

Spacecraft: Cassini

DSS: 65

Monitor File: S95SROC2016\_205\_2100\_65\_MON.ecsv

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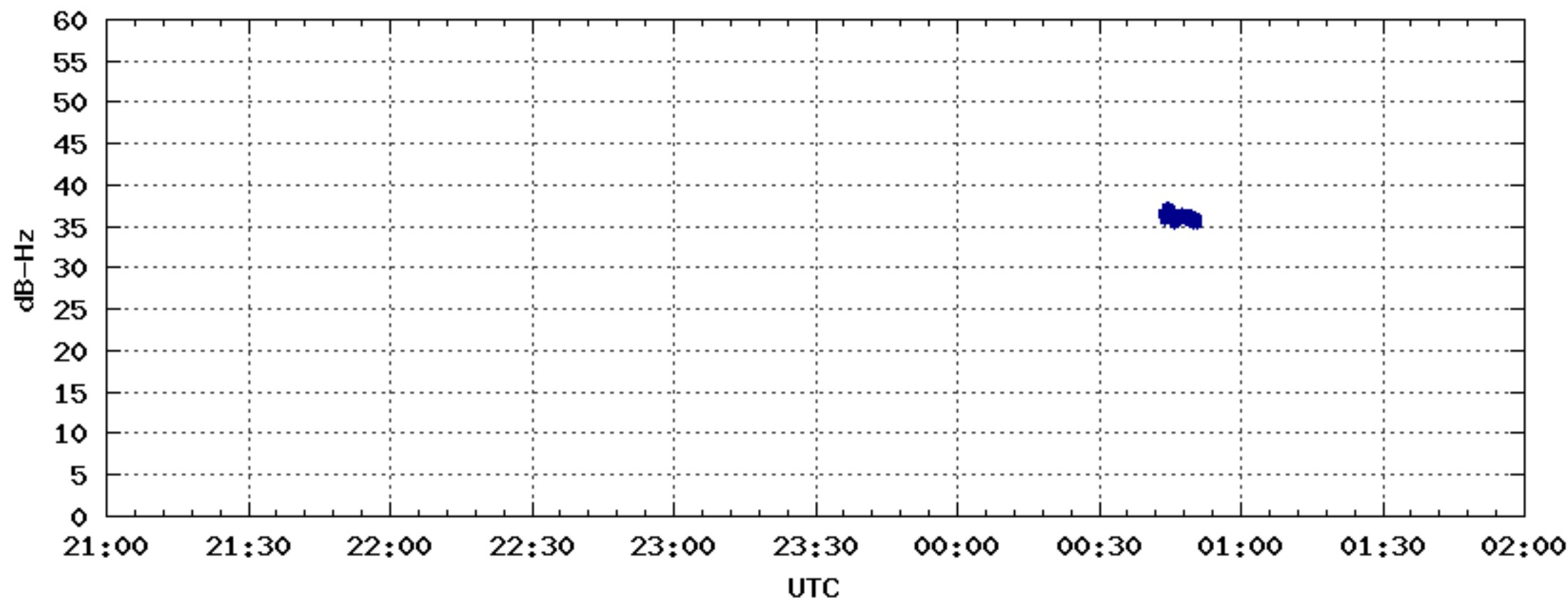
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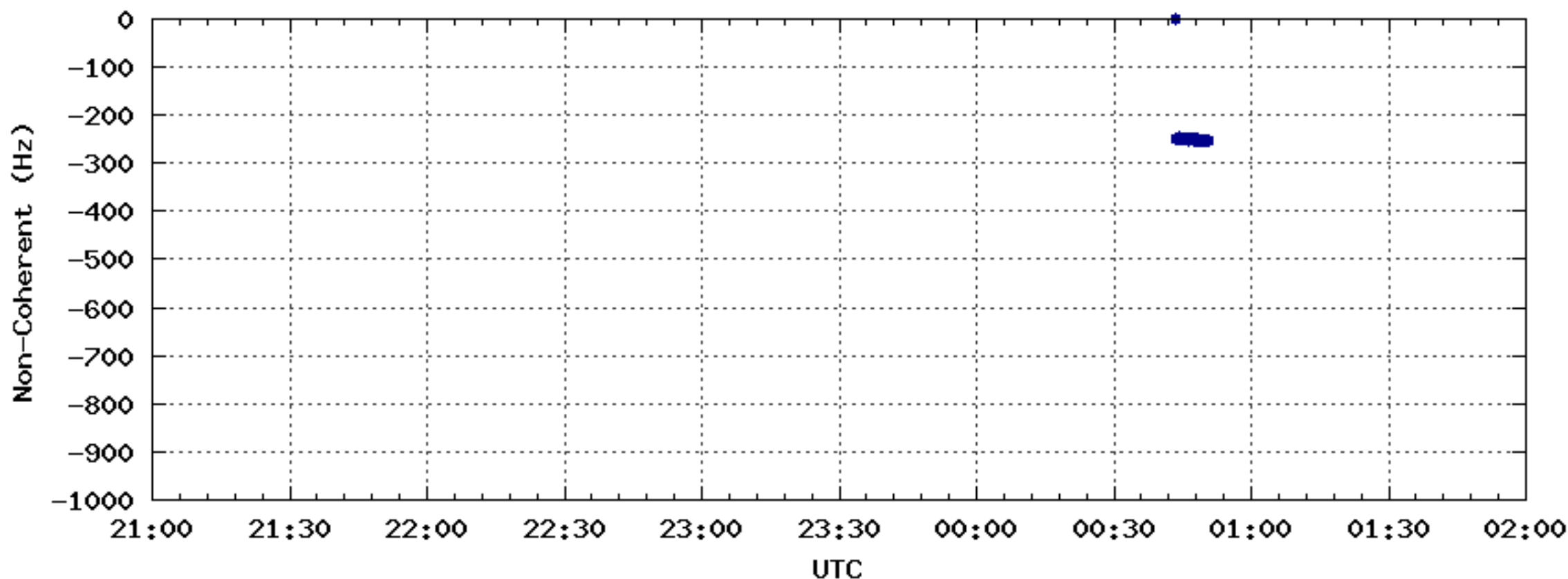
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02. Carrier Power to Noise Spectral Density Ratio ( $P_c/N_o$ ) and Residual Frequency
03. X-Band Measured Carrier Frequency, Predicted Carrier Frequency, and Residual Frequency
04. Uplink Frequency and Power
05. Carrier Power to Noise Spectral Density Ratio ( $P_c/N_o$ ) and Carrier Power
06. Carrier Power to Noise Spectral Density Ratio ( $P_c/N_o$ ) and System Noise Temperature
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10. Azimuth & Elevation
11. Weather: Air Temperature, Dew Point Temperature, Relative Humidity, Precipitation Rate, and Barometric Pressure
12. Wind Speed and Direction
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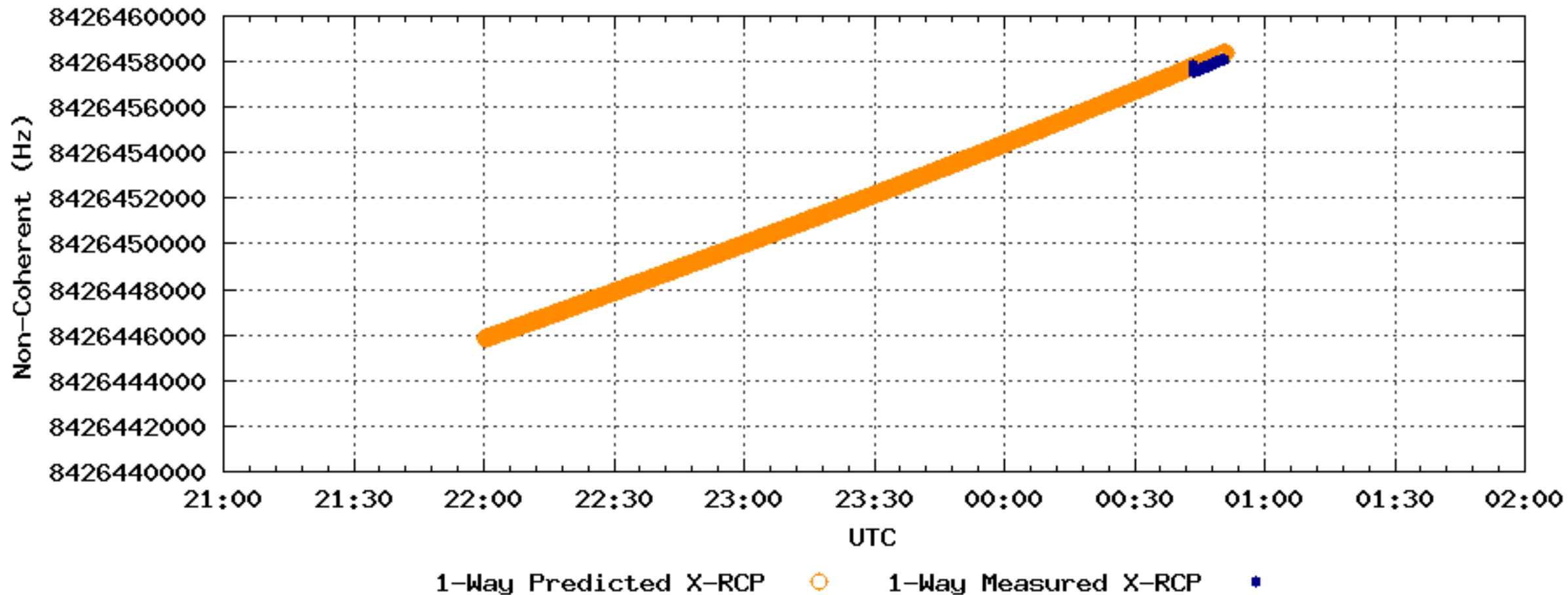
2016/205 D55-65 Carrier Power to Noise Spectral Density Ratio (Pc/No)



