

Cassini

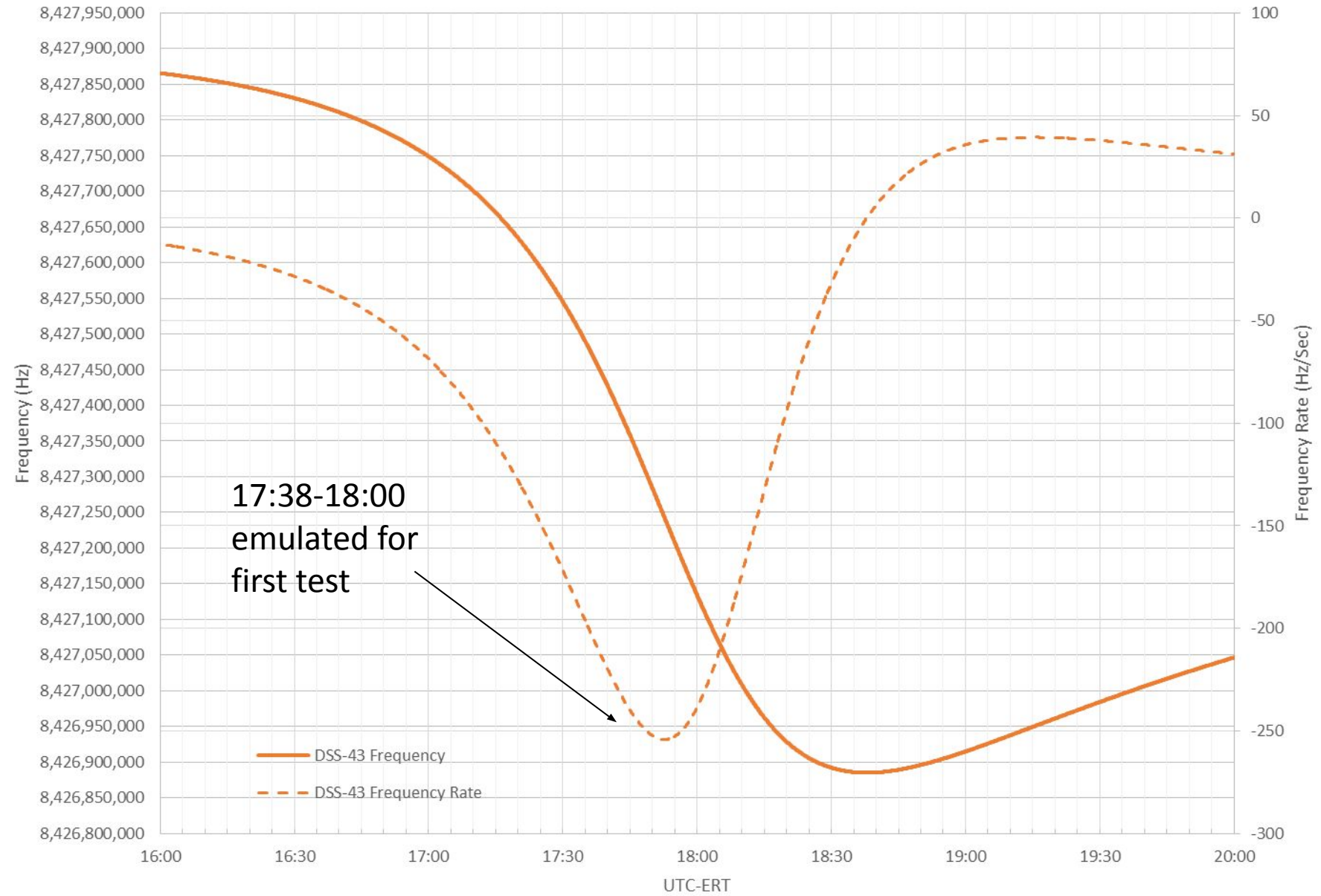
Doppler Dynamics During Proximal Orbits

Test 1

