

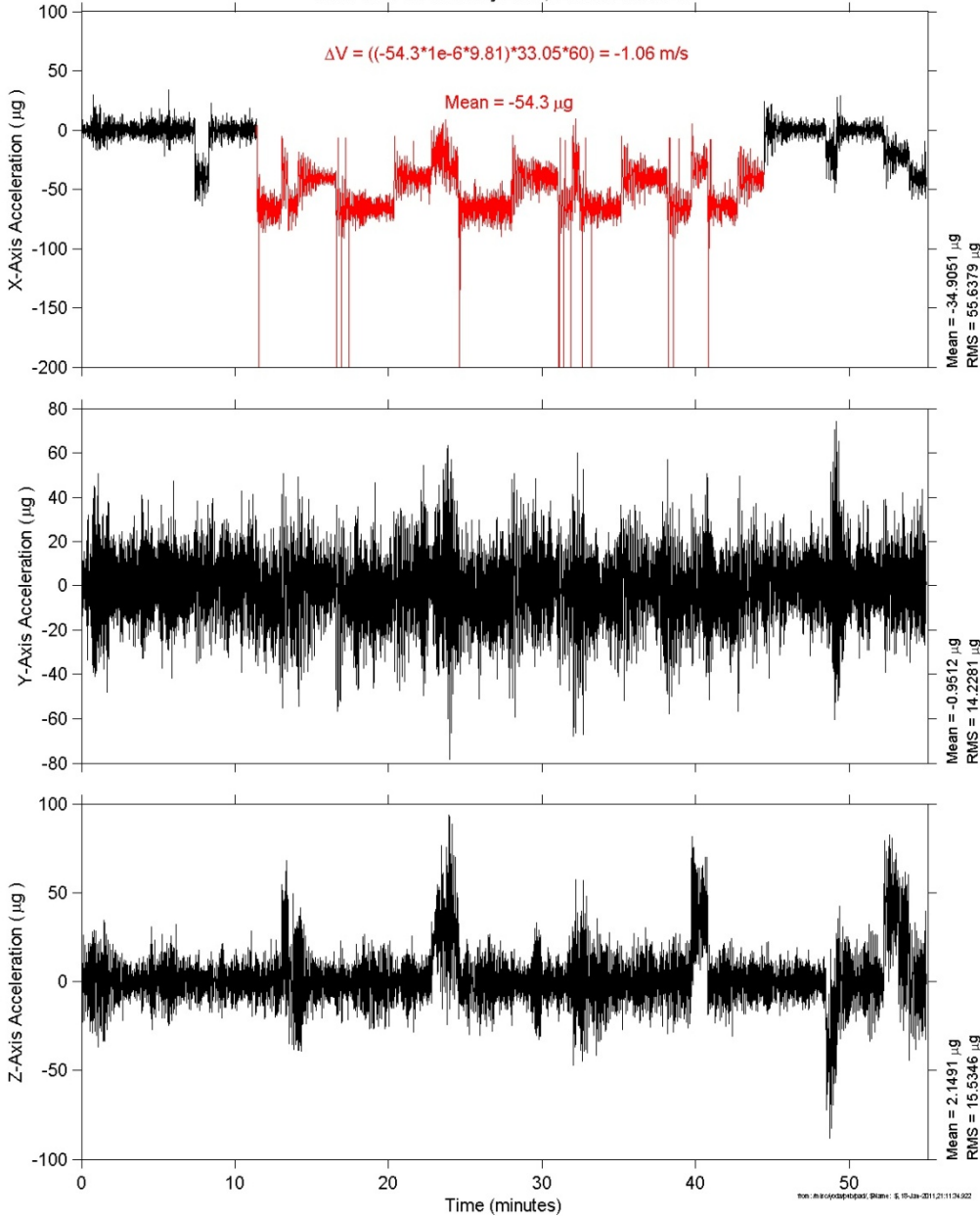
Orbiter Reboost

mams, ossraw at LAB1O2, ER1, Lockers 3,4 [135.28 -10.68 132.12]
10.0000 sa/sec (1.00 Hz)