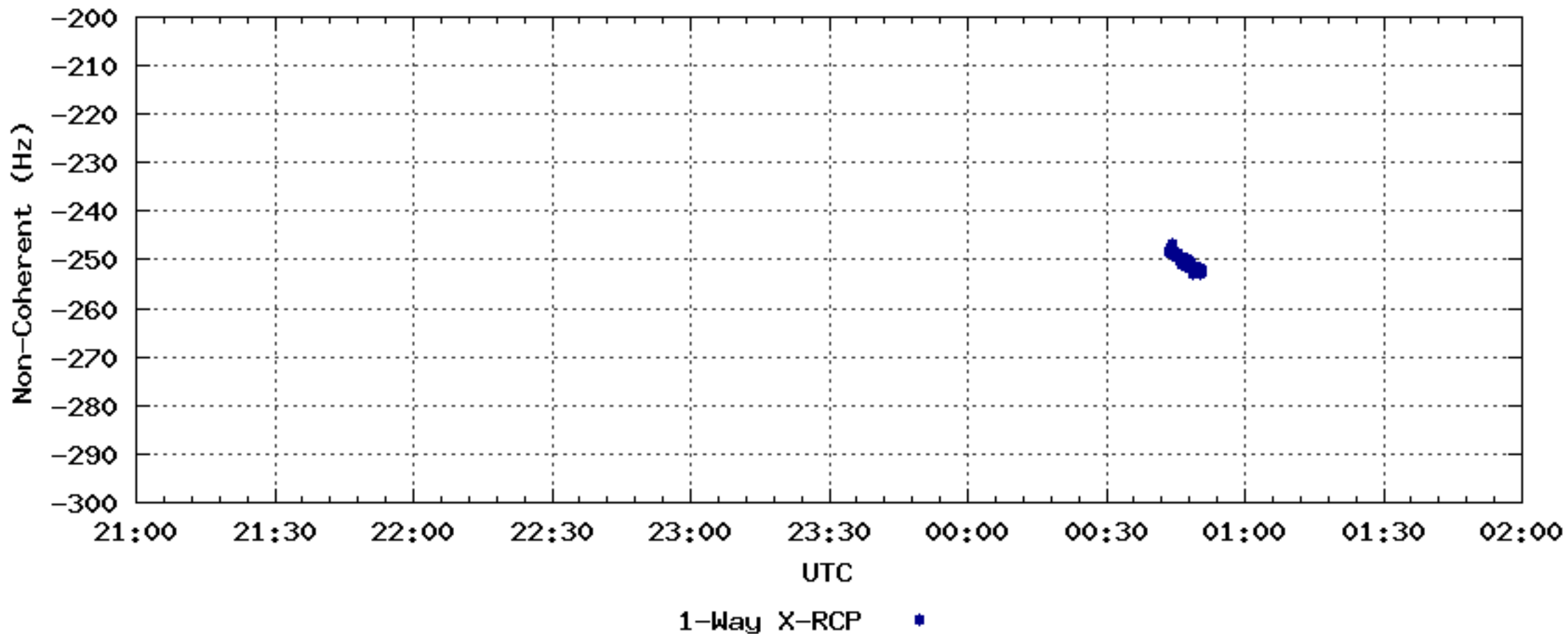
2016/205 D55-65 Carrier Frequency Residual (Measured - Predicted)



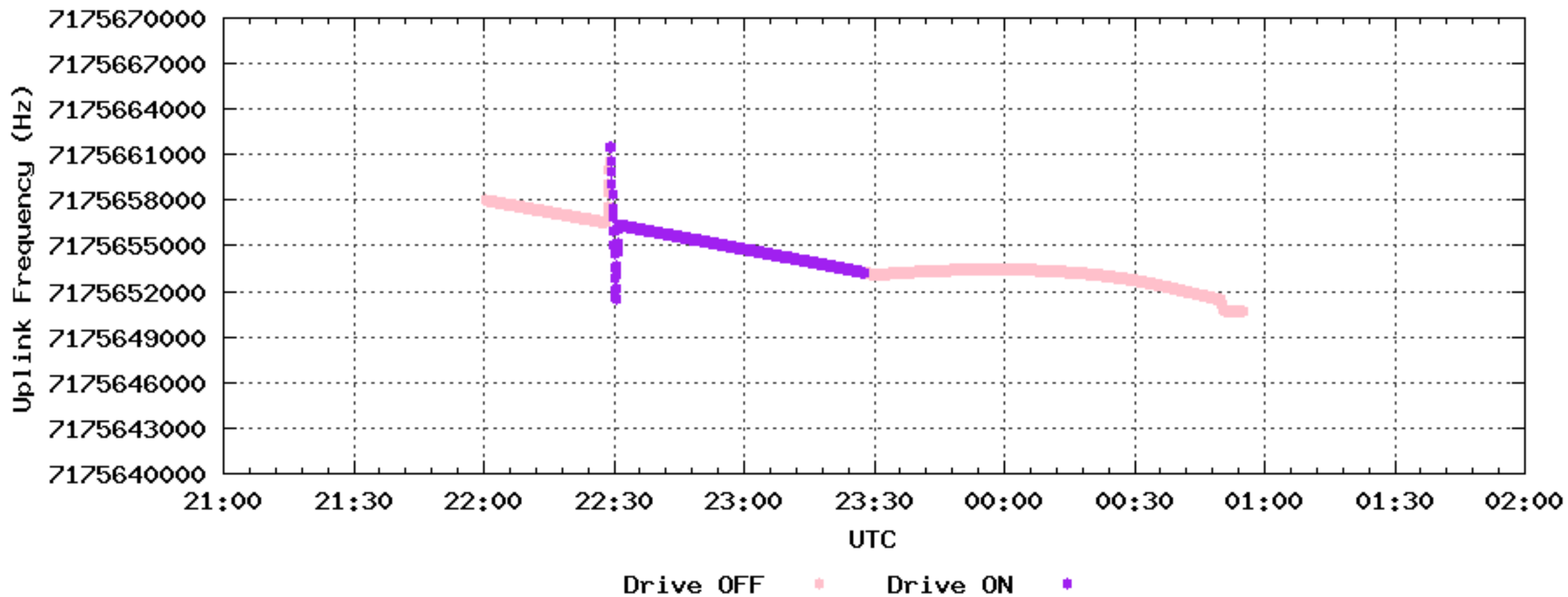
2016/205 DSS-65 X-Band Measured and Predicted Carrier Frequency



