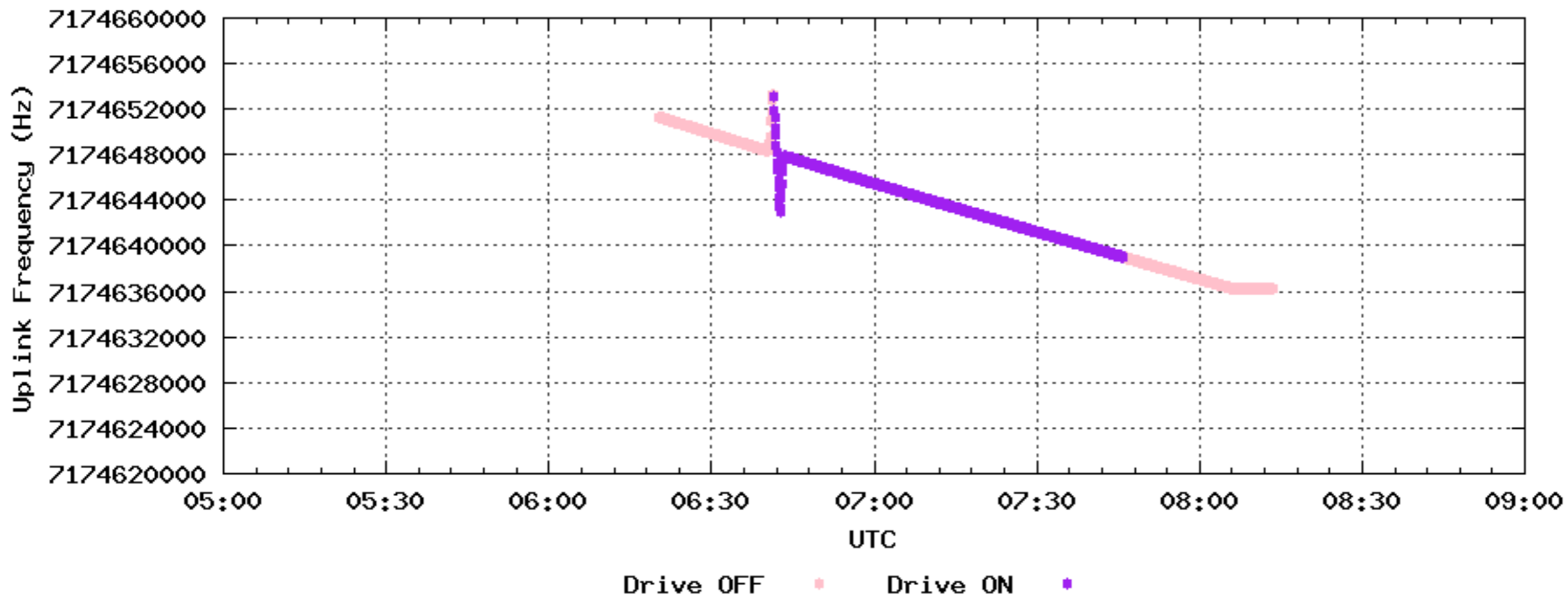
5 minutes omitted from end of file

02. X-Band Measured Carrier Frequency, Predicted Carrier Frequency,
and Residual Frequency
03. Uplink Frequency and Power
04. Carrier Loop Tracking Bandwidth
05. Subreflector Tracking Status
06. AGC Voltage
07. Azimuth & Elevation
08. Weather: Air Temperature, Dew Point Temperature, Relative Humidity,
Precipitation Rate, and Barometric Pressure
09. Wind Speed and Direction
10. Conscan Drive Status
11. Azimuth & Elevation Residuals
12. Index

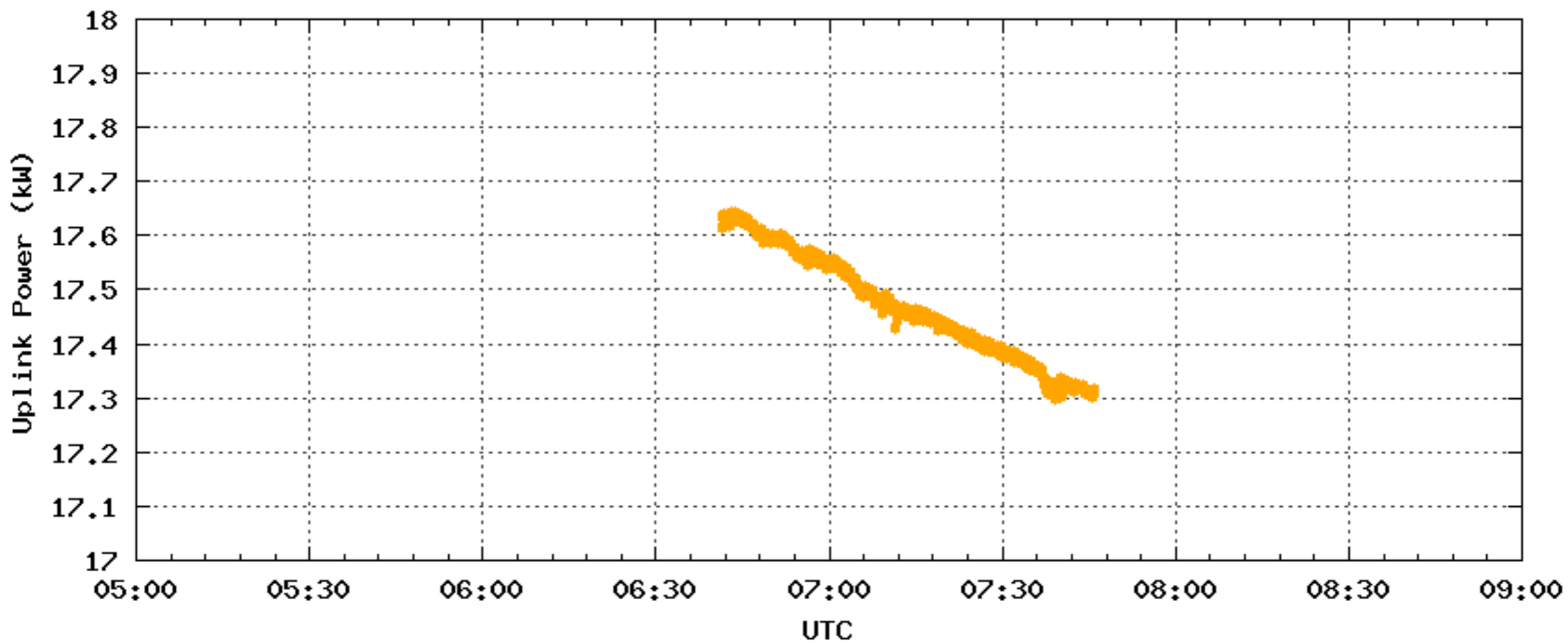
2017/110 D55-63 X-Band Measured and Predicted Carrier Frequency



