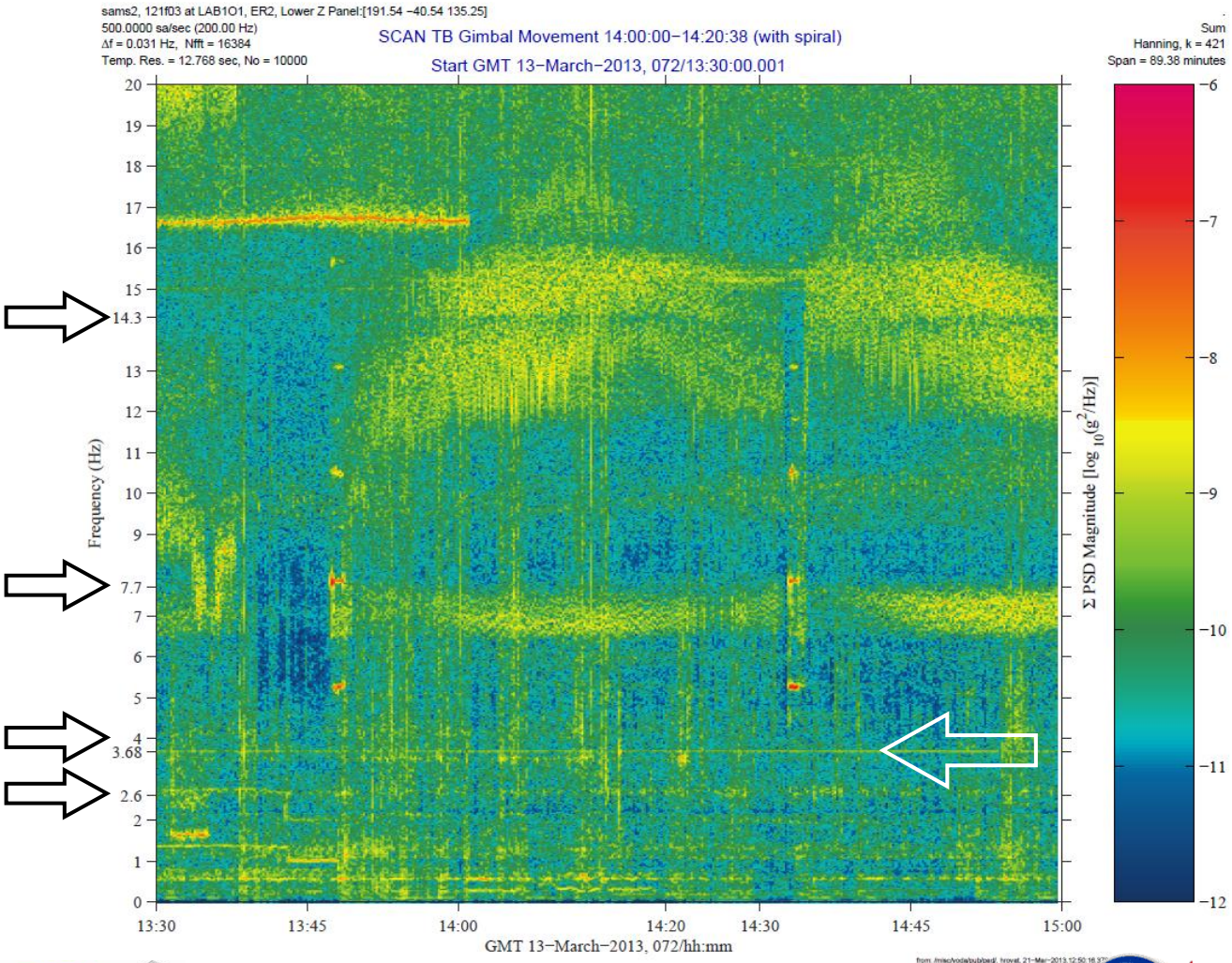
SCaN Testbed Gimbal Movement #1
Qualify



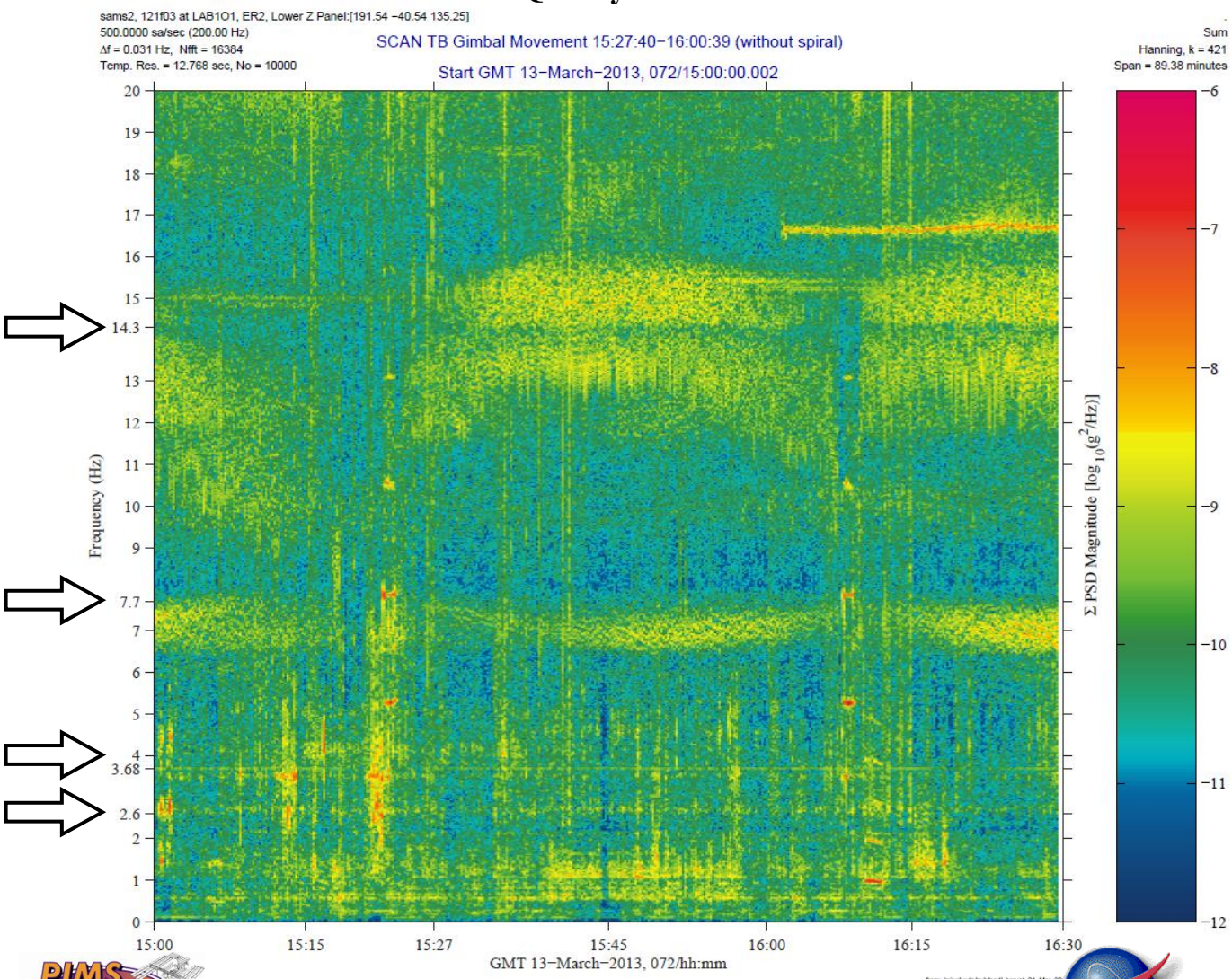
Description	
Sensor	121f03 500 sa/sec (200 Hz)
Location	LAB1O1, ER2, Lower Z Panel
Plot Type	spectrogram (Σ); f < 20 Hz

Notes:

- This spectrogram qualitatively shows no discernible, spectral signature that we can attribute to SCaN gimbal movement between GMT 14:00:00-14:20:38, at least not any that stands out against other know disturbance sources, such as the Ku-band antenna.
- The 4 black arrows indicate anticipated frequencies for spiral track (ST) mode at 14.3 Hz, inner velocity loop at 7.7 Hz, autotrack (AT) harmonic oscillator at 4 Hz, and AT correction at 2.6 Hz.
- The white arrow indicates the spectral signature of unrelated equipment, the UPA, at 3.68 Hz.