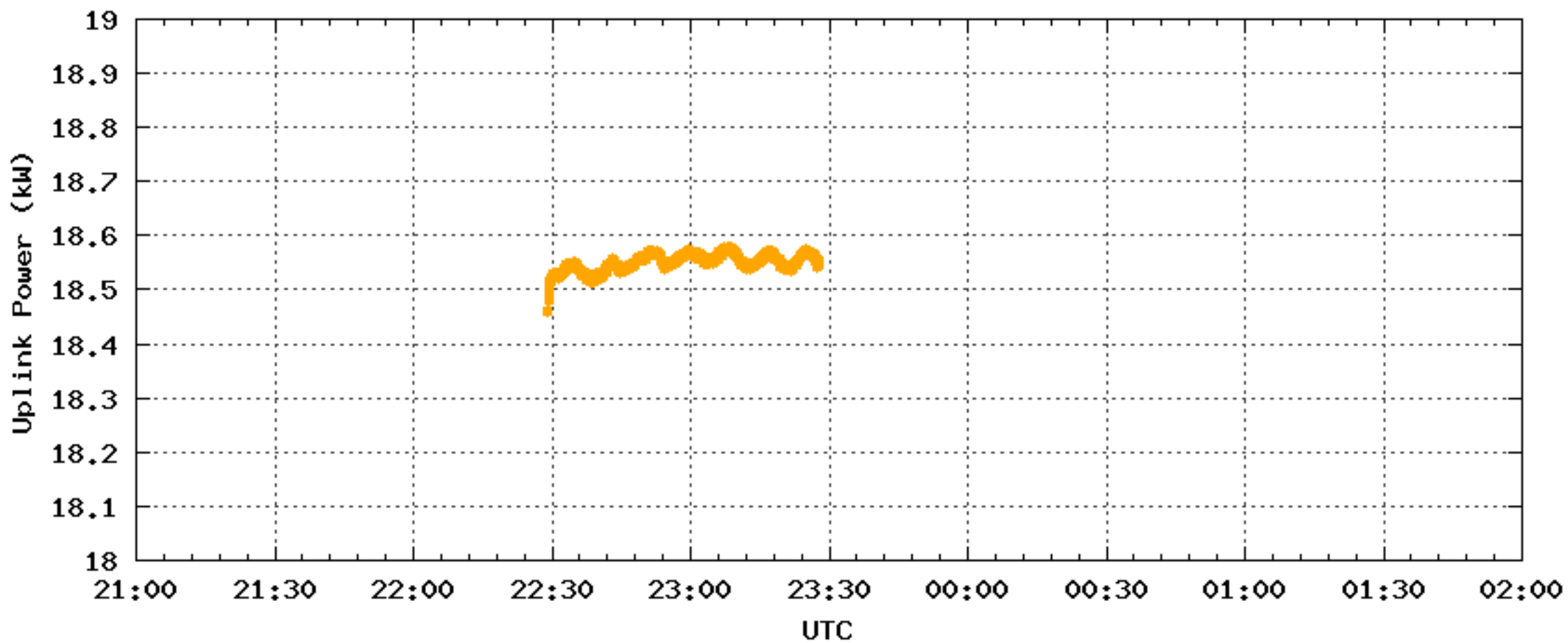
2016/205 DSS-65 X-Band Residual Frequency (Measured - Predicted)



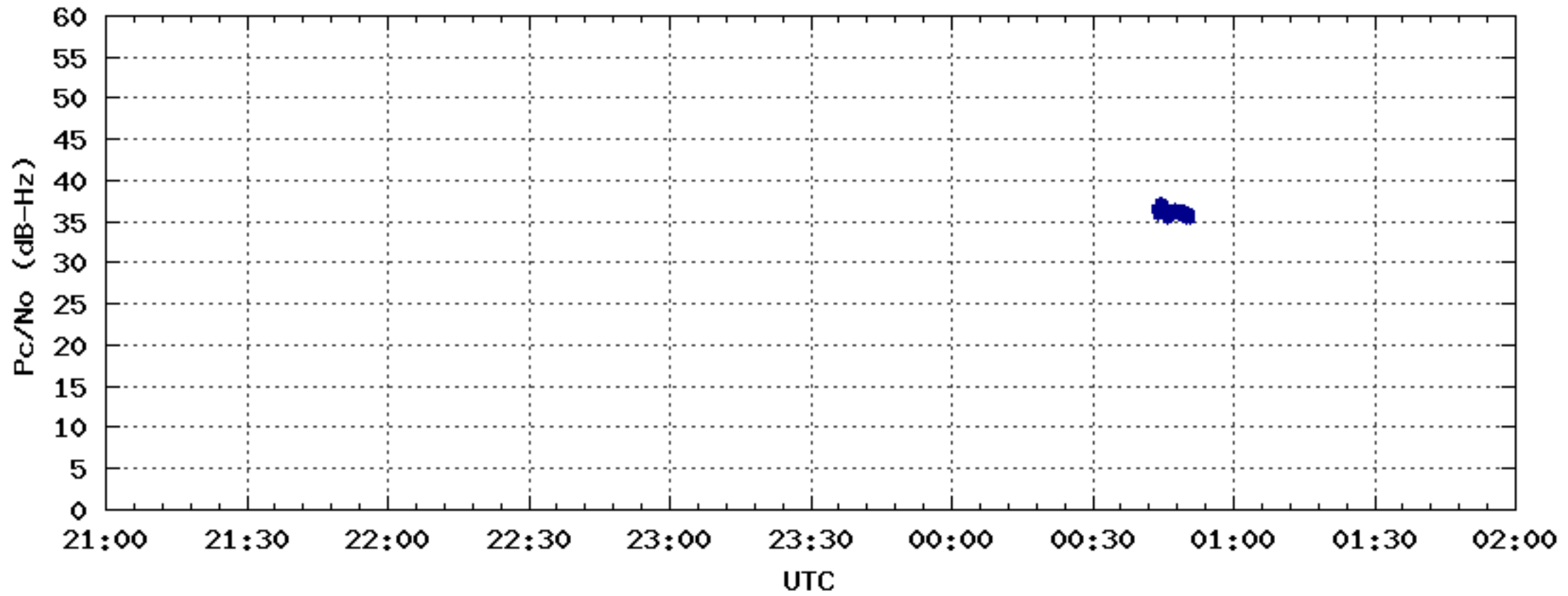
2016/205 DSS-65 Uplink Frequency



2016/205 DSS-65 Uplink Power (with TXR ON and when > 1)

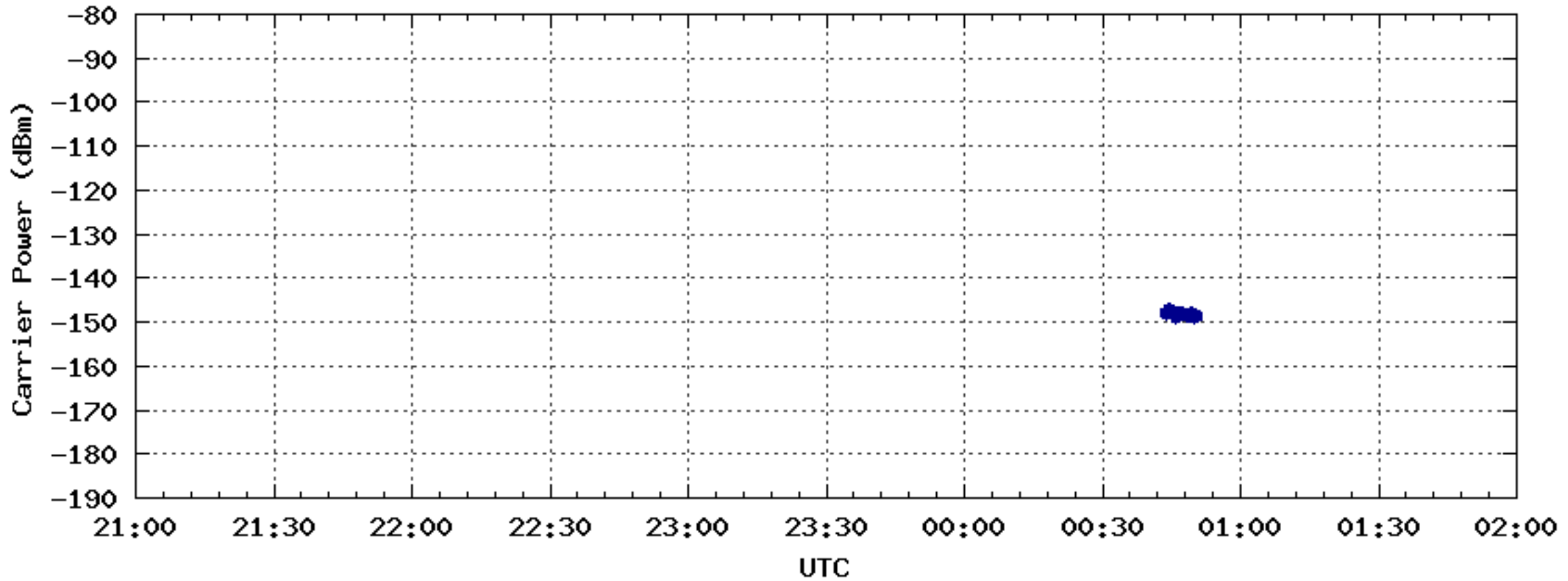


2016/205 D55-65 Carrier Power to Noise Spectral Density Ratio (Pc/No)



