Maneuver to Post Undock Torque Equilibrium Attitude (TEA) with Control Moment Gyros (CMGs) - Qualify

Notes:
- After the Progress 49P vehicle undocked from the ISS on GMT 15-April-2013 at about 12:00, the ISS maneuvered to its desired Torque Equilibrium Attitude (TEA) using only its Control Moment Gyros (CMGs). As a result, no propellant was used.
- This spectrogram shows the transient impact of the undocking separation event at just after 12:00, but note the lack of discernible impact from the maneuver during CMG activity between 12:20 and 12:25.
Maneuver to Post Undock Torque Equilibrium Attitude (TEA) with Control Moment Gyros (CMGs) - Quantify

- This 3-panel plot of acceleration versus time from MAMS OSS best trimmed-mean filter data shows the transient impact of the undocking separation event at just after 12:00, but again note the lack of discernible impact from the maneuver during CMG activity between 12:20 and 12:25.
- Not only did this maneuver save propellant, it also preserved status quo with regards to the microgravity environment.

Sensor: OSS
Location: LAB102, ER1, Lockers 3,4
Plot Type: Acceleration vs. time

<table>
<thead>
<tr>
<th>Description</th>
<th>Sensor</th>
<th>OSS</th>
<th>0.0625 sa/sec (0.01 Hz)</th>
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</thead>
<tbody>
<tr>
<td>Location</td>
<td>LAB1O2, ER1, Lockers 3,4</td>
<td></td>
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<tr>
<td>Plot Type</td>
<td>Acceleration vs. time</td>
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<td>Notes:</td>
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</tbody>
</table>

Regime: Quasi-Steady
Category: Vehicle
Source: Maneuver