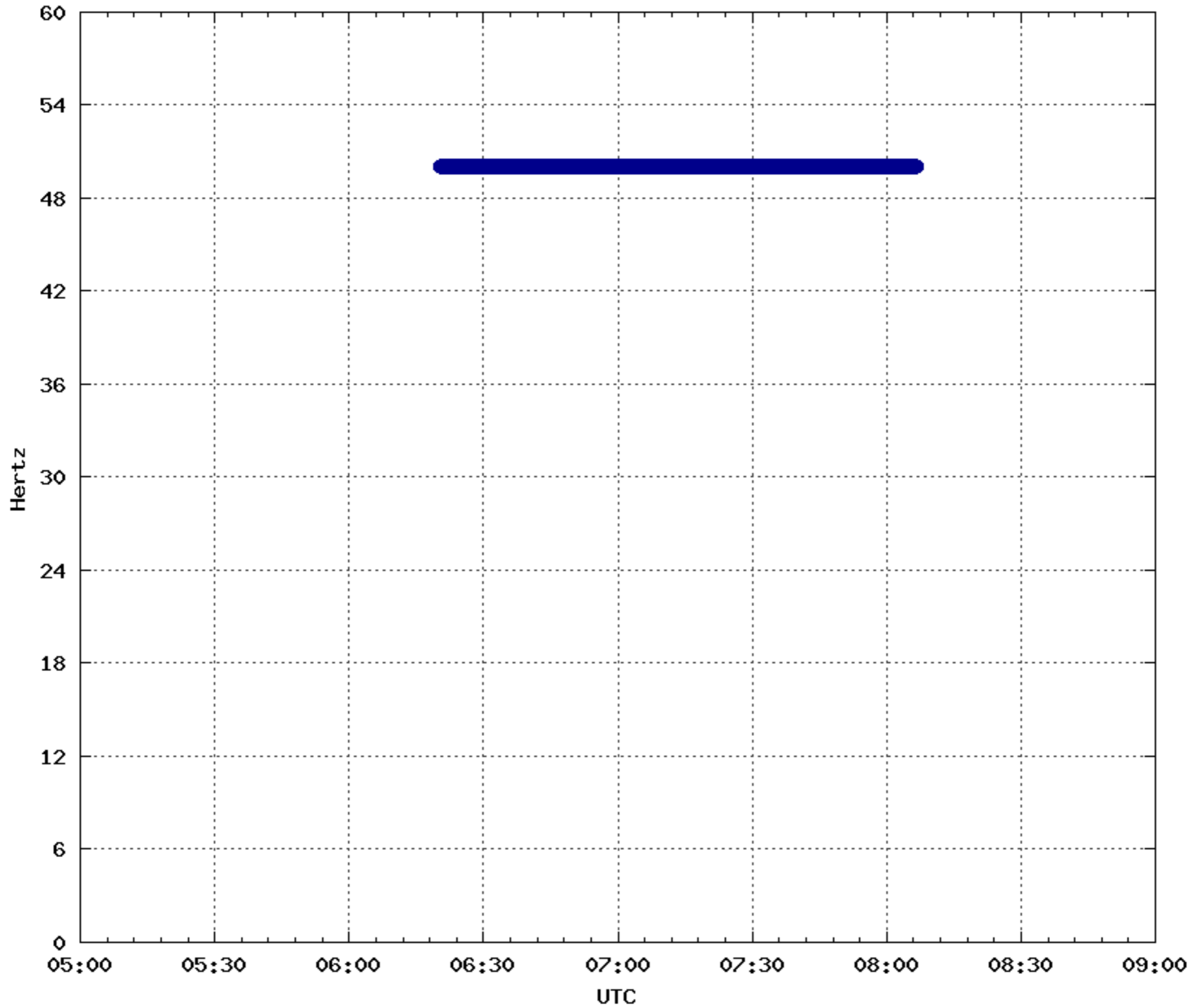
2017/110 DSS-63 Uplink Frequency



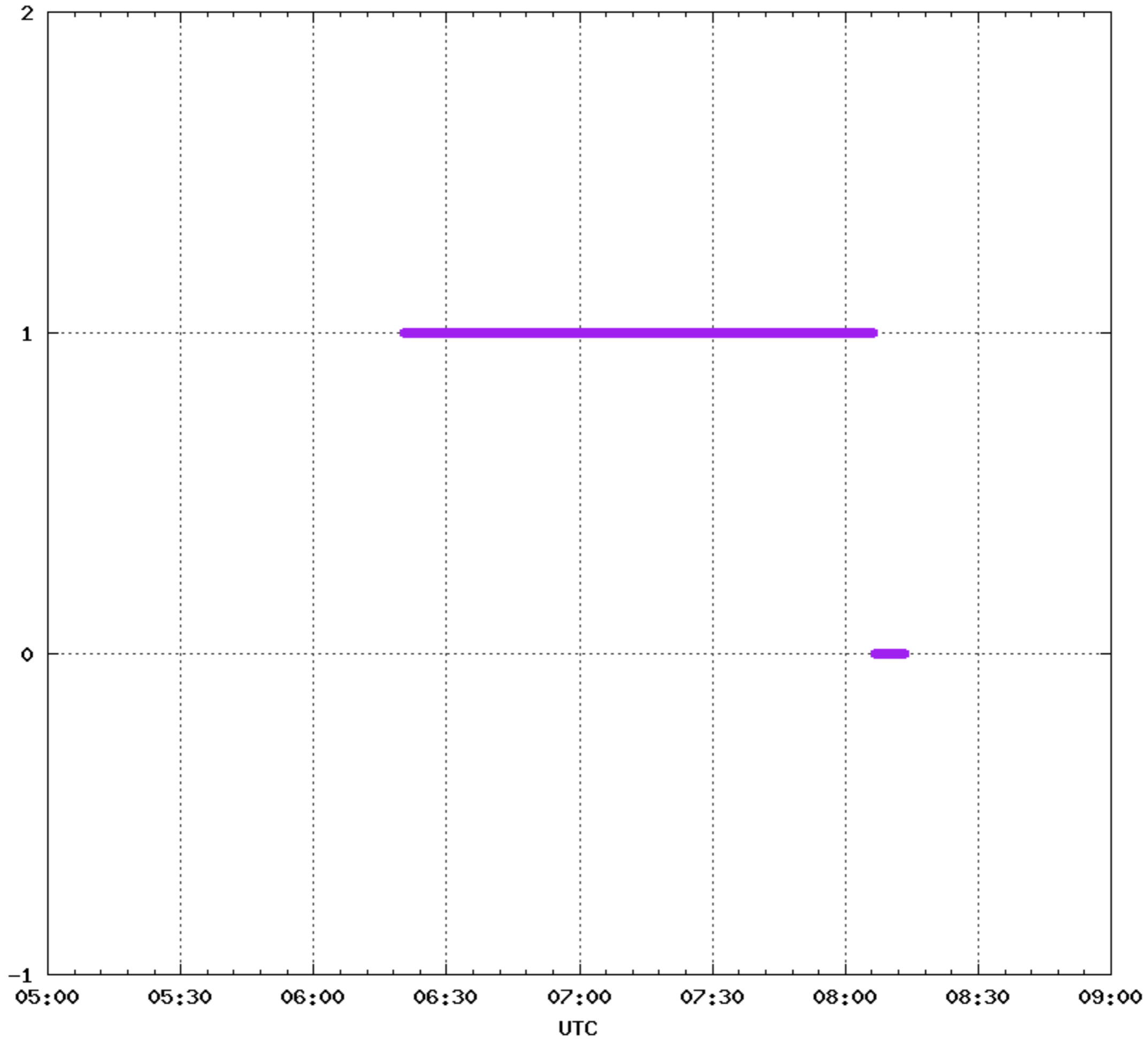