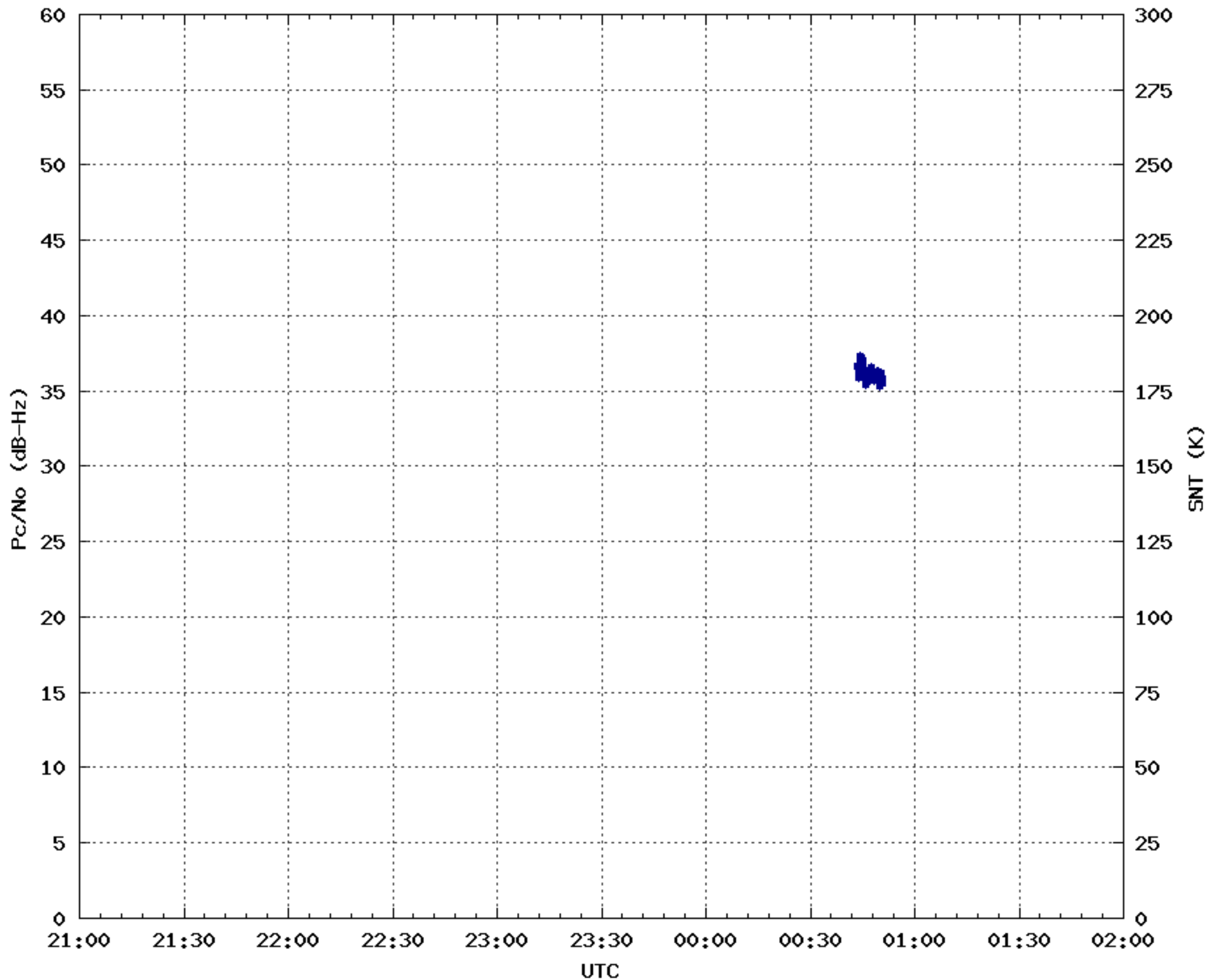
X-RCP

2016/205 D55-65 Carrier Power



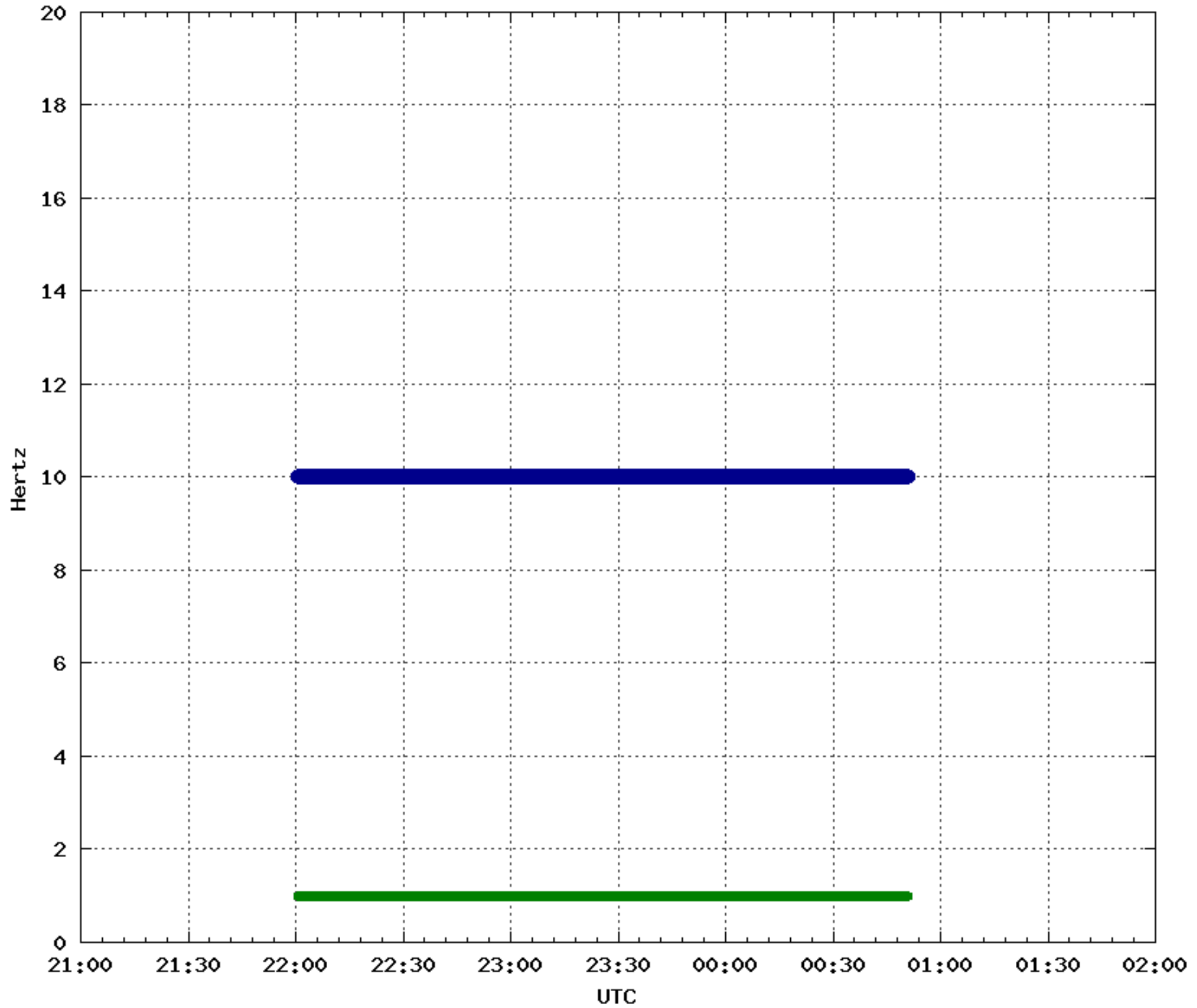
X-RCP

2016/205 D55-65 Carrier Power to Noise Spectral Density Ratio and System Noise Temperature



