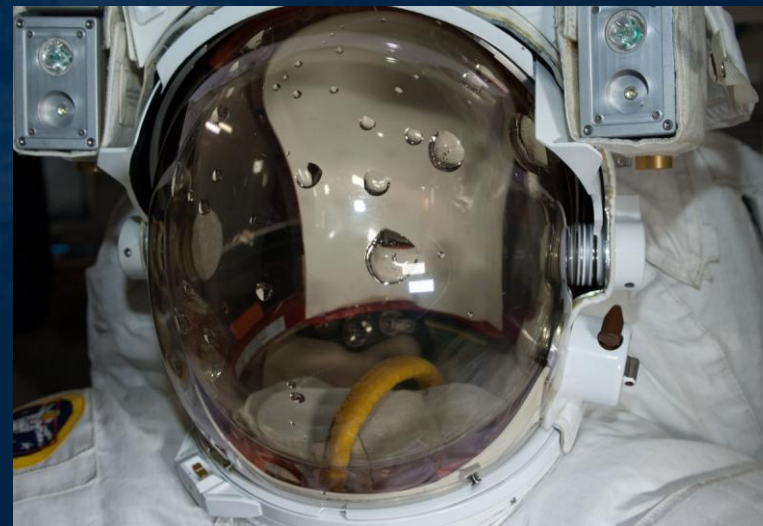


ISS EVA 23

Lessons Learned

Date of Mishap: July 16, 2013

High Visibility Close Call –



Luca Parmitano

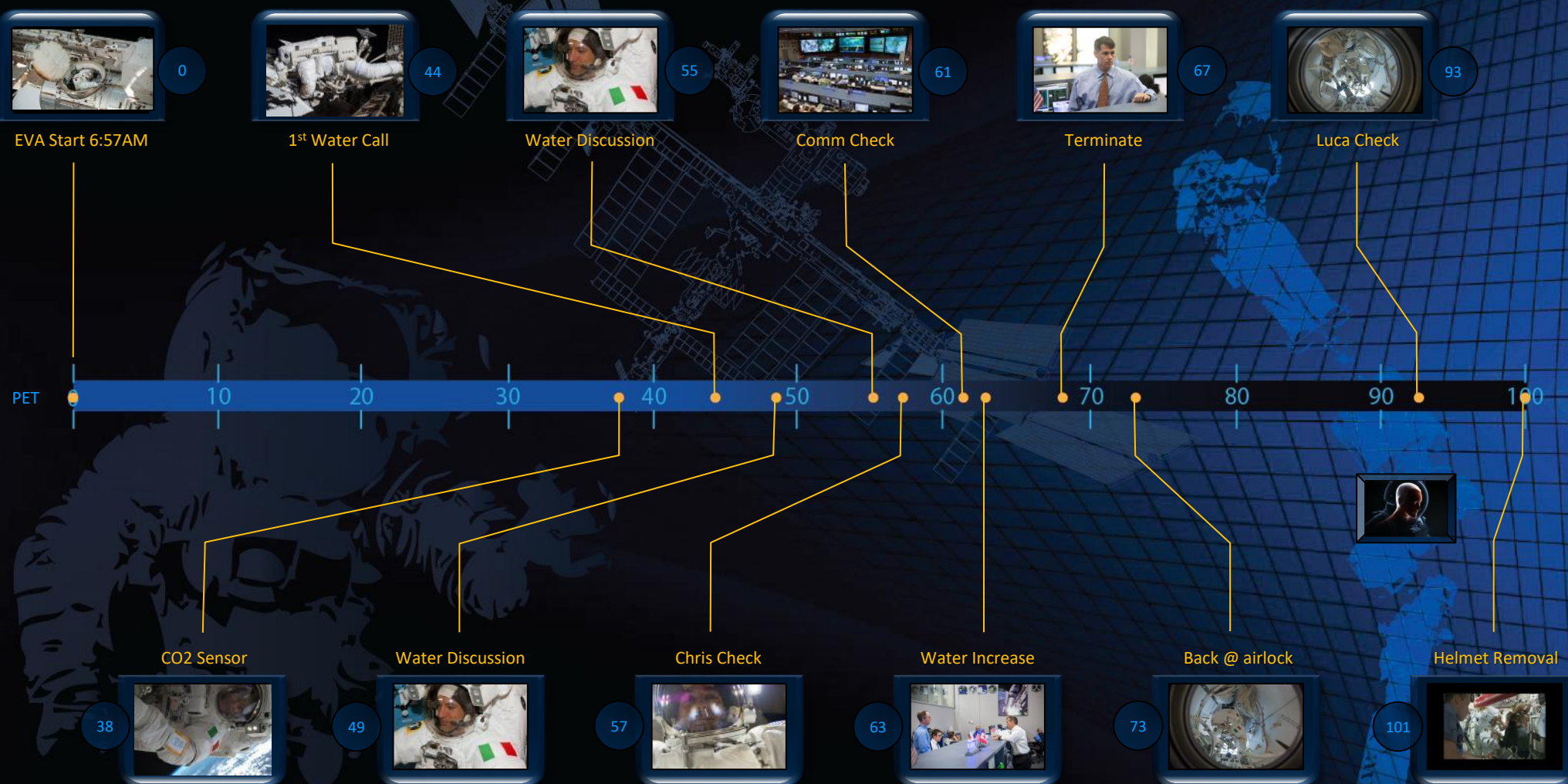
ESA astronaut

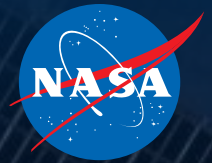