2017/110 DSS-63 Uplink Power (with TXR ON and when > 1)



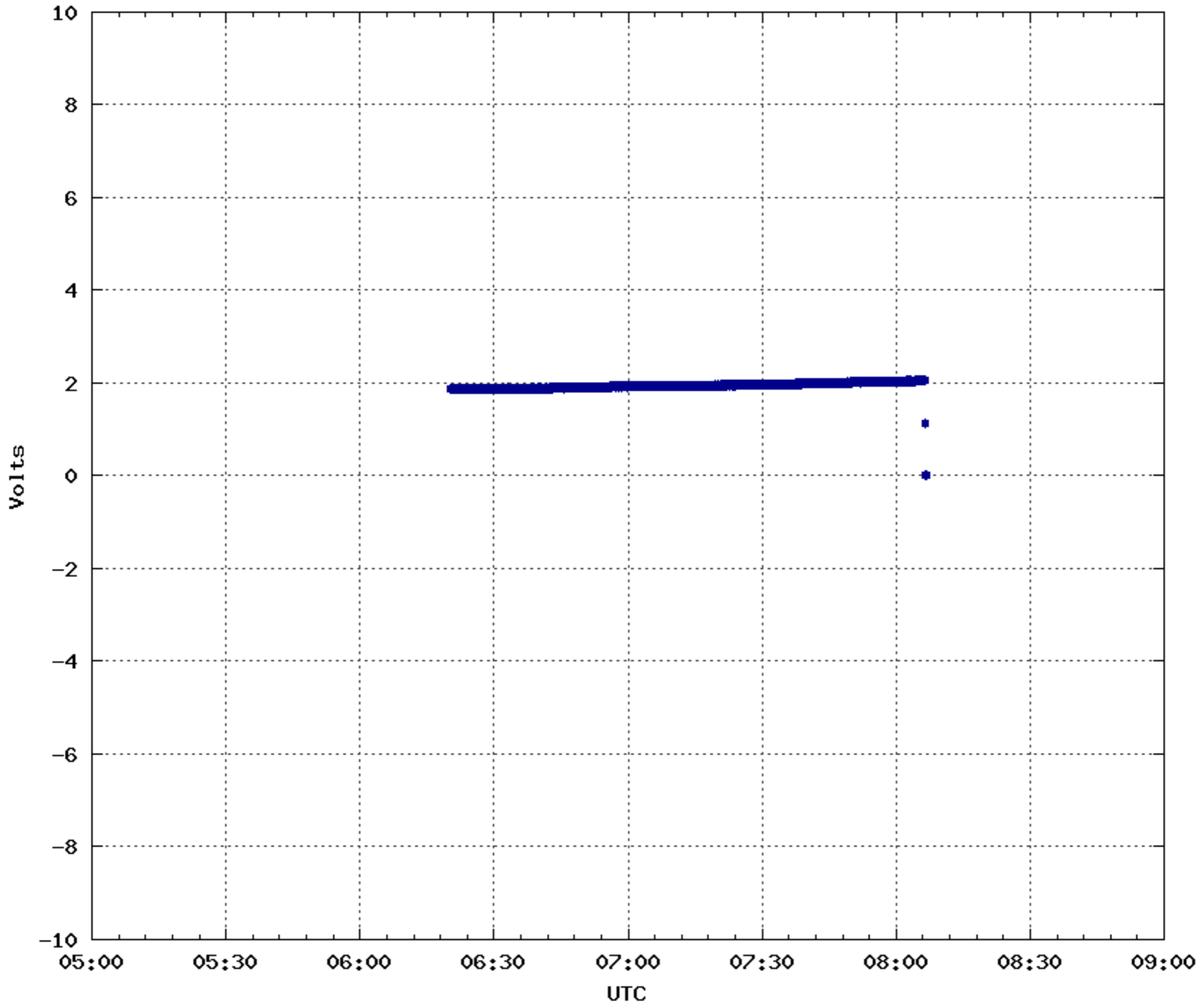
2017/110 DSS-63 Carrier Loop Tracking Bandwidth



