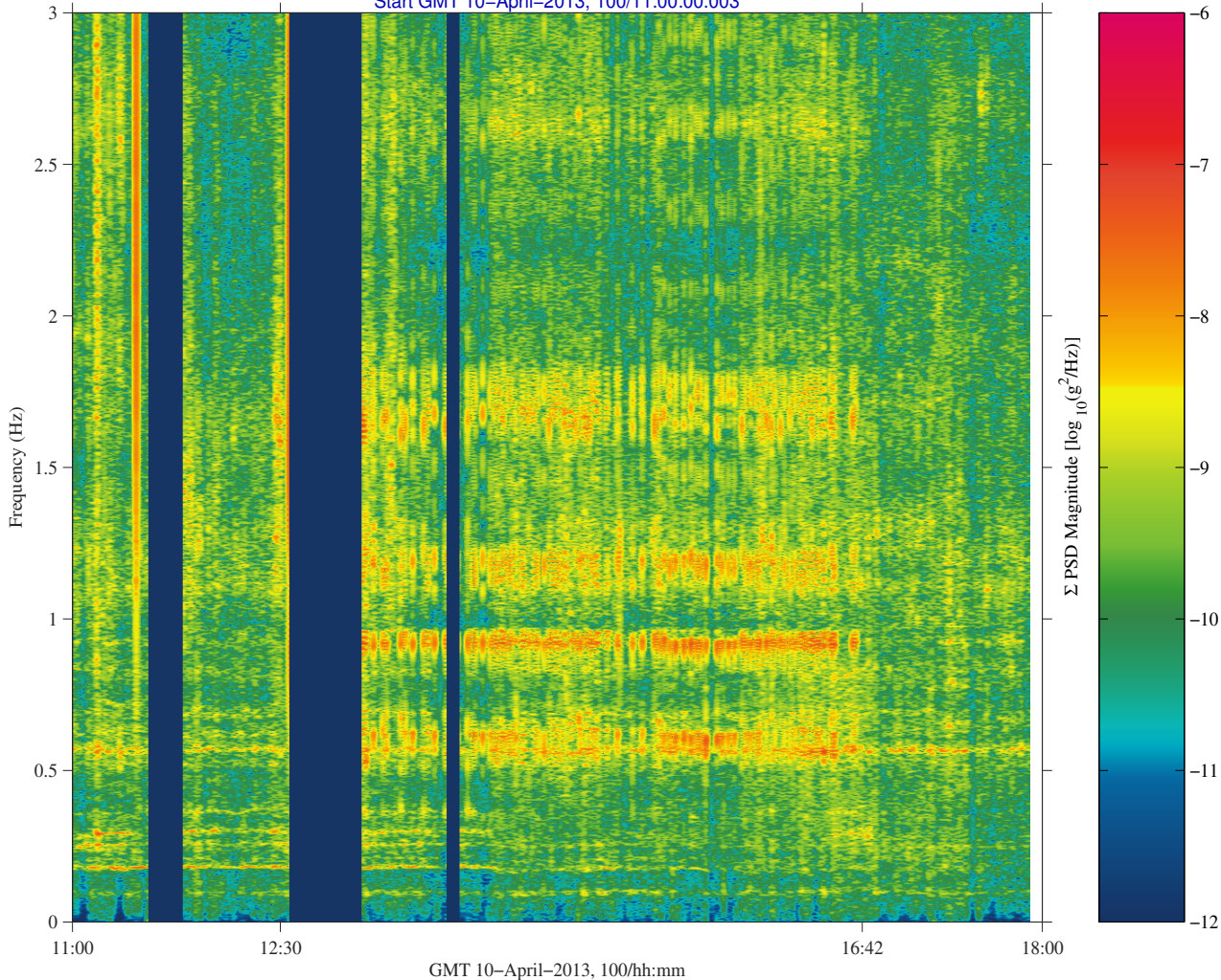


# Progress Propellant Line Purge Qualify

mams, hirap006 at LAB1O2, ER1, Lockers 3,4[138.68 -16.18 142.35]  
198.0000 sa/sec (6.00 Hz)  
 $\Delta f = 0.003$  Hz, Nfft = 65536  
Temp. Res. = 27.960 sec, No = 60000

Progress Propellant Line Purge

Start GMT 10-April-2013, 100/11:00:00.003



Sum  
Hanning, k = 890  
Span = 414.27 minutes

Description	
Sensor	HiRAP (low-pass filtered) 198 sa/sec (6 Hz)
Location	LAB1O2, ER1, Lockers 3,4
Plot Type	spectrogram ( $\Sigma$ ); $f < 3$ Hz

- Notes:**
- The TsUP/Moscow mission control performed a purge of the fuel line of the Progress 49P vehicle in preparation for its undocking.
  - This fuel line purge took place between GMT 10-April-2013, 12:30 and 16:42.
  - This spectrogram shows the vibratory impact of the propellant line purge. Note the elevated structural mode excitation between 0.5 Hz and 2 Hz during the purge process.

