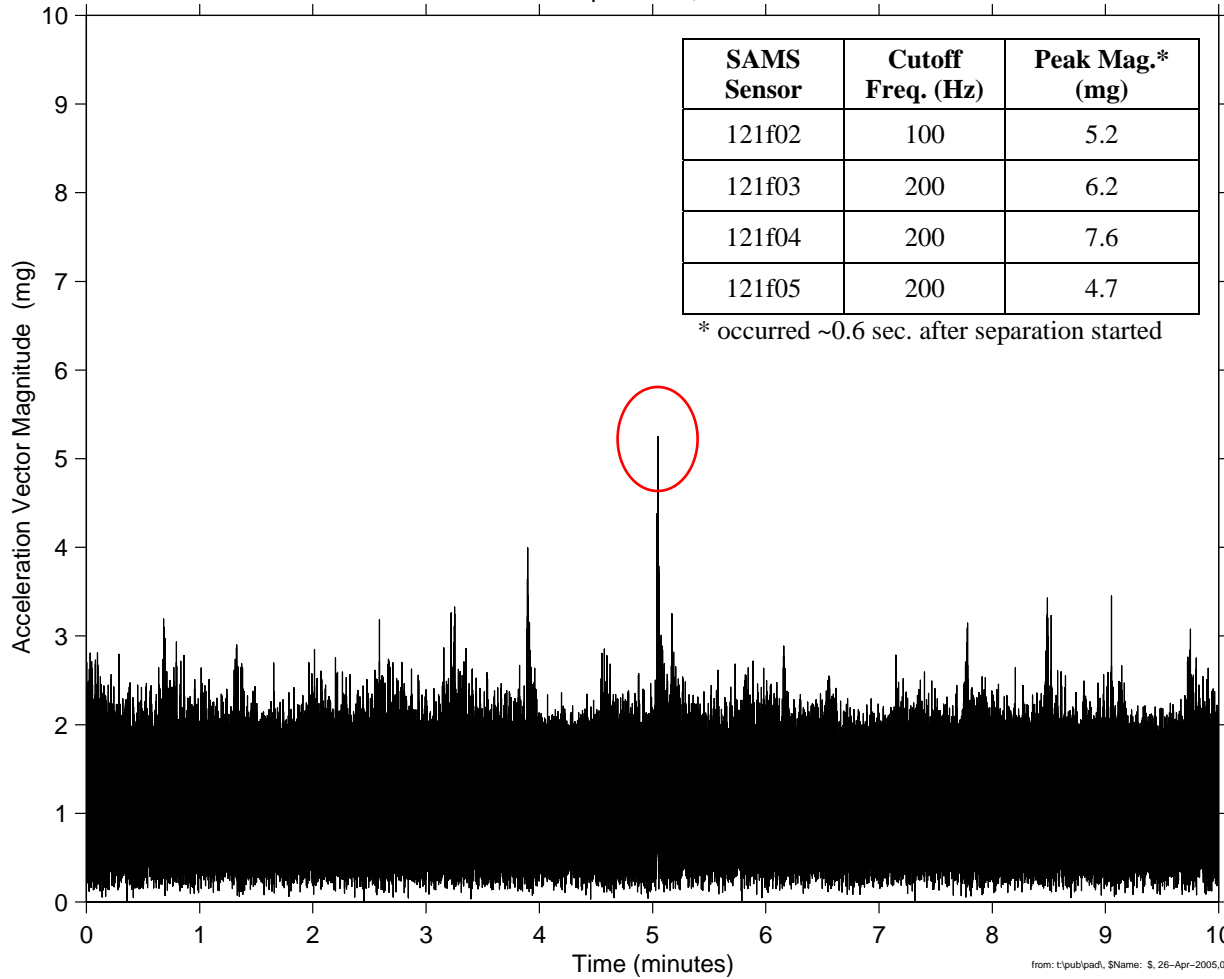


Soyuz 9S Undocking Qualify

sams2, 121f02 at LAB1O2, ER1, Drawer 1:[128.73 -23.53 144.15]
250.0000 sa/sec (100.00 Hz)

Increment: 10, Flight: 9S
Vector Magnitude

Soyuz Undocking
Start GMT 24-April-2005, 114/18:39:50.002



Data Description	
Sensor	SAMS 121f02 250.0 sa/sec (100.00 Hz)
Location	LAB1O2, ER1, Drawer 1
Inc/Flight	Increment: 10 Flight: 9S
Plot Type	acceleration vector magnitude

Notes:

The return to Earth of the Soyuz TMA-5/9S with Leroy Chiao, Salizhan Sharipov & Roberto Vittori proceeded along the following GMT sequence on 24-Apr-2005:

15:15 ISS attitude handover to RS and maneuver to 9S undocking attitude (11:15am EDT)

18:37 ISS in free drift (2:37pm EDT)

18:39 Hooks open command (2:39pm EDT)

18:44 Separation springs action; delta-V ~0.12 m/sec (2:44pm EDT)

18:45 Separation burn; 8 sec, ~0.29 m/sec (2:45pm EDT)

21:16 De-orbit burn; delta-V 115.2 m/sec (5:16pm EDT)

21:41 Tri-module separation; 140.1 km (5:41pm EDT)

21:44 Atmospheric entry; 101.8 km, ~170 m/sec (5:44pm EDT)

21:53 Parachute deploy command (5:53pm EDT)

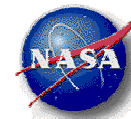
21:55 ISS attitude control handed back to US (5:55pm EDT)

22:08 9S landing; nominally (6:08pm EDT)

Regime:	Vibratory
Category:	Vehicle
Source:	Soyuz 9S Undocking



Microgravity Science Division



Glenn Research Center