Increment: 19, Flight: 15A
ossraw[90.0 0.0 0.0]

STS 130 Orbiter Reboost

Start GMT 18-February-2010, 049/07:20:00.045



Description

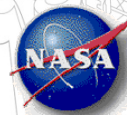
Sensor	MAMS,ossraw 10 sa/sec (1 Hz)
Location	LAB1O2, ER1, Lockers 3,4
Orientation	Space Station Analysis (SSA)
Inc/Flight	Increment: 22, Flight: 20A
Plot Type	Time Series

NOTES:

- Periodic reboosts of the ISS are necessary due to orbital decay or for debris avoidance maneuvers. Reboosts were often conducted using the thruster system on a docked Space Shuttle.
- Because the Orbiter is docked to PMA-2, ISS is maneuvered to -XVV/+ZLV attitude for reboost.
- OSS Data captured during the Orbiter reboost on GMT 049/24-Feb-2010 is shown on the left.



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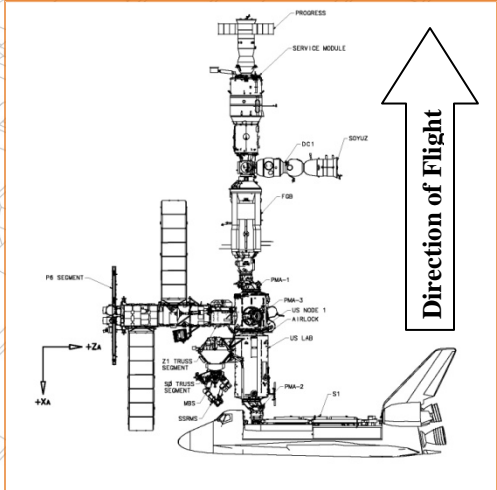
Regime:	Quasi-steady
Category:	Vehicle
Source:	Reboost

Orbiter Reboost

Reboost Information				Calculations from MAMS OSS Data		
Time of Ignition	Remarks	Duration (min)	ΔV (m/s)	Duration (min)	ΔV (m/s)	X-Axis Mean(μg)
12-Oct-2002, 285/10:53	Config 3	60	3.60	59.9	3.50	-99.4
14-Oct-2002, 287/10:53	Config 3	35	2.10	35.5	2.11	-100.9
27-Nov-2002, 331/17:11	Config 3	45	2.65	45.3	2.70	-101.3
29-Nov-2002, 333/16:50	Config 4, OSS raw data exhibits range clipping which may affect result.	55	0.75	54.6	0.46	-14.2
16-Feb-2008, 47/12:17	Config 3	36	1.60	36.1	1.43	-67.5
21-Nov-2008, 326/17:10	Config 3	30	1.2	27.3	1.01	-61
18-Jul-2009, 199/00:30	Config 3	15	0.77	18.9	0.67	-60.5
24-Nov-2009, 328/10:07	Config 3	27	1.14	26.9	0.92	-57.8
18-Feb-2010, 49/07:31	Config 3	31	1.3	32.9	1.01	-52.2
3-Mar-2011, 62/14:03	Config 3, Discovery Last Reboost	26	1.00	26.0	0.70	-45.8
29-May-2011, 149/05:03	Config 3, Endeavor Last Reboost	14	0.57	14.7	0.37	-42.7

Description	
Sensor	MAMS,ossbtmf 0.0625 sa/sec (1 Hz)
Location	LAB102, ER1, Lockers 3,4
Orientation	Space Station Analysis (SSA)
Inc/Flight	Increments: 3-28 Flights: Various
Plot Type	Time Series

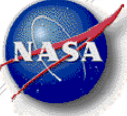
* See SM Reboost – Excessive Vibration handbook page for details on events of GMT 014/14-Jan-2009.



ISS/Orbiter Mated Configuration for Mission 9A. Indicated direction of flight is specific for reboost operations.



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Regime:	Quasi-steady
Category:	Vehicle
Source:	Progress Thrusters