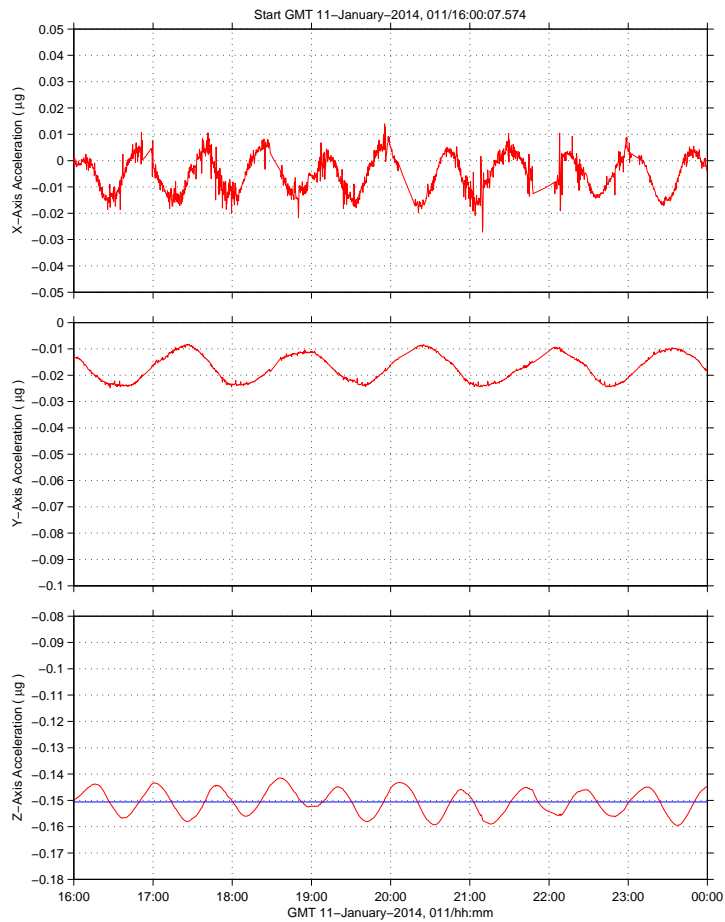


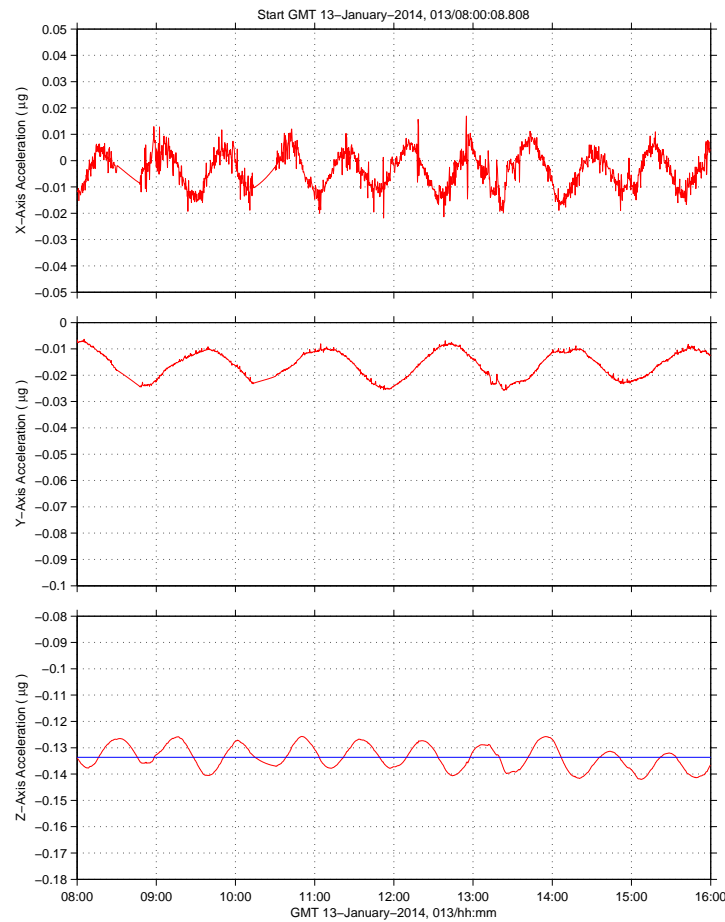
2014 Cygnus Capture Install Quantify

Description	
Data Set	ISS radgse 0.0625 sa/sec, 1.0 Hz
Plot Type	Acceleration vs. Time

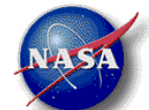
mams, ossbmf at LAB102, ER1, Lockers 3.4:[135.28 -10.68 132.12]
0.0625 sa/sec (0.01 Hz) Quasi-steady Roadmap
RED LINE IS RADGSE SSAnalysis[0.0 0.0 0.0]



mams, ossbmf at LAB102, ER1, Lockers 3.4:[135.28 -10.68 132.12]
0.0625 sa/sec (0.01 Hz) Quasi-steady Roadmap
RED LINE IS RADGSE SSAnalysis[0.0 0.0 0.0]



Regime:	Vibratory
Category:	Vehicle
Source:	2014 Cygnus Capture Install



2014 Cygnus Capture Install Ancillary Notes

Orbital Sciences' Cygnus cargo spacecraft loaded with scientific cargo, including colonies of ants, rendezvoused at the space station early Sunday morning of GMT 12-Jan-2014. The cargo ship was captured and then manually berthed by astronauts guiding it with the Canadian robotic arm. When Cygnus had moved further to within 30 feet (10m), station crew member Mike Hopkins, worked inside the Cupola to watch and carefully grapple the huge cargo ship using the space station's 57 foot long Canadarm2. Koichi Wakata of the Japan Aerospace Exploration Agency (JAXA) then took the controls of the robotic arm and maneuvered Cygnus to berth it at the Earth-facing (nadir) port on the station's Harmony Node. There are 16 bolts that have to be driven and 4 latches that have to be tightly hooked to firmly join together for a good mating of the 2 spacecraft. This is the 2nd time Cygnus has been deployed to the ISS and this mission is 1 of 8 operational cargo logistics flights scheduled under Orbital Sciences' multi-year \$1.9 billion Commercial Resupply Services contract (CRS) with NASA that runs through 2016. The purpose of the unmanned, private Cygnus spaceship - and the SpaceX Dragon - is to restore America's cargo to orbit capability that was terminated following the shutdown of NASA's space shuttles.