2017/110 D55-63 Subreflector Tracking Status (Tracking = 1; Not Tracking = 0)

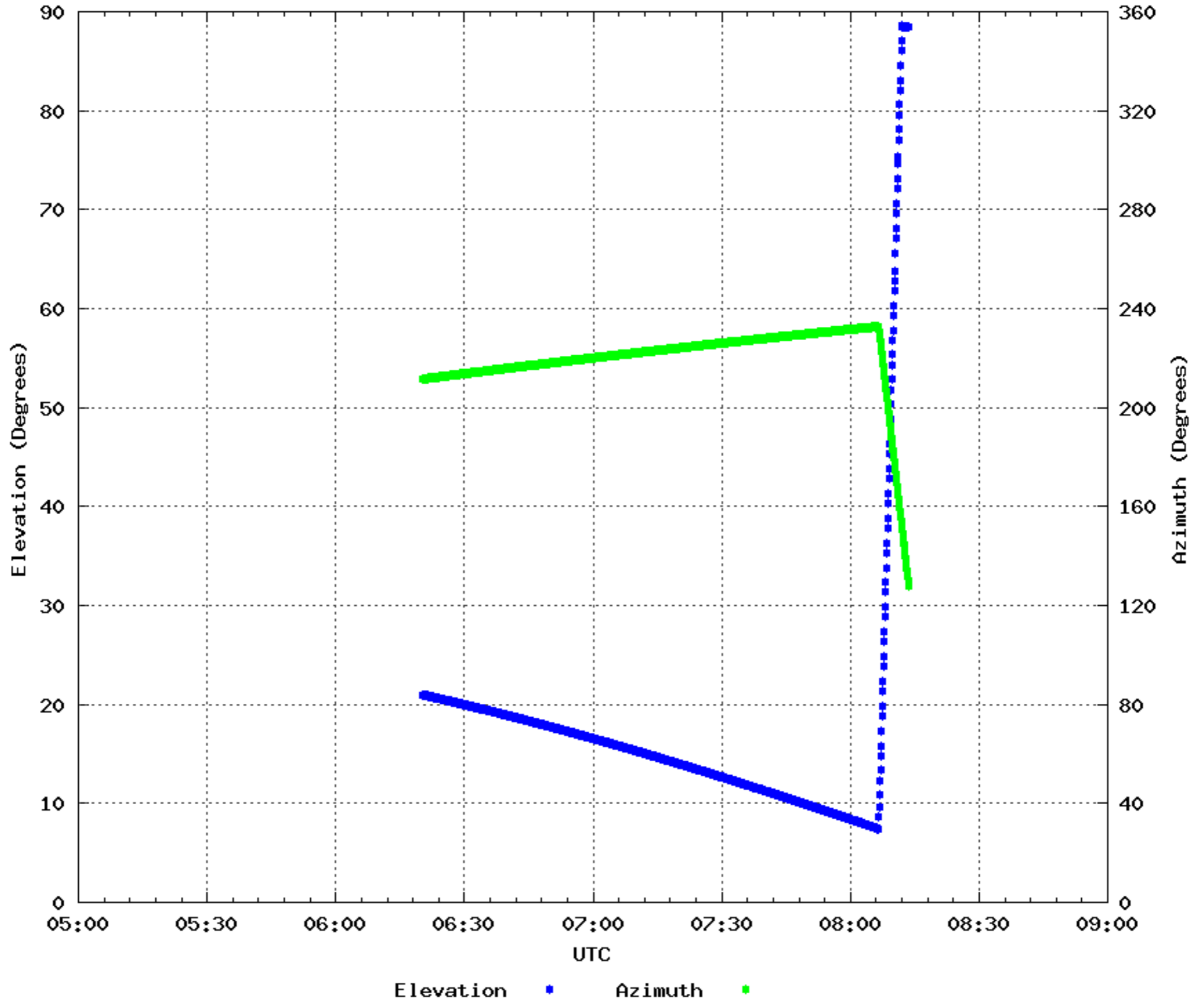


2017/110 DSS-63 Total Power Automatic Gain Control (AGC) Voltage