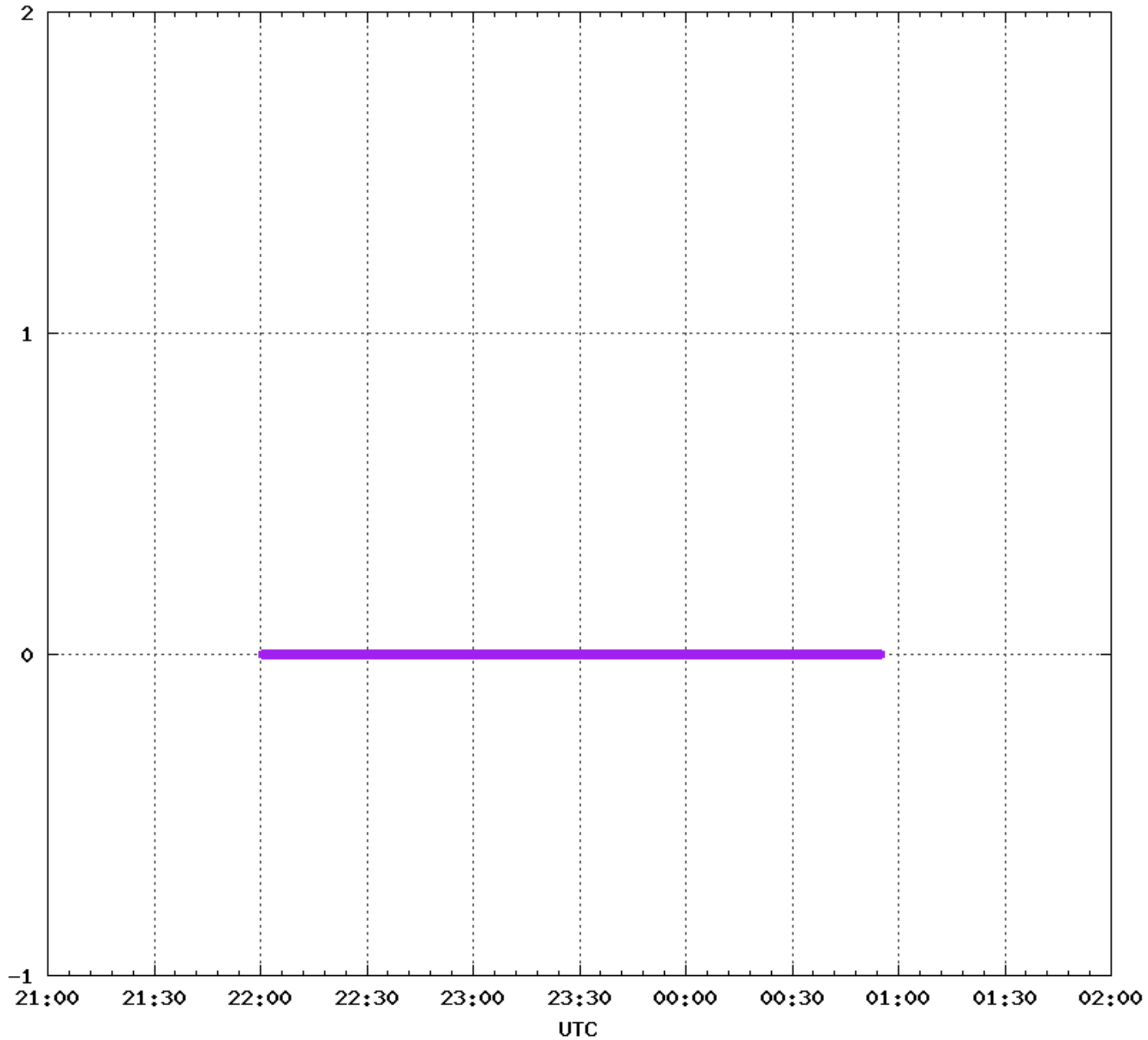
Pc/No X-RCP ■

# 2016/205 DSS-65 Carrier Loop Tracking Bandwidth



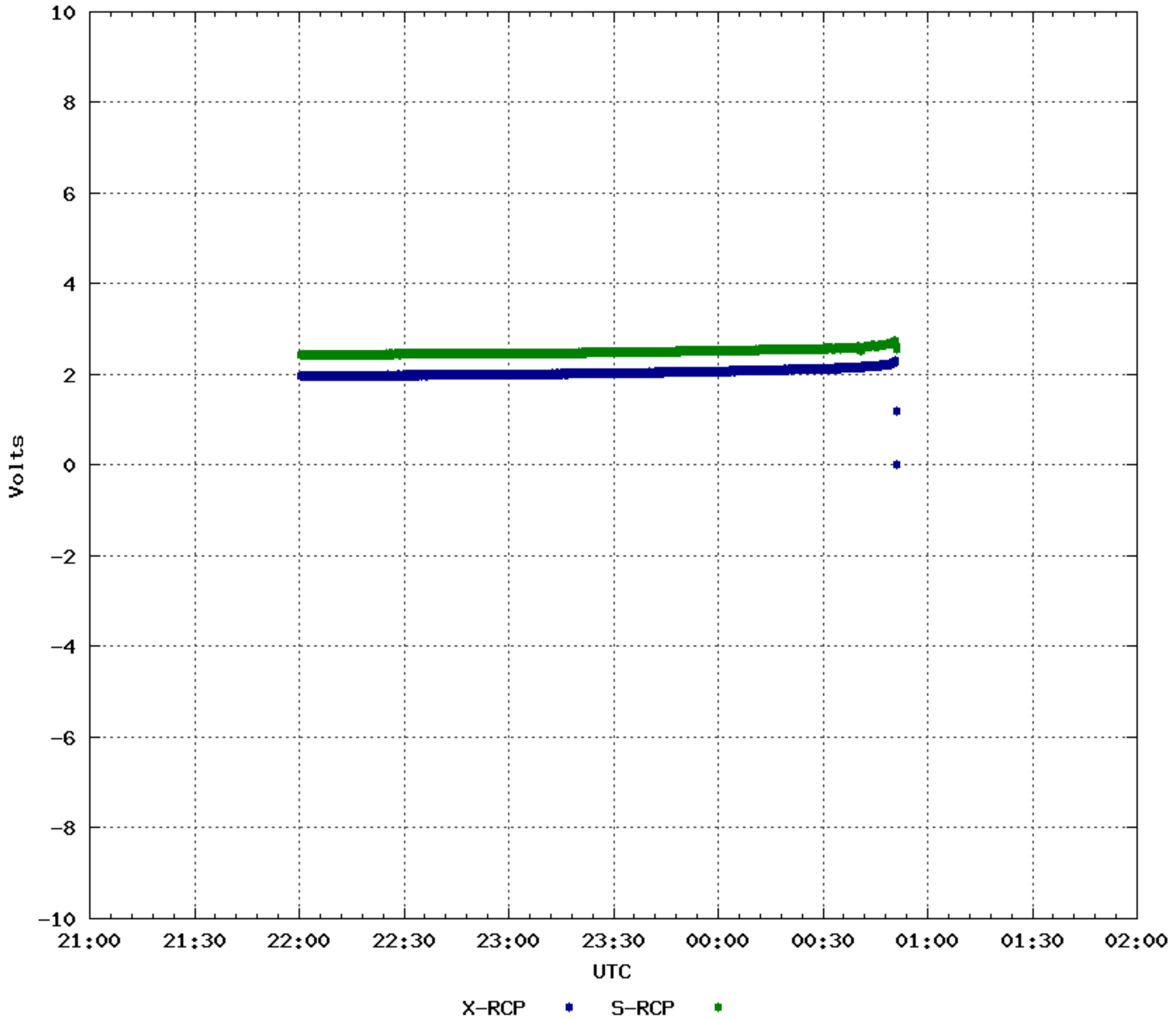
X-RCP ● S-RCP ●

2016/205 D55-65 Subreflector Tracking Status (Tracking = 1; Not Tracking = 0)