Today's presentation

- EVA 23 : what happened?
- Summary of findings
- Lessons learned
- Q&A

Timeline

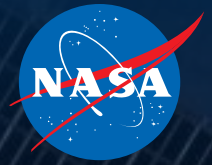




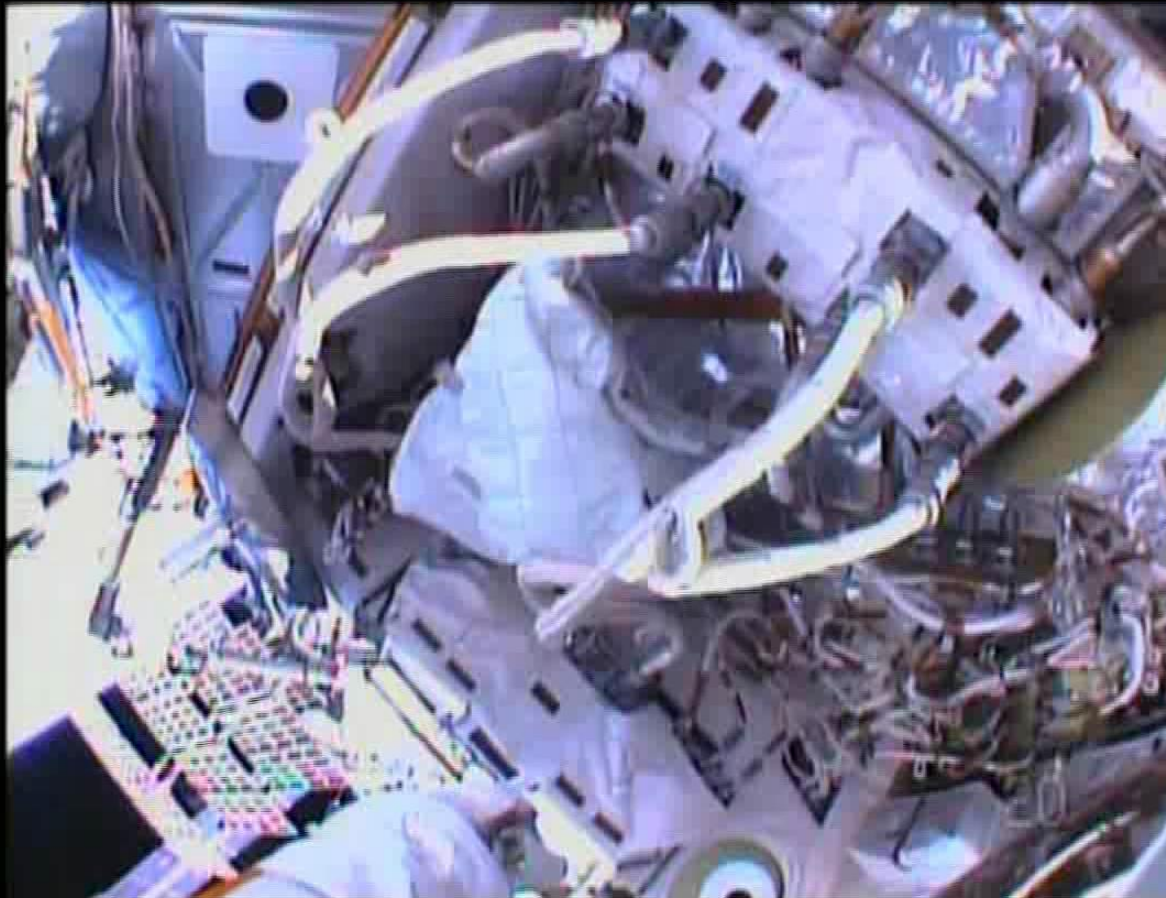
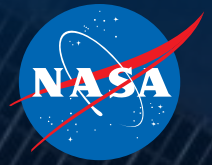
Summary of Findings