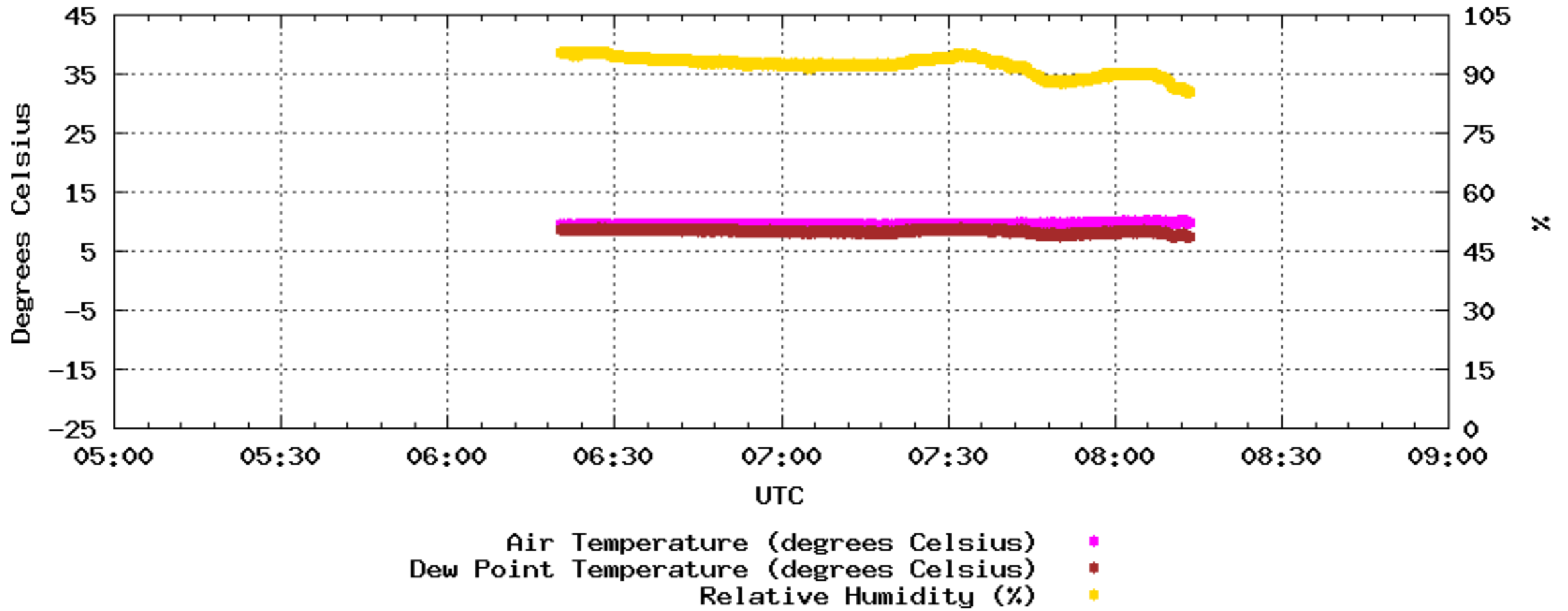


X-RCP ■

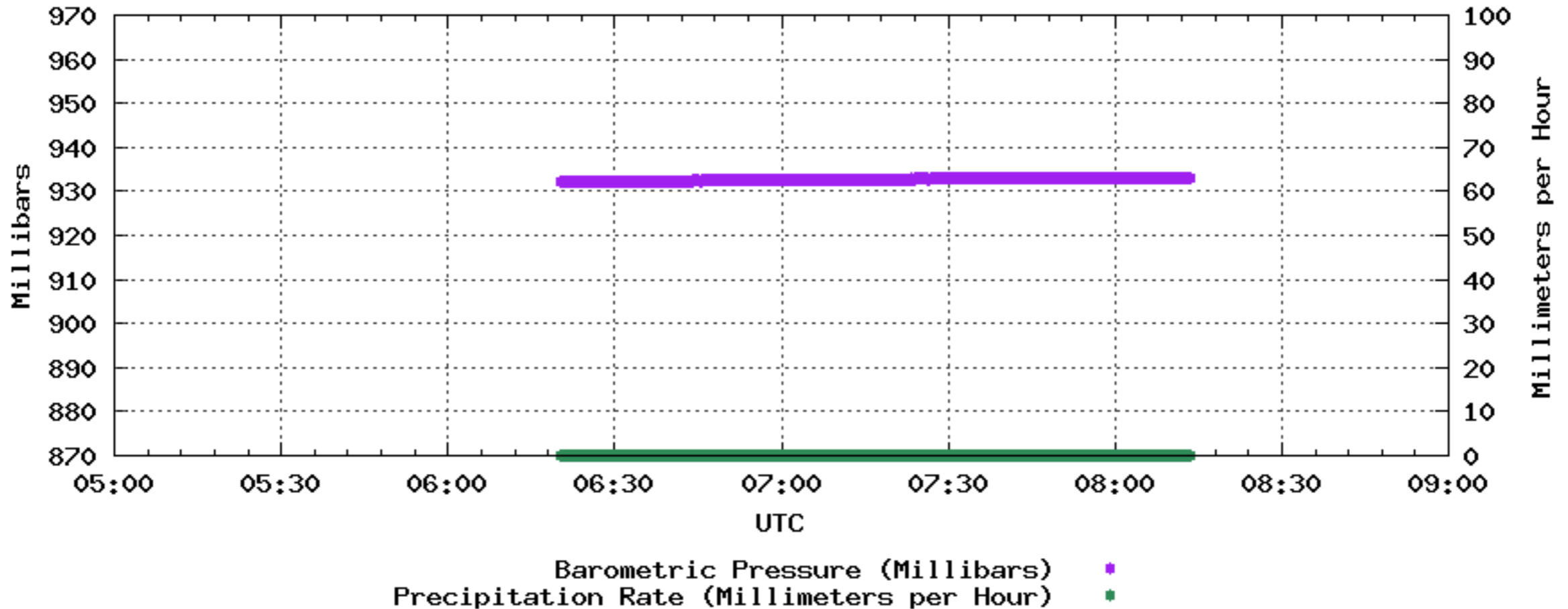
2017/110 DSS-63 Elevation & Azimuth



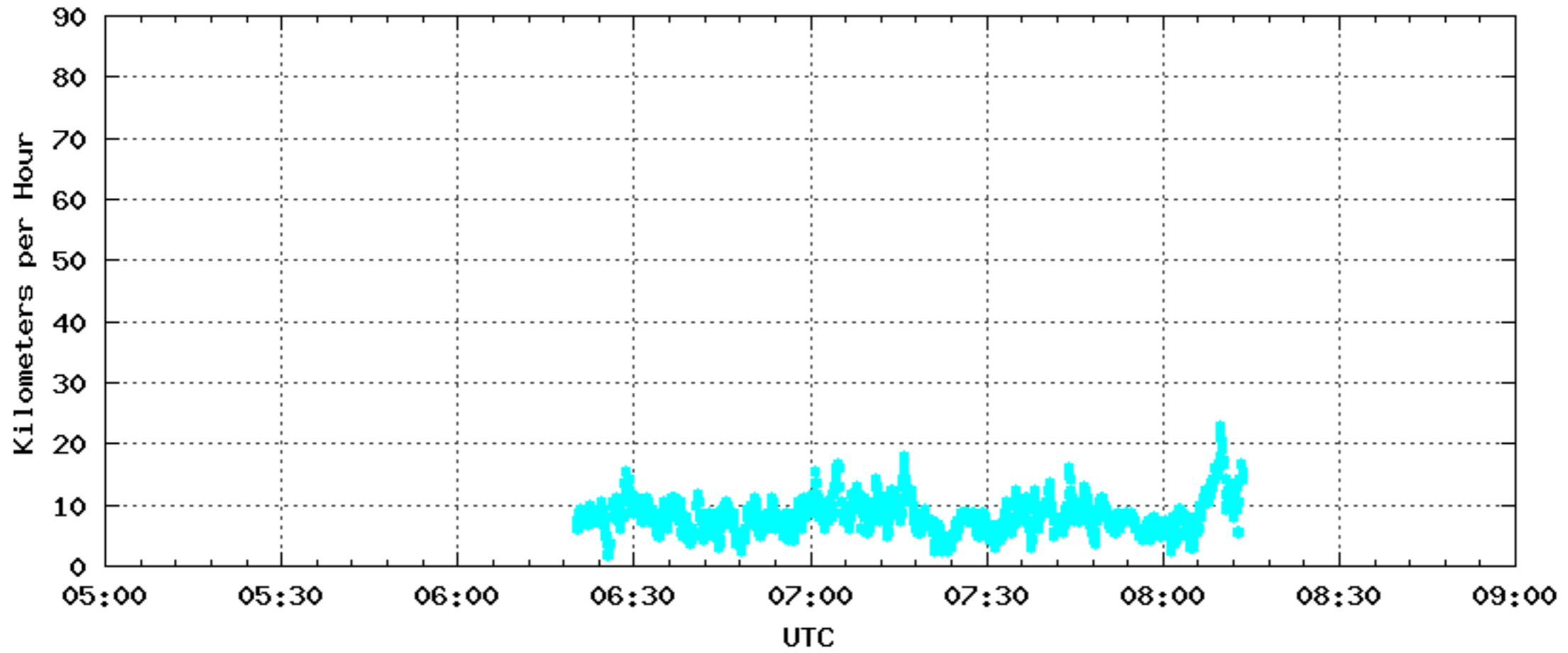