Regime:	Vibratory
Category:	Equipment
Source:	SCaN Testbed Gimbal Move #1

SCaN Testbed Gimbal Movement #2 Qualify



Description	
Sensor	121f03 500 sa/sec (200 Hz)
Location	LAB1O1, ER2, Lower Z Panel
Plot Type	spectrogram (Σ); f < 20 Hz

Notes:

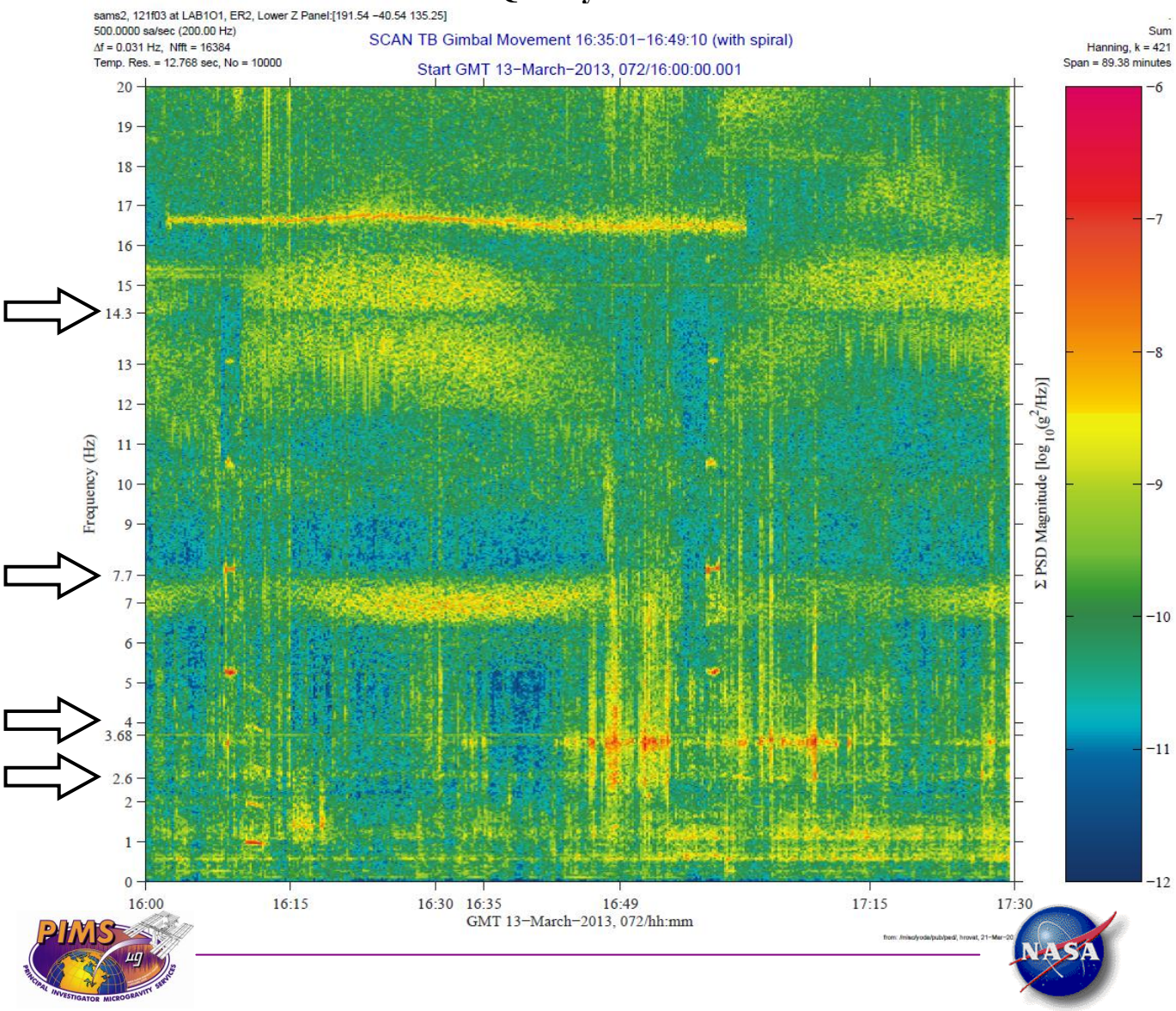
- This spectrogram qualitatively shows again no discernible, spectral signature that we can attribute to SCaN gimbal movement #2 between GMT 15:27:40-16:00:39.
- The 4 black arrows indicate anticipated frequencies for spiral track (ST) mode at 14.3 Hz, inner velocity loop at 7.7 Hz, autotrack (AT) harmonic oscillator at 4 Hz, and AT correction at 2.6 Hz.