Regime:	Vibratory
Category:	Vehicle
Source:	Propellant Line Purge



← purge →

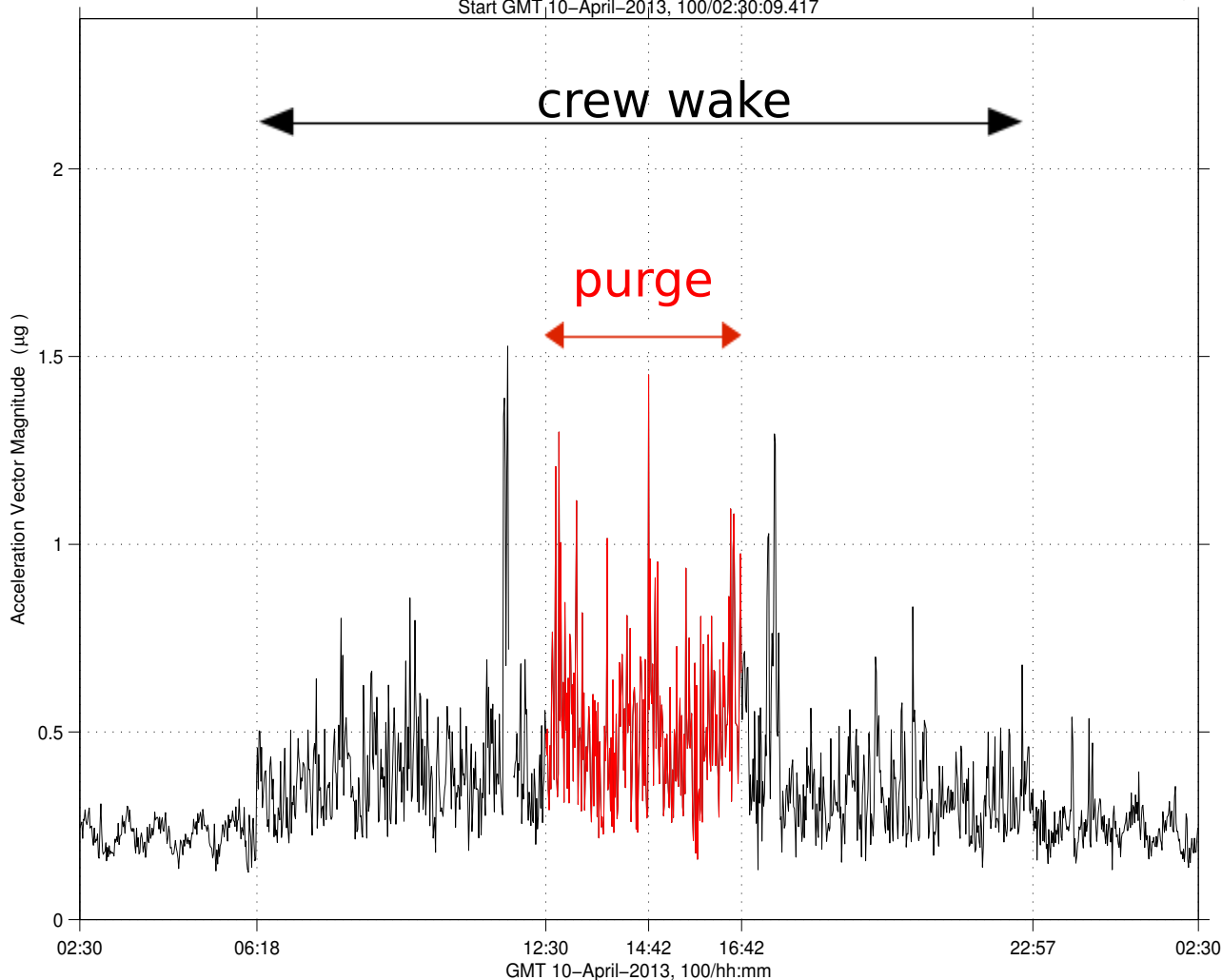
## Progress Propellant Line Purge Quantify

mams, ossbtmf at LAB1O2, ER1, Lockers 3,4[135.28 -10.68 132.12]  
0.0156 sa/sec (0.01 Hz)

Progress 49P Propellant Line Purge

Vector Magnitude  
Interval Average  
Size: 64.00, Step: 64.00 sec.

Start GMT, 10-April-2013, 100/02:30:09.417



from: imiscyoda/pubpad/, Irvost, 18-Apr-2013, 11:50:31.870

Description	
Sensor	OSS (best TMF) 0.0156 sa/sec (0.01 Hz)
Location	LAB1O2, ER1, Lockers 3,4
Plot Type	Vector magnitude vs. time

### Notes:

- The plot here shows a low-frequency view of this propellant purge activity. This is a plot of MAMS OSS acceleration vector magnitude versus time for 24 hours surrounding the event.
- Note the following transitions that line up with the time axis tick marks for GMT 10-April-2013:
  - 06:18 = crew wake
  - 12:30 = start propellant purge
  - 16:42 = stop propellant purge
  - 22:57 = crew sleep
- The average value during the propellant line purge was about 0.51  $\mu\text{g}$ .
- The average value during crew wake, but excluding the purge period, was 0.38  $\mu\text{g}$ .
- The average value during sleep (not wake period) was 0.24  $\mu\text{g}$ .

Regime:	Quasi-Steady
Category:	Vehicle
Source:	Propellant Line Purge