2017/110 D55-63 Air Temperature, Dew Point Temperature, and Relative Humidity



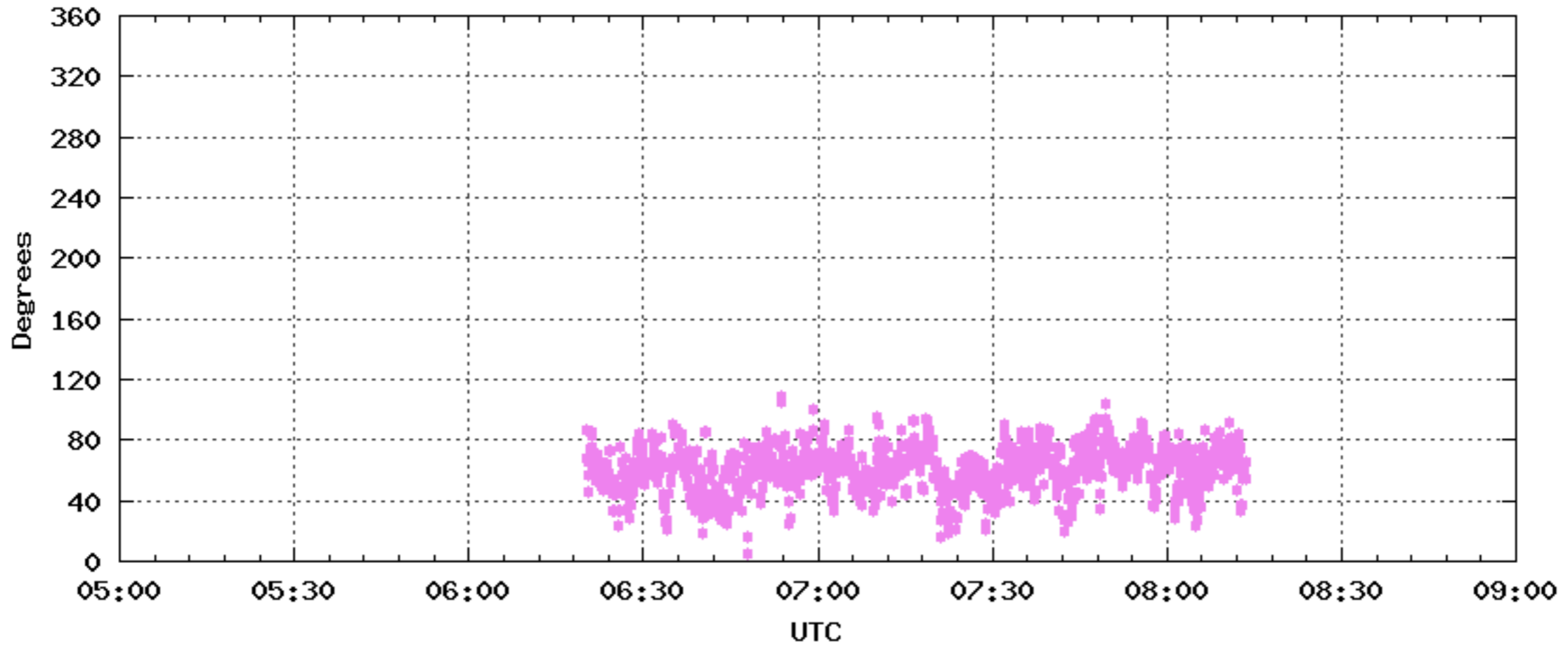
2017/110 D55-63 Barometric Pressure and Precipitation Rate