- The causes for this mishap evolved from:
 - Inorganic materials causing blockage of the drum holes in the EMU water separator resulting in water spilling into the vent loop
 - The NASA team's lack of knowledge regarding this particular failure mode
 - Misdiagnosis of this suit failure when it initially occurred on EVA 22

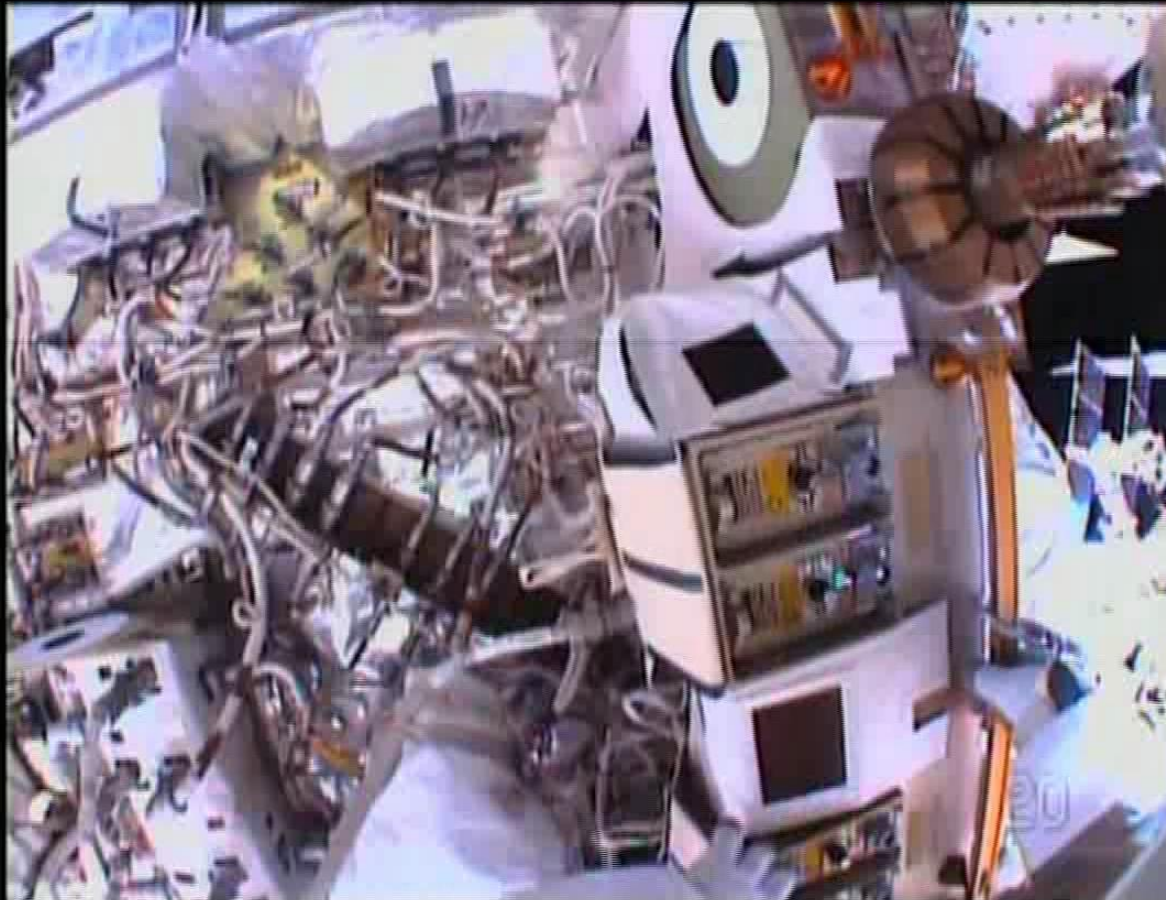
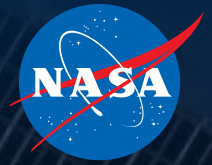
EVA Start