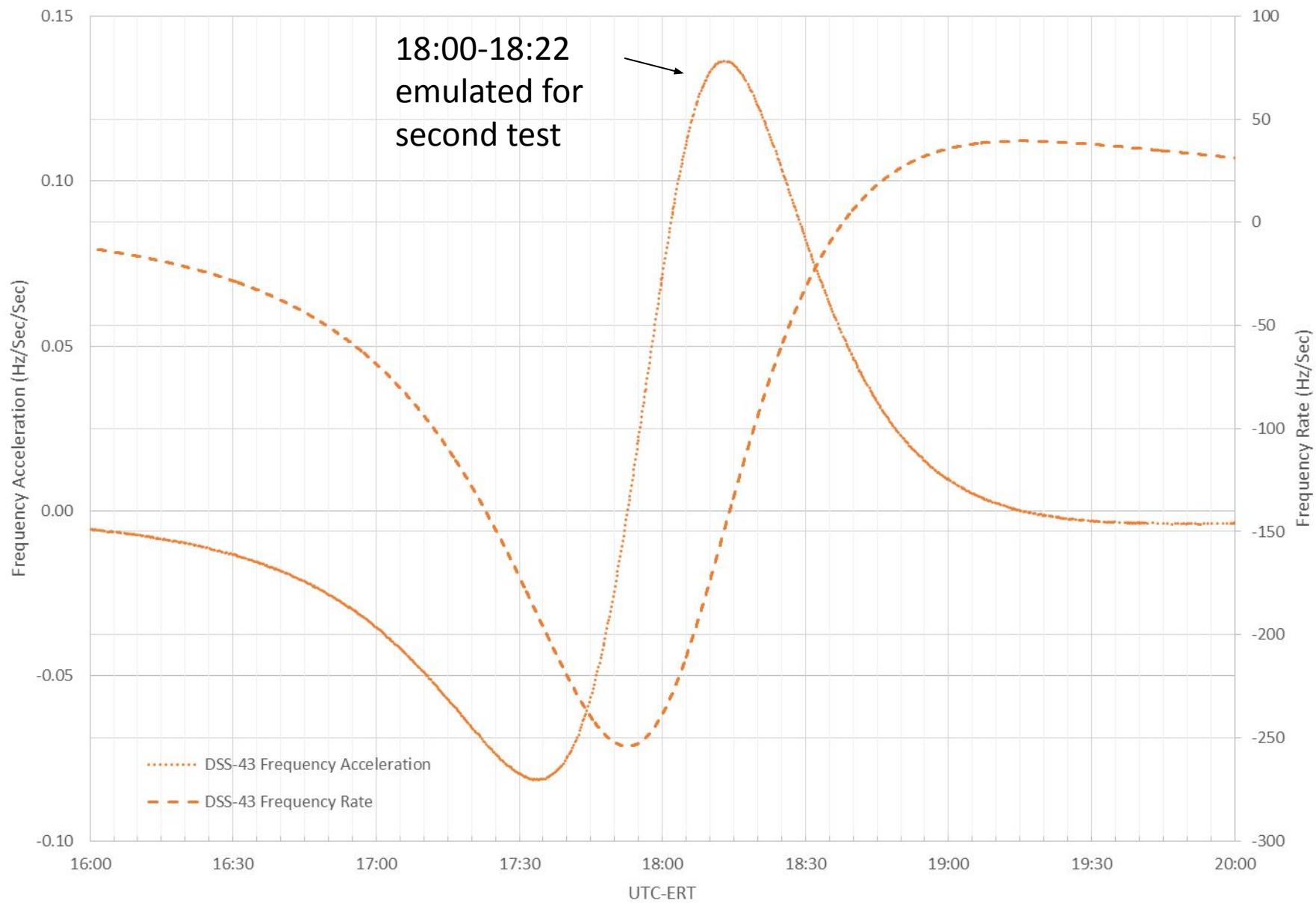
2016/240

DSS-35

2017/135 18:02 Closest Approach (1-Way X-Band Downlink) Frequency & Rate