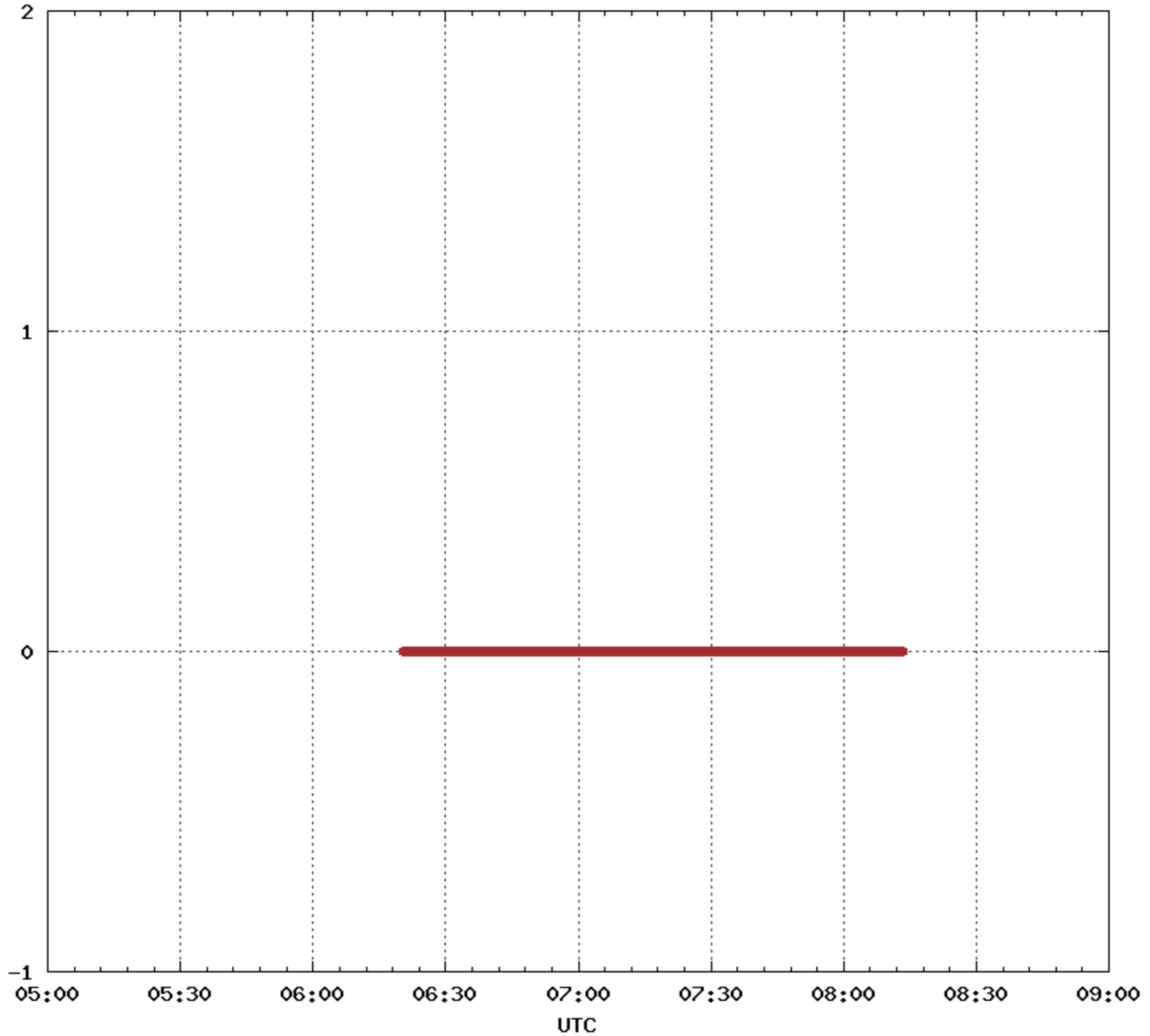
2017/110 D55-63 Wind Speed



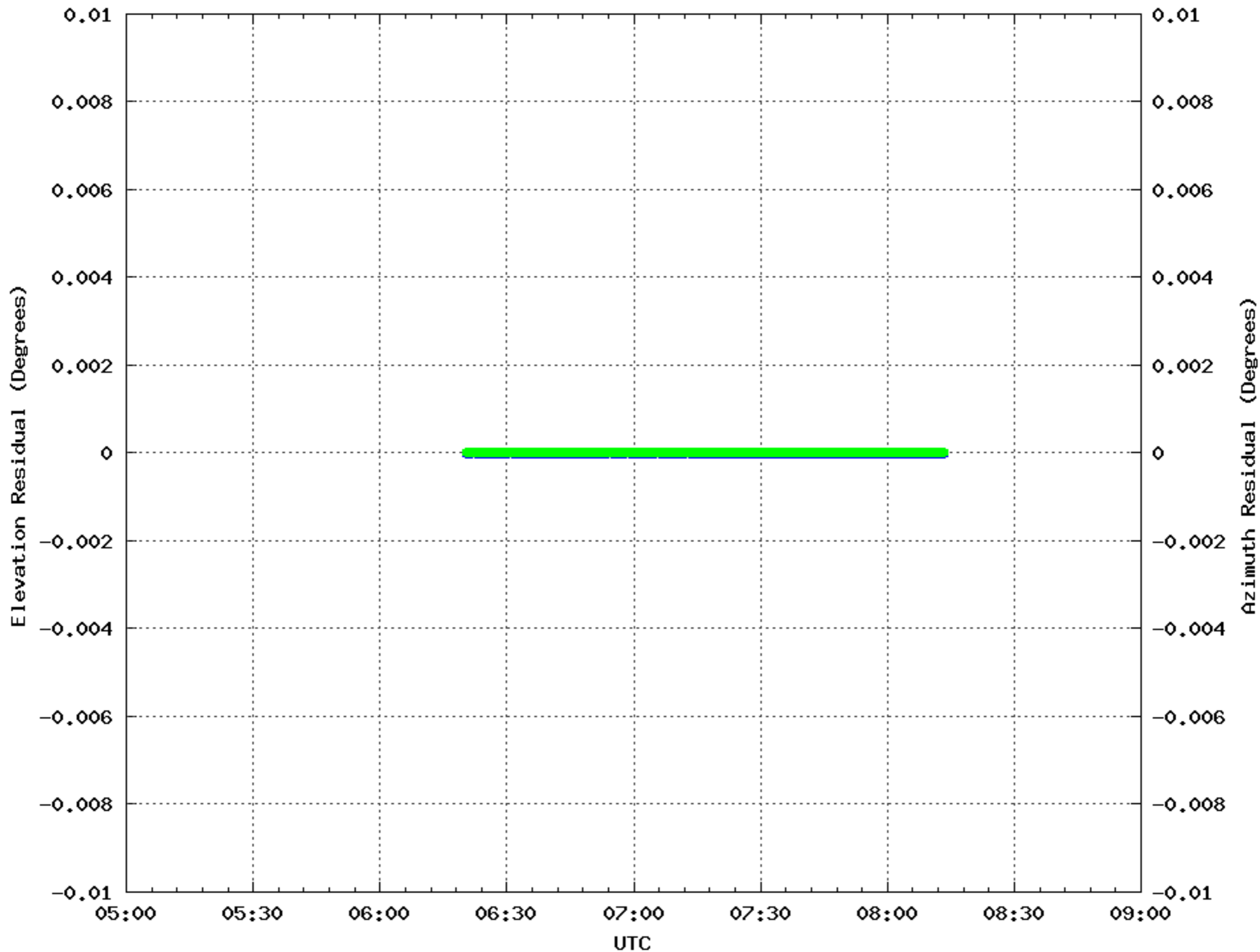
2017/110 D55-63 Wind Direction



2017/110 D55-63 Conscan Drive Status (ON = 1; OFF = 0)



2017/110 D55-63 Elevation & Azimuth Residuals



Elevation Residual ■ Azimuth Residual ■

02. X-Band - Measured Carrier Frequency, Predicted Carrier Frequency,
and Residual Frequency

Top:

Predicted Frequency including Doppler Shift (M-1320, M-1820, M-2320, M-2820)
categorized by Predicts Mode (M-1248, M-1748, M-2248, M-2748)
and by Downlink Band (M-1245, M-1745, M-2245, M-2745)
and Polarization (M-1267, M-1767, M-2267, M-2767)

Measured Carrier Frequency (M-1304, M-1804, M-2304, M-2804)
filtered by Carrier Tracking Loop Status (M-1302, M-1802, M-2302, M-2802)
categorized by Predicts Mode (M-1248, M-1748, M-2248, M-2748)
and by Downlink Band (M-1245, M-1745, M-2245, M-2745)
and Polarization (M-1267, M-1767, M-2267, M-2767)

Bottom:

Residual Frequency (M-1305, M-1805, M-2305, M-2805)
filtered by Carrier Tracking Loop Status (M-1302, M-1802, M-2302, M-2802)
categorized by Predicts Mode (M-1248, M-1748, M-2248, M-2748)
and by Downlink Band (M-1245, M-1745, M-2245, M-2745)
and Polarization (M-1267, M-1767, M-2267, M-2767)