Acceleration Measurements Program

Glenn Research Center

Regime:	Vibratory
Category:	Equipment
Source:	SCaN Testbed Gimbal Move #2

SCaN Testbed Gimbal Movement #3 Qualify



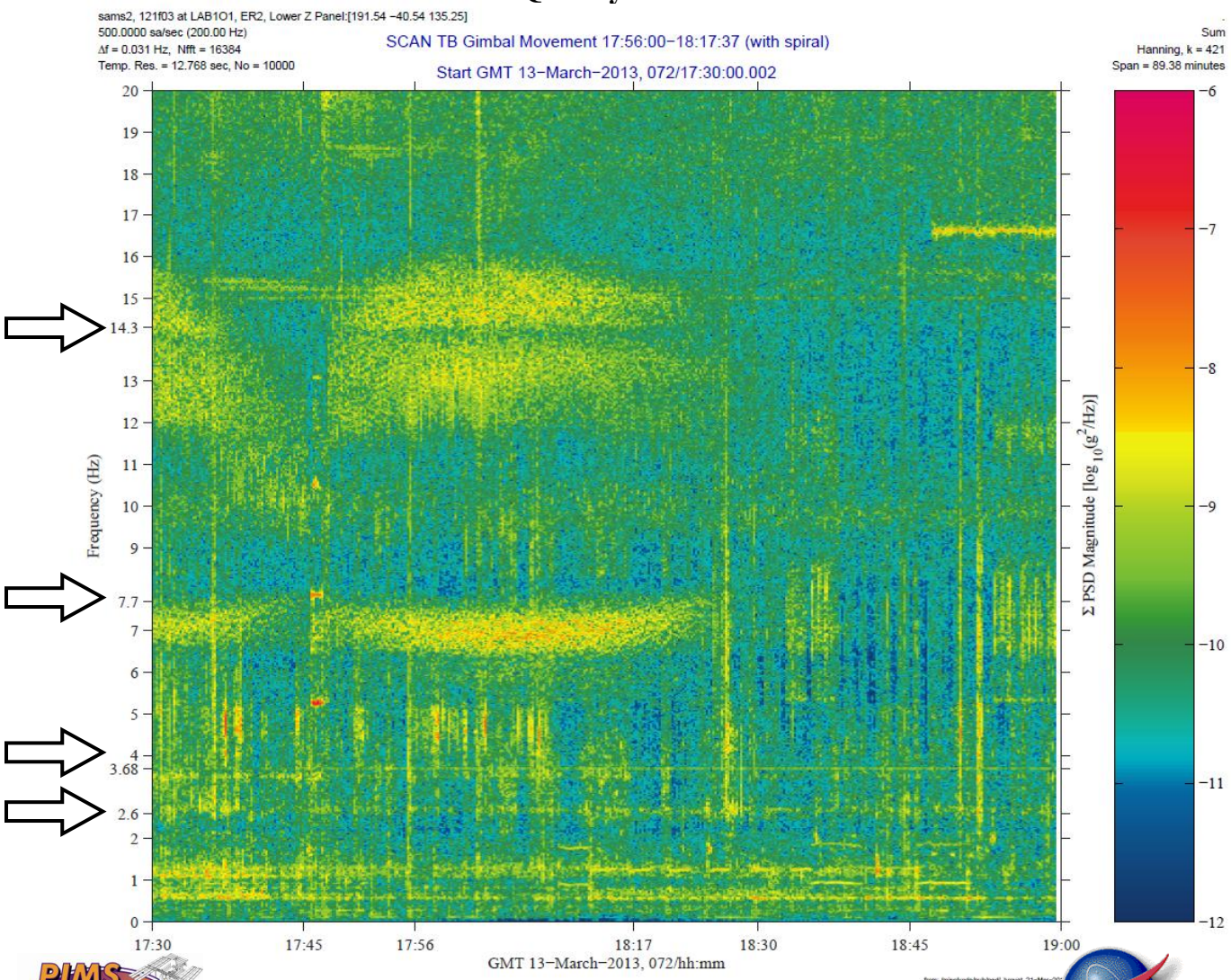
Description	
Sensor	121f03 500 sa/sec (200 Hz)
Location	LAB1O1, ER2, Lower Z Panel
Plot Type	spectrogram (Σ); f < 20 Hz

Notes:

- This spectrogram qualitatively shows again no discernible, spectral signature that we can attribute to SCaN gimbal movement #3 between GMT 16:25:01-16:49:10.
- The 4 black arrows indicate anticipated frequencies for spiral track (ST) mode at 14.3 Hz, inner velocity loop at 7.7 Hz, autotrack (AT) harmonic oscillator at 4 Hz, and AT correction at 2.6 Hz.