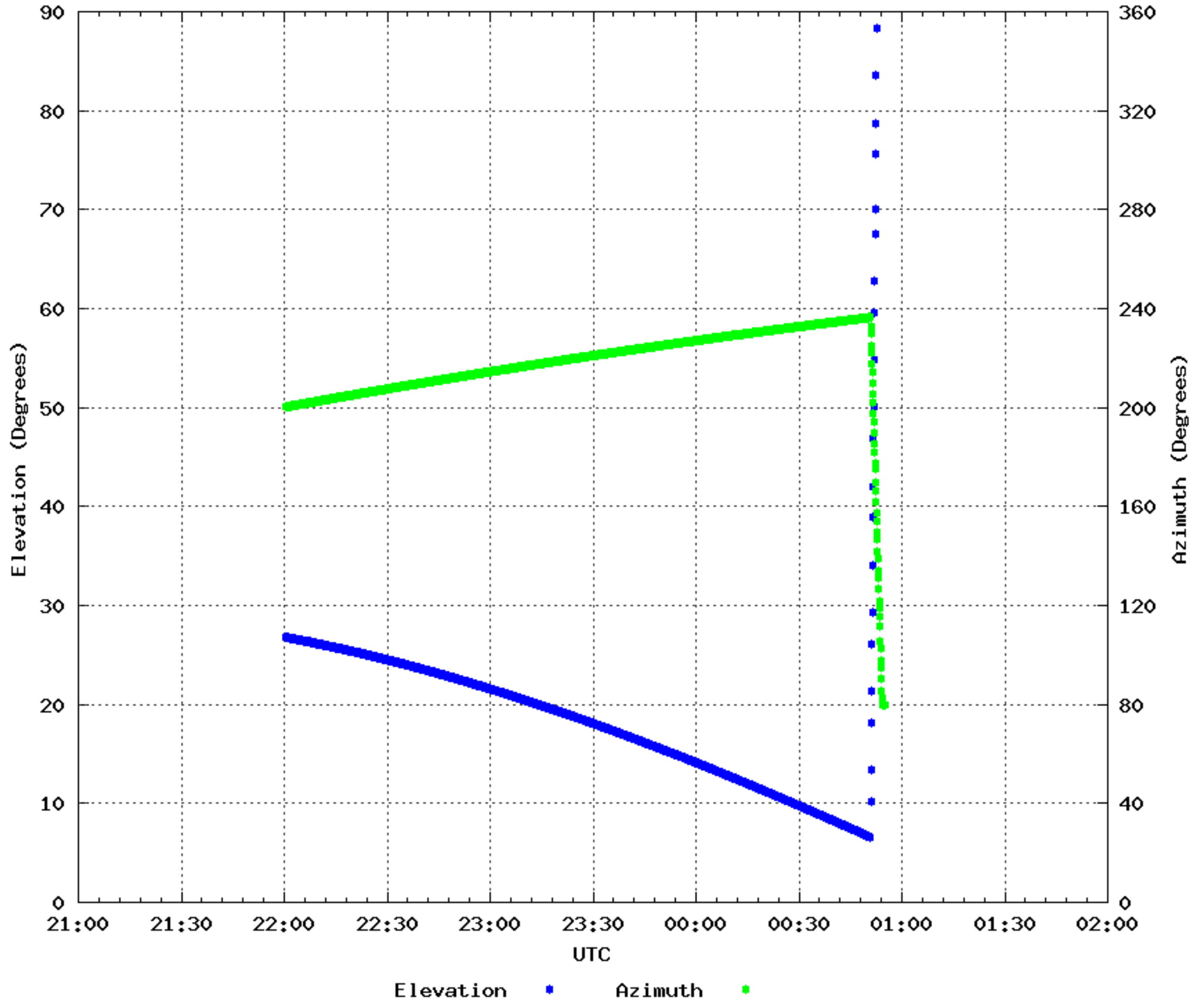




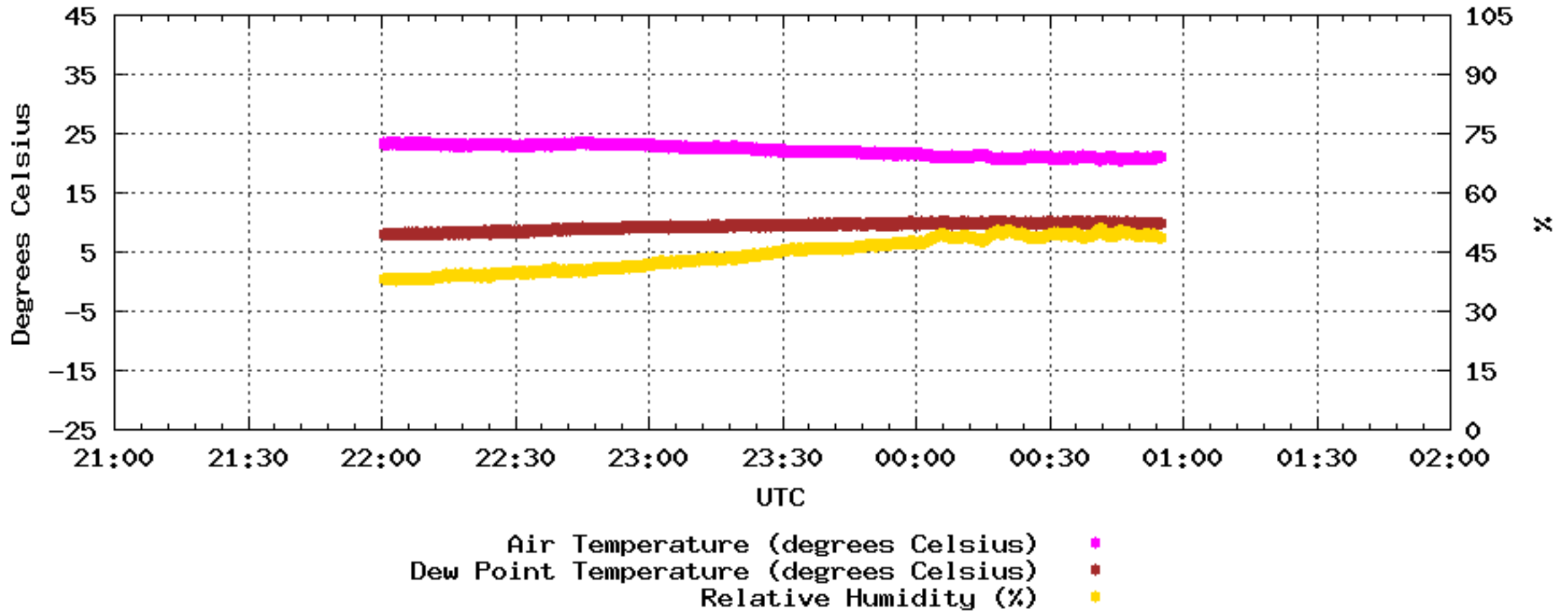
2016/205 DSS-65 Total Power Automatic Gain Control (AGC) Voltage