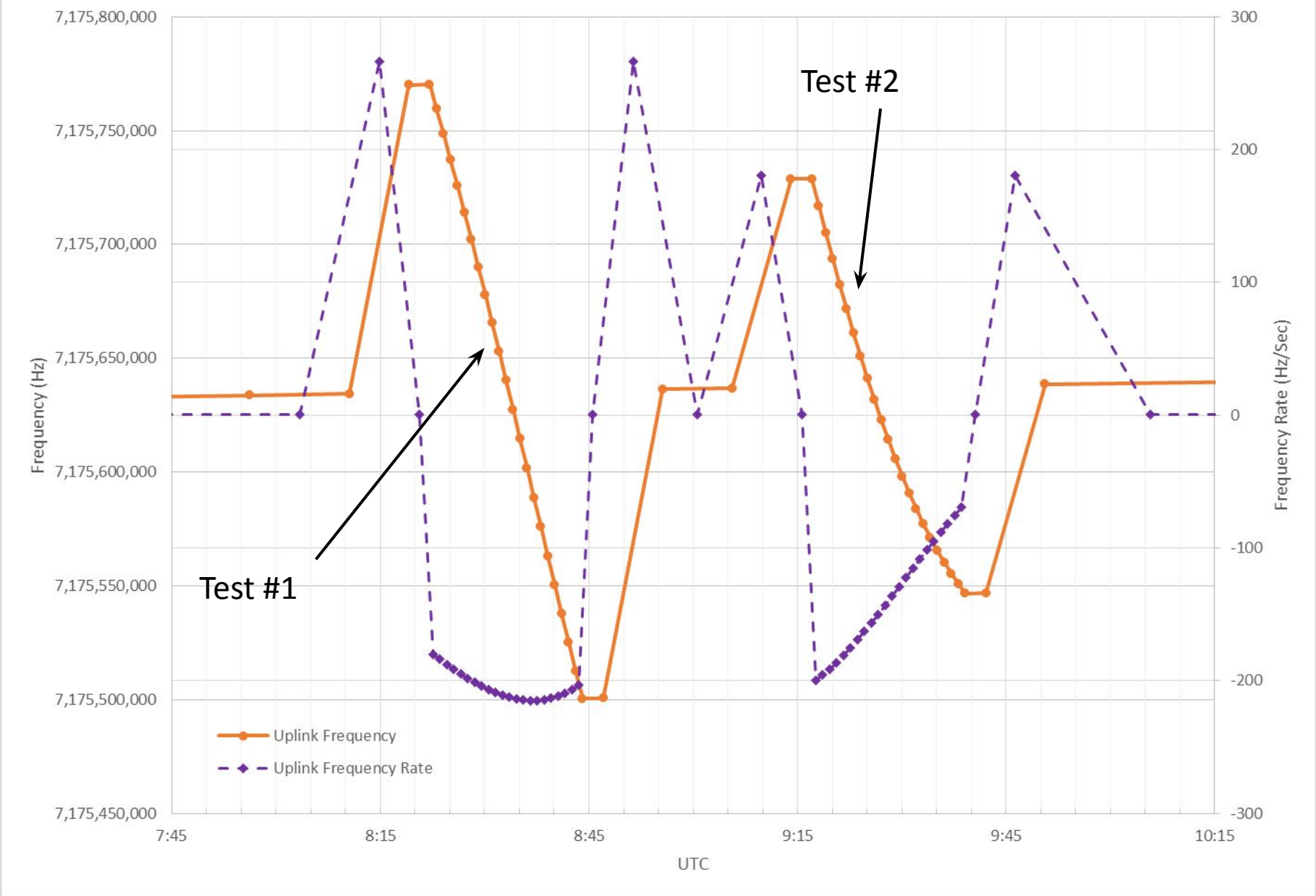
2017/135 18:02 Closest Approach (1-Way X-Band Downlink) Acceleration & Rate