Regime:	Vibratory
Category:	Equipment
Source:	SCaN Testbed Gimbal Move #3

SCaN Testbed Gimbal Movement #4 Qualify



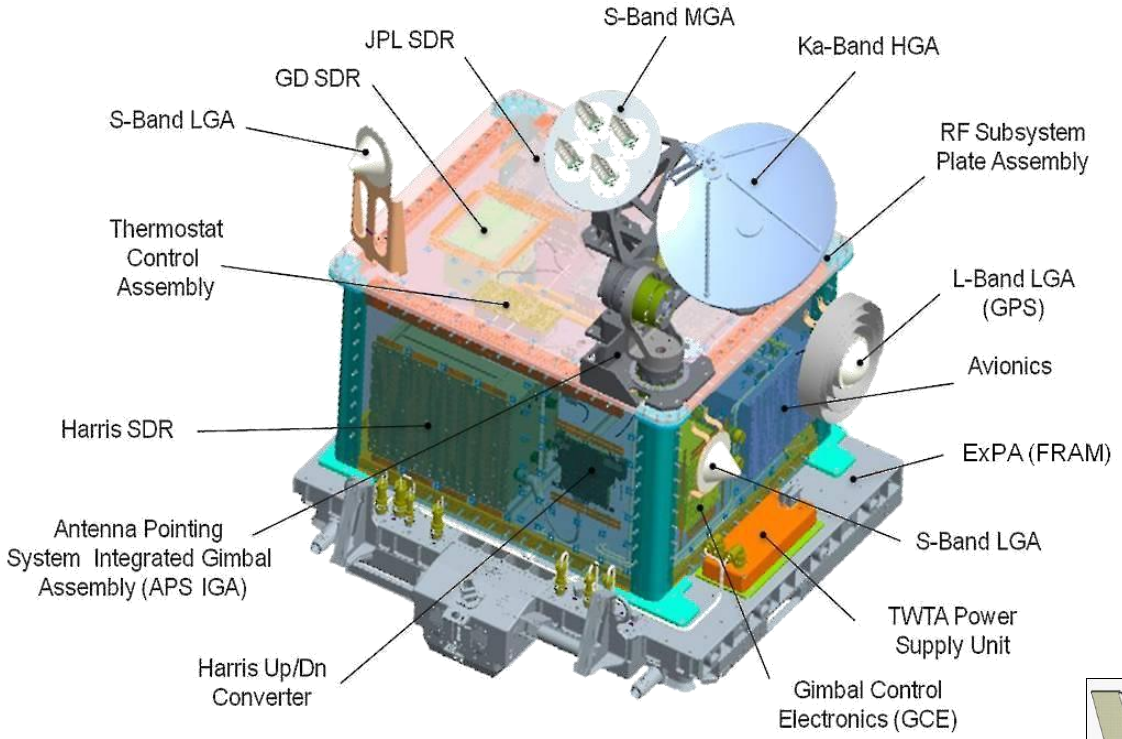
Description	
Sensor	121f03 500 sa/sec (200 Hz)
Location	LAB1O1, ER2, Lower Z Panel
Plot Type	spectrogram (Σ); f < 20 Hz

Notes:

- This spectrogram qualitatively shows again no discernible, spectral signature that we can attribute to SCaN gimbal movement #4 between GMT 17:56:00-18:17:37.
- The 4 black arrows indicate anticipated frequencies for spiral track (ST) mode at 14.3 Hz, inner velocity loop at 7.7 Hz, autotrack (AT) harmonic oscillator at 4 Hz, and AT correction at 2.6 Hz.
- Since there was no discernible disturbance in the 4 time frames associated with SCaN gimbal movement, no attempt to further quantify was undertaken.

Regime:	Vibratory
Category:	Equipment
Source:	SCaN Testbed Gimbal Move #4

SCaN Testbed Ancillary Information



- The NASA Space Communications and Navigation (SCaN) Program is responsible for providing communications and navigation services to space flight missions throughout the solar system using Software Defined Radios (SDRs).
- SDRs offer NASA the opportunity to improve the way space missions develop and operate space transceivers for communications, networking, and navigation. Reconfigurable SDRs provide the capability to change the functionality of the radio during a mission and optimize capabilities (e.g. video, telemetry, voice).
- The ability to change the operating characteristics of a radio via software after it is deployed to space offers the flexibility to adapt to new science opportunities, recover from anomalies, and potentially reduce development cost and risk through reuse of common space platforms to meet specific mission requirements.