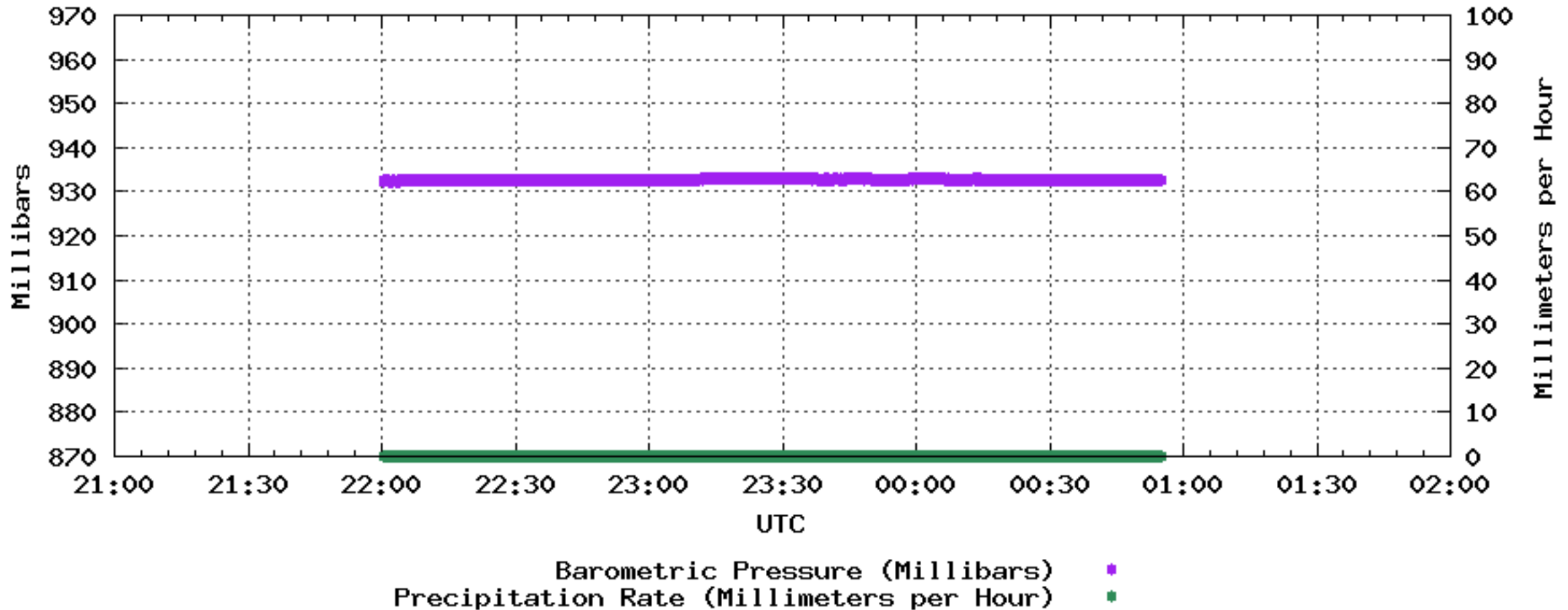
2016/205 DSS-65 Elevation & Azimuth



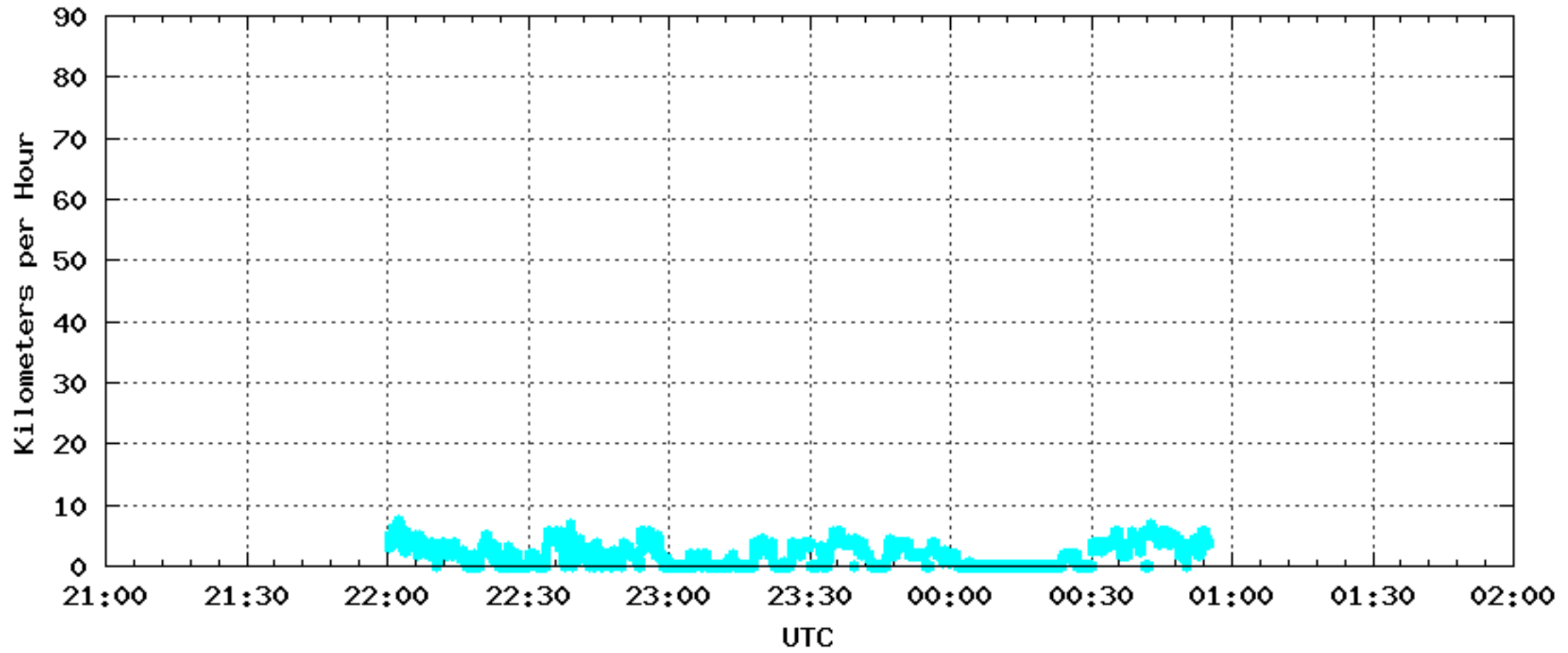
2016/205 D55-65 Air Temperature, Dew Point Temperature, and Relative Humidity



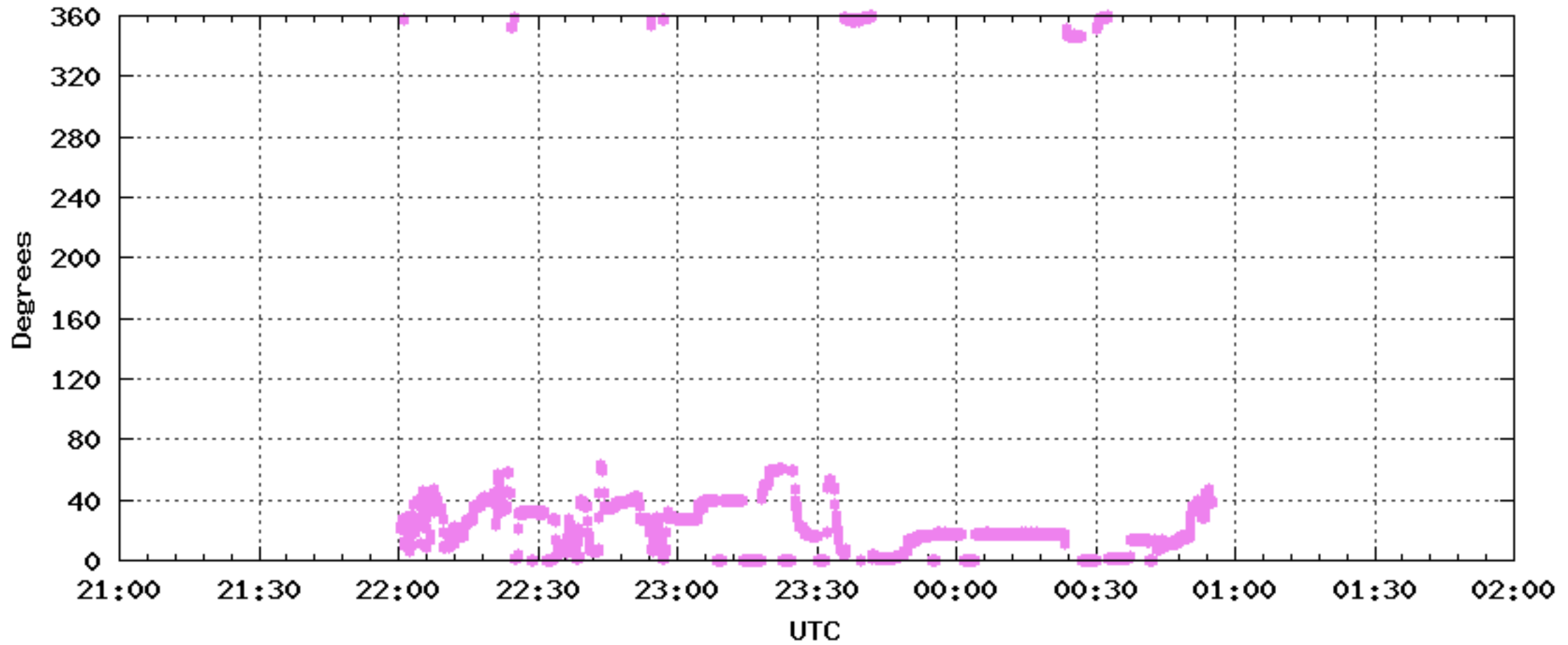
2016/205 D55-65 Barometric Pressure and Precipitation Rate