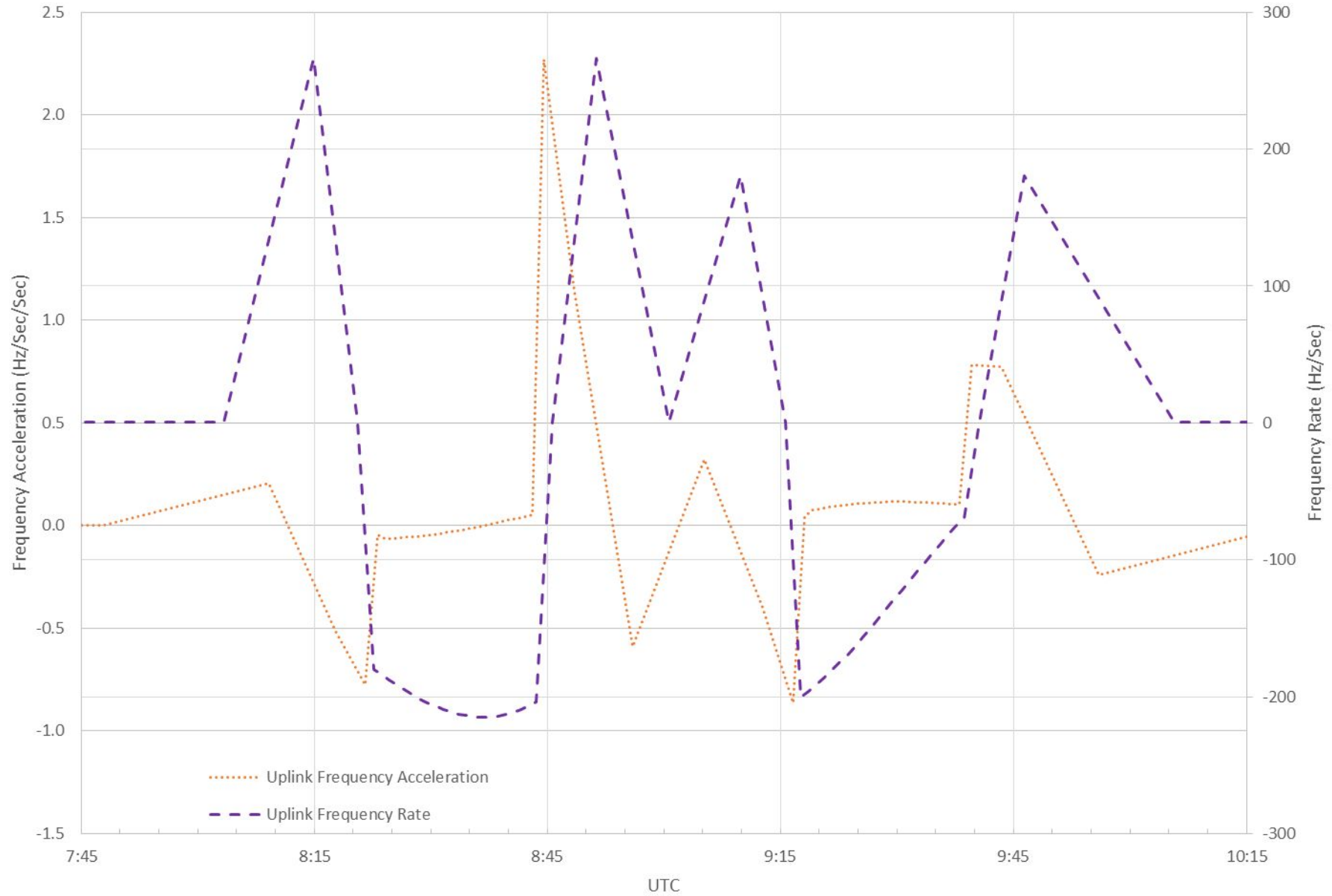
Sequence of Events

UTC-ERT - RTLT	UTC-ERT	Event
08:00:36	10:45:00	Baseline #1
08:10:36	10:55:00	Sweep to first test
08:19:06	11:03:30	3-minute dwell
08:22:06	11:06:30	Test #1 (2x greatest rate) (22 min)
08:44:06	11:28:30	3-minute dwell
08:47:06	11:31:30	Return to baseline
08:55:36	11:40:00	Baseline #2
09:05:36	11:50:00	Sweep to second test
09:14:06	11:58:30	3-minute dwell
09:17:06	12:01:30	Test #2 (2x greatest acceleration) (22 min)
09:39:06	12:23:30	3-minute dwell
09:42:06	12:26:30	Return to baseline
09:50:36	12:35:00	Baseline #3
10:00:36	12:45:00	End

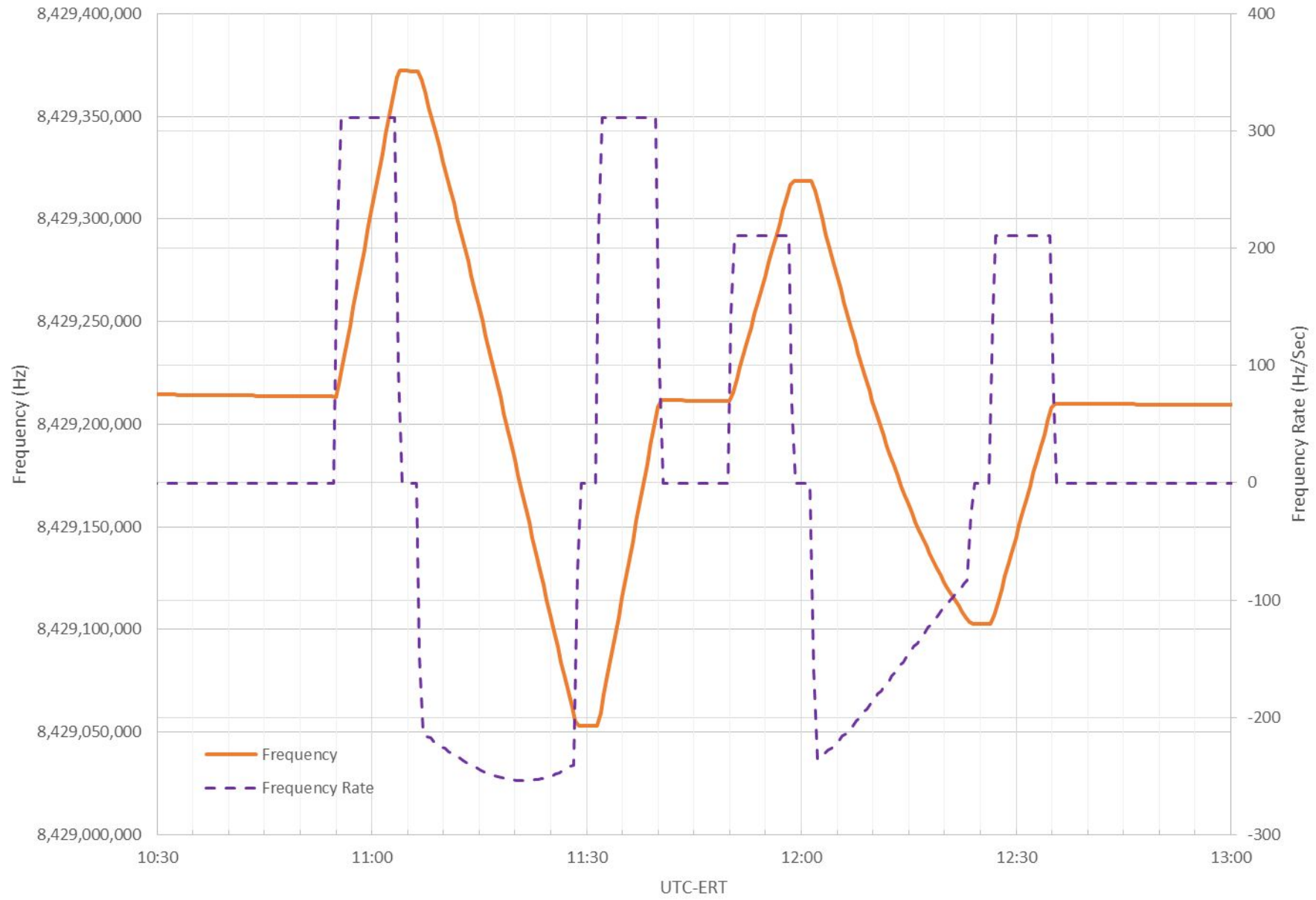
2016/240 DSS-35 Modified Uplink Ramp Frequency & Rate



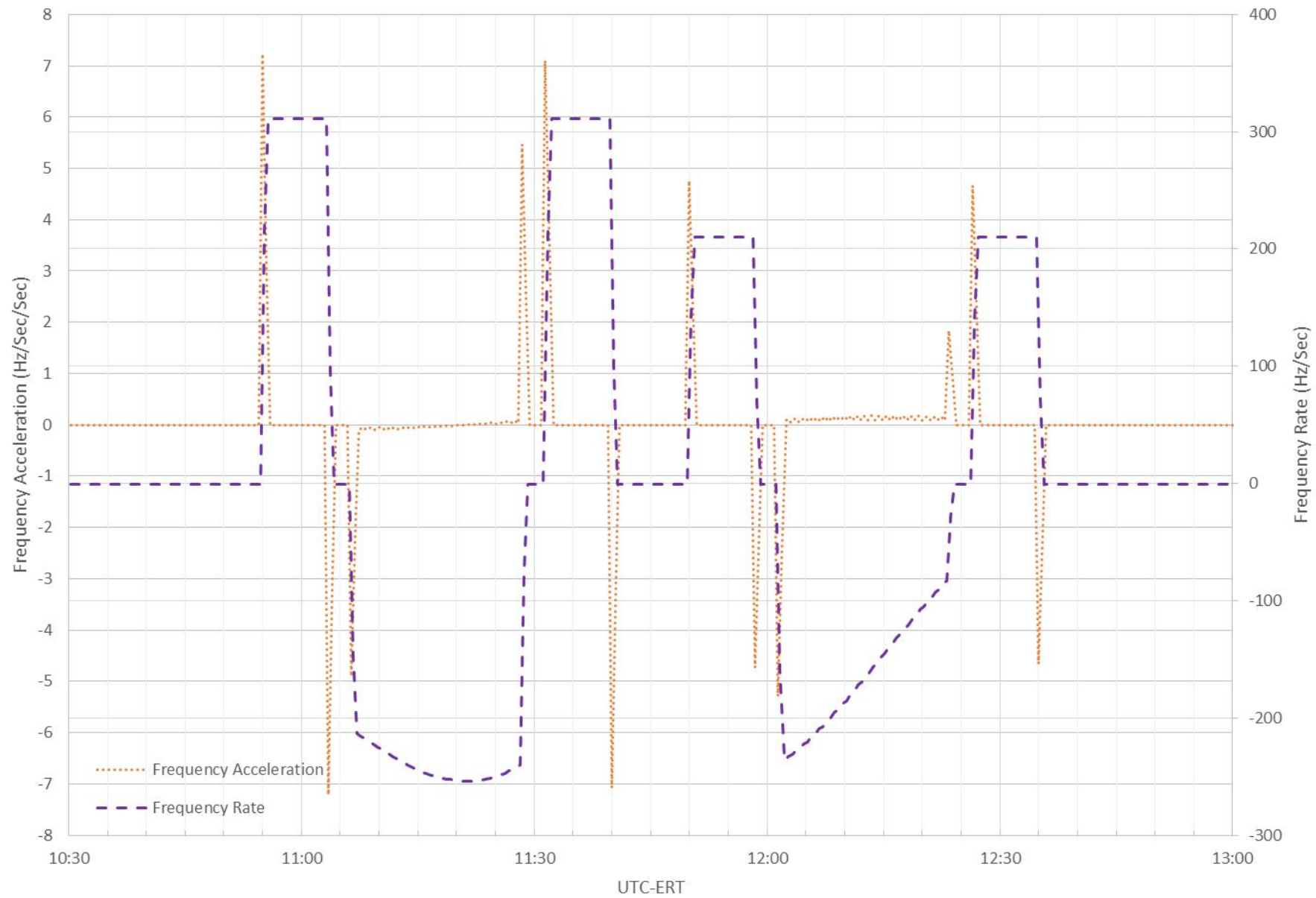
2016/240 DSS-35 Modified Uplink Ramp Acceleration & Rate



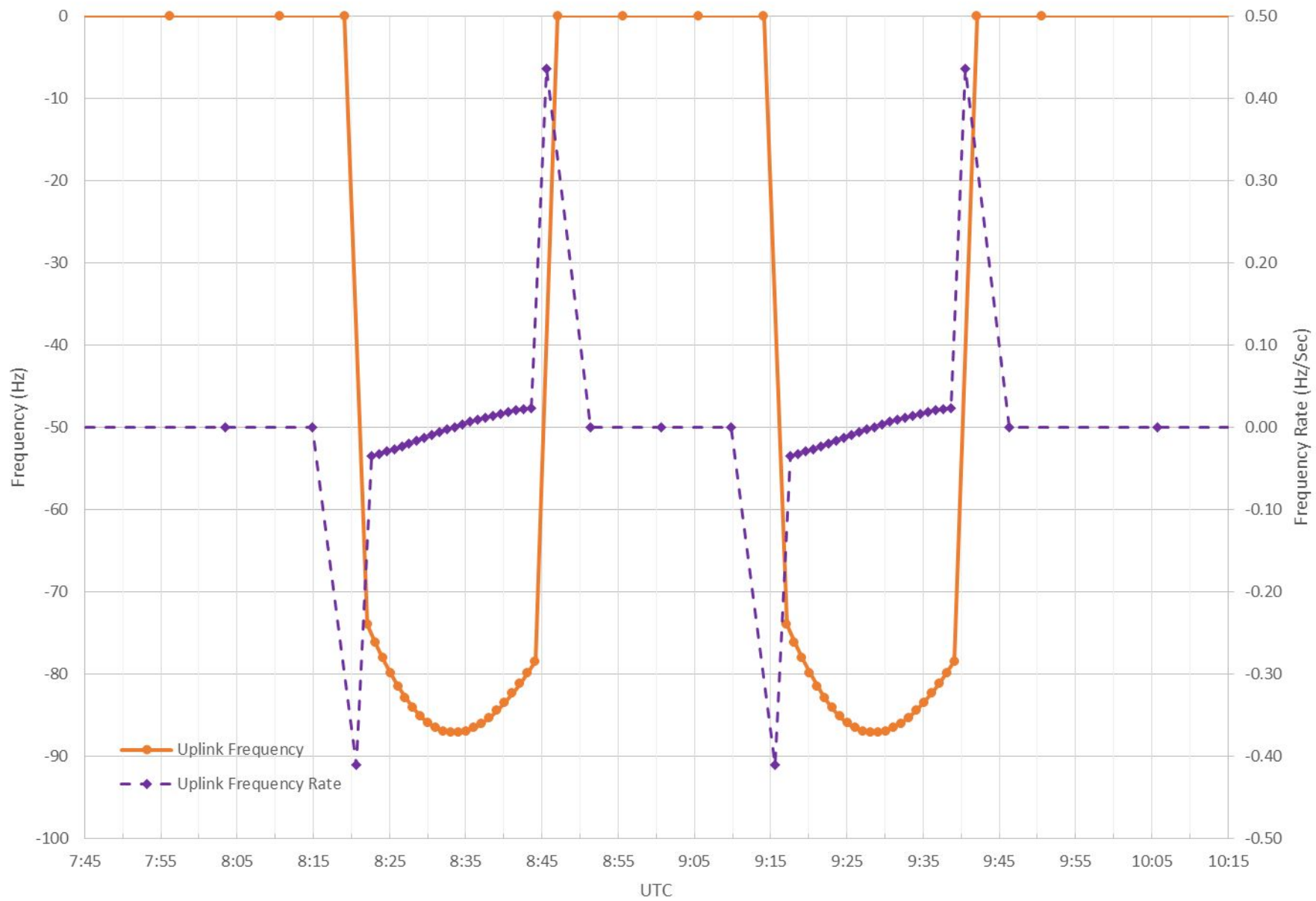
2016/240 DSS-35 2-Way X-Band Downlink Frequency & Rate



2016/240 DSS-35 2-Way X-Band Downlink Frequency Acceleration & Rate



2016/240 DSS-35 Uplink Ramp Difference due to Imposed Uncertainty



2016/240 DSS-35 X-Band Downlink Frequency Difference due to Imposed Doppler Uncertainty