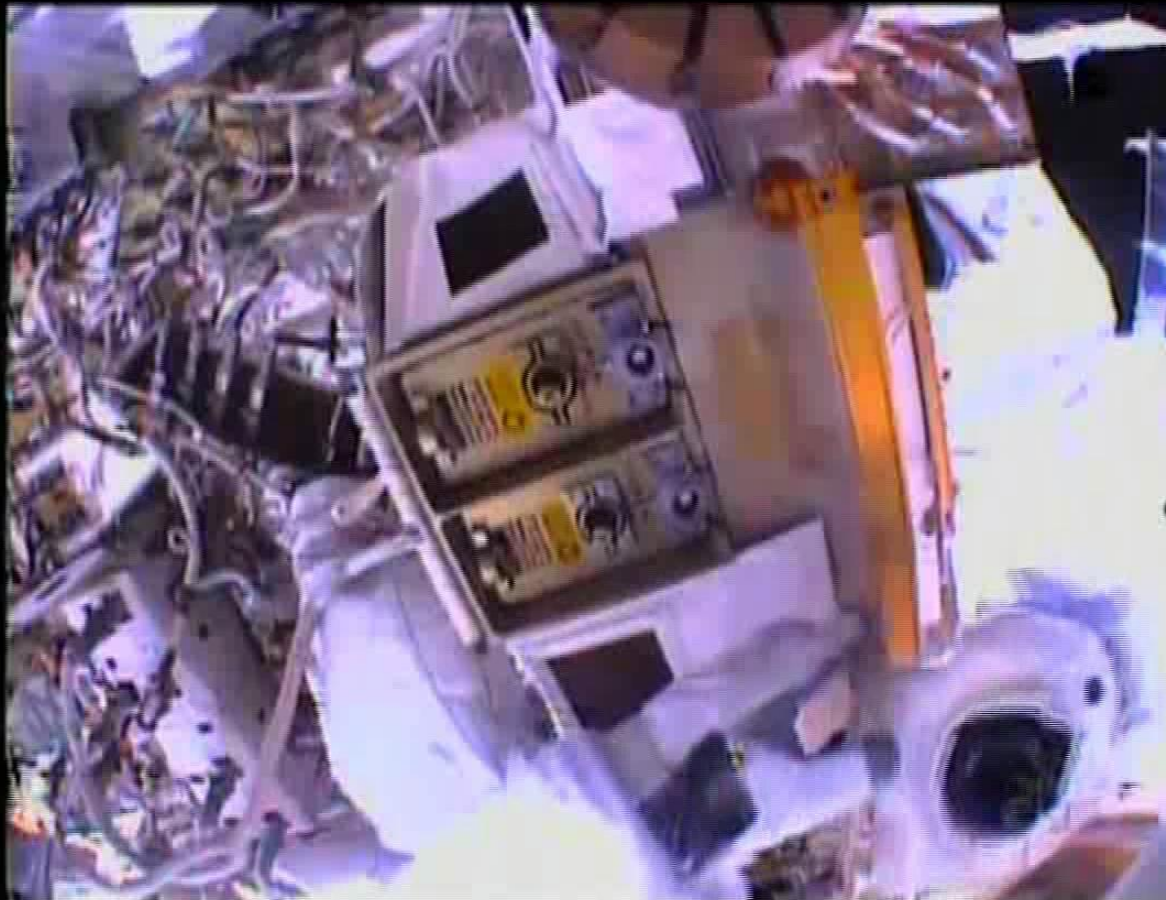
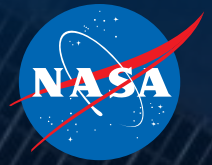
CO₂ Sensor