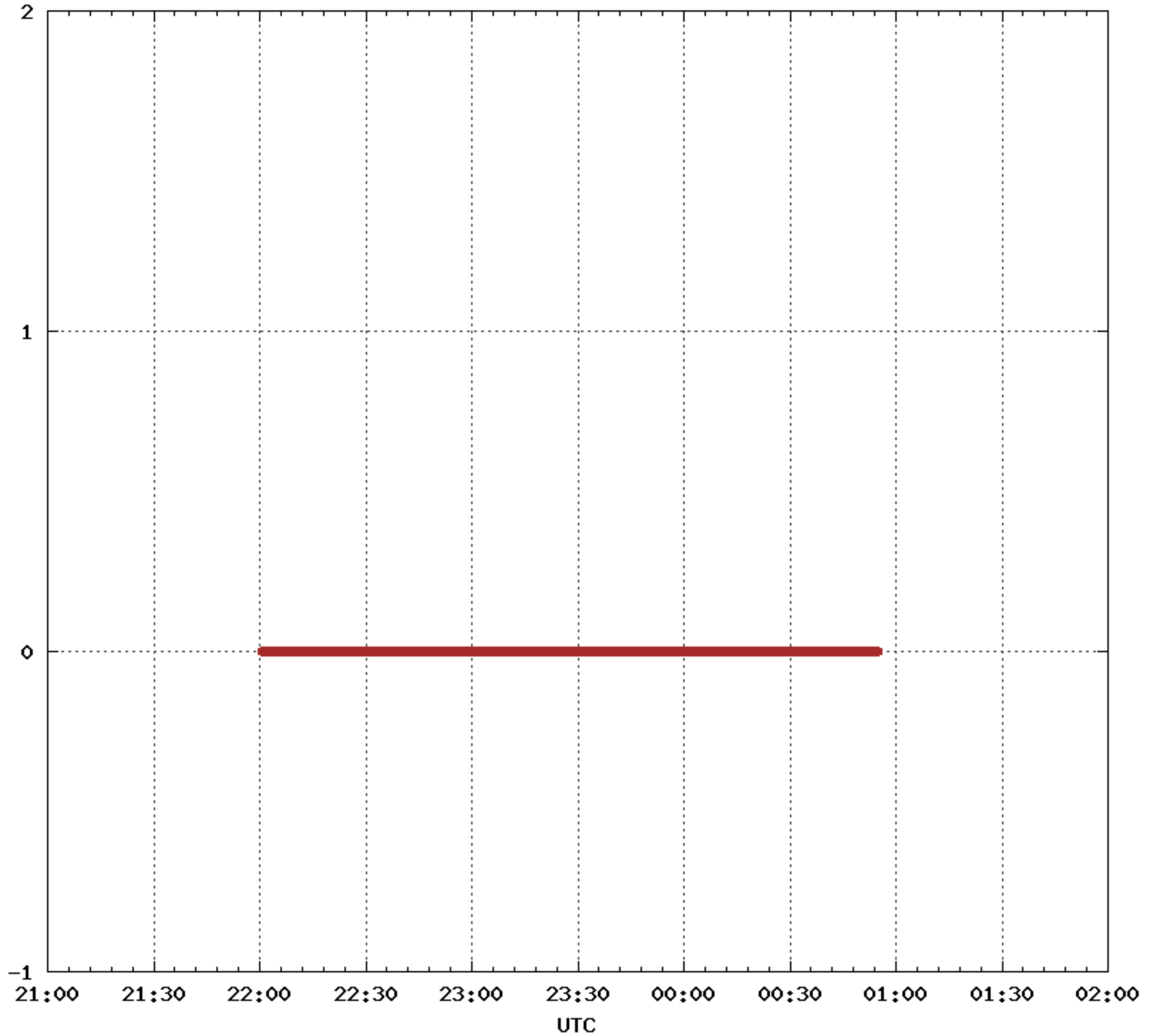
2016/205 D55-65 Wind Speed



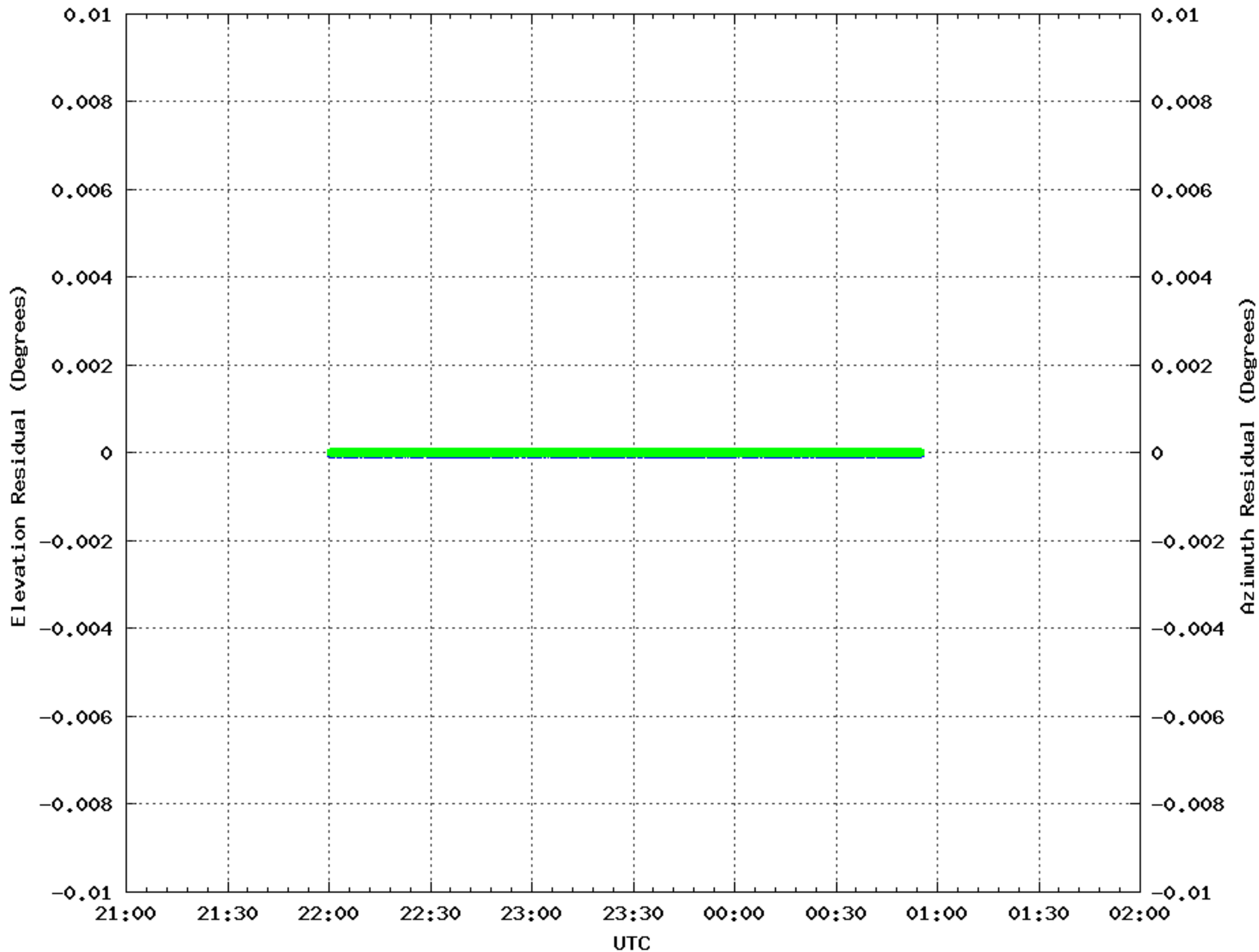
2016/205 D55-65 Wind Direction



2016/205 D55-65 Conscan Drive Status (ON = 1; OFF = 0)



2016/205 D55-65 Elevation & Azimuth Residuals



Elevation Residual    ■    Azimuth Residual    ■

02. Carrier Power to Noise Spectral Density Ratio ( $P_c/N_o$ ) and Residual Frequency

Top:

Carrier Power to Noise Spectral Density Ratio (M-1315, M-1815, M-2315, M-2815)  
filtered by Carrier Tracking Loop Status (M-1302, M-1802, M-2302, M-2802)  
categorized 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. 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)

04. 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)

05. Carrier Power to Noise Spectral Density Ratio ( $P_c/N_o$ ) and Carrier Power

Top:

Carrier Power to Noise Spectral Density Ratio (M-1315, M-1815, M-2315, M-2815)  
filtered by Carrier Tracking Loop Status (M-1302, M-1802, M-2302, M-2802)  
categorized by Downlink Band (M-1245, M-1745, M-2245, M-2745)  
and Polarization (M-1267, M-1767, M-2267, M-2767)

Bottom:

Carrier Power (M-1310, M-1810, M-2310, M-2810)  
filtered by Carrier Tracking Loop Status (M-1302, M-1802, M-2302, M-2802)  
categorized by Downlink Band (M-1245, M-1745, M-2245, M-2745)  
and Polarization (M-1267, M-1767, M-2267, M-2767)

06. Carrier Power to Noise Spectral Density Ratio ( $P_c/N_o$ ) and System  
Noise Temperature

Carrier Power to Noise Spectral Density Ratio (M-1315, M-1815, M-2315, M-2815)  
filtered by Carrier Tracking Loop Status (M-1302, M-1802, M-2302, M-2802)  
categorized by Downlink Band (M-1245, M-1745, M-2245, M-2745)  
and Polarization (M-1267, M-1767, M-2267, M-2767)  
System Noise Temperature (M-1318, M-1818, M-2318, M-2818)  
categorized by Downlink Band (M-1245, M-1745, M-2245, M-2745)  
and Polarization (M-1267, M-1767, M-2267, M-2767)

07. 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)

08. Subreflector Tracking Status

Subreflector Tracking Status (M-0317)

09. 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)

10. Azimuth & Elevation

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

11. 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)

12. Wind Speed and Direction

Top:



Wind Speed (M-0388)

Bottom:

Wind Direction (M-0391)

13. Conscan Drive Status

Conscan Drive Status (M-0308)

14. Azimuth & Elevation Residuals

Elevation Residuals (M-0307)

Azimuth Residuals (M-0306)