03. Uplink Frequency and Power

Top:

Uplink Frequency (M-1049)
filtered by Transmitter Status (M-1070)

Bottom:

Uplink Power (M-1067)
filtered by Transmitter Status (M-1070)

04. Carrier Loop Tracking Bandwidth

Carrier Loop Tracking Bandwidth (M-1299, M-1799, M-2299, M-2799)
categorized by Downlink Band (M-1245, M-1745, M-2245, M-2745)
and Polarization (M-1267, M-1767, M-2267, M-2767)

05. Subreflector Tracking Status

Subreflector Tracking Status (M-0317)

06. AGC Voltage

AGC Voltage (M-1325, M-1825, M-2325, M-2825)
categorized by Downlink Band (M-1245, M-1745, M-2245, M-2745)
and Polarization (M-1267, M-1767, M-2267, M-2767)

07. Azimuth & Elevation

Elevation Angle (M-0304)
Azimuth Angle (M-0305)

08. Weather: Air Temperature, Dew Point Temperature, Relative Humidity,

Precipitation Rate, and Barometric Pressure

Top:

Air Temperature (M-0394)

Dew Point (M-0397)

Relative Humidity (M-0409)

Bottom:

Barometric Pressure (M-0400)

Precipitation Rate (M-0406)

09. Wind Speed and Direction

Top:

Wind Speed (M-0388)

Bottom:

Wind Direction (M-0391)

10. Conscan Drive Status

Conscan Drive Status (M-0308)

11. Azimuth & Elevation Residuals

Elevation Residuals (M-0307)

Azimuth Residuals (M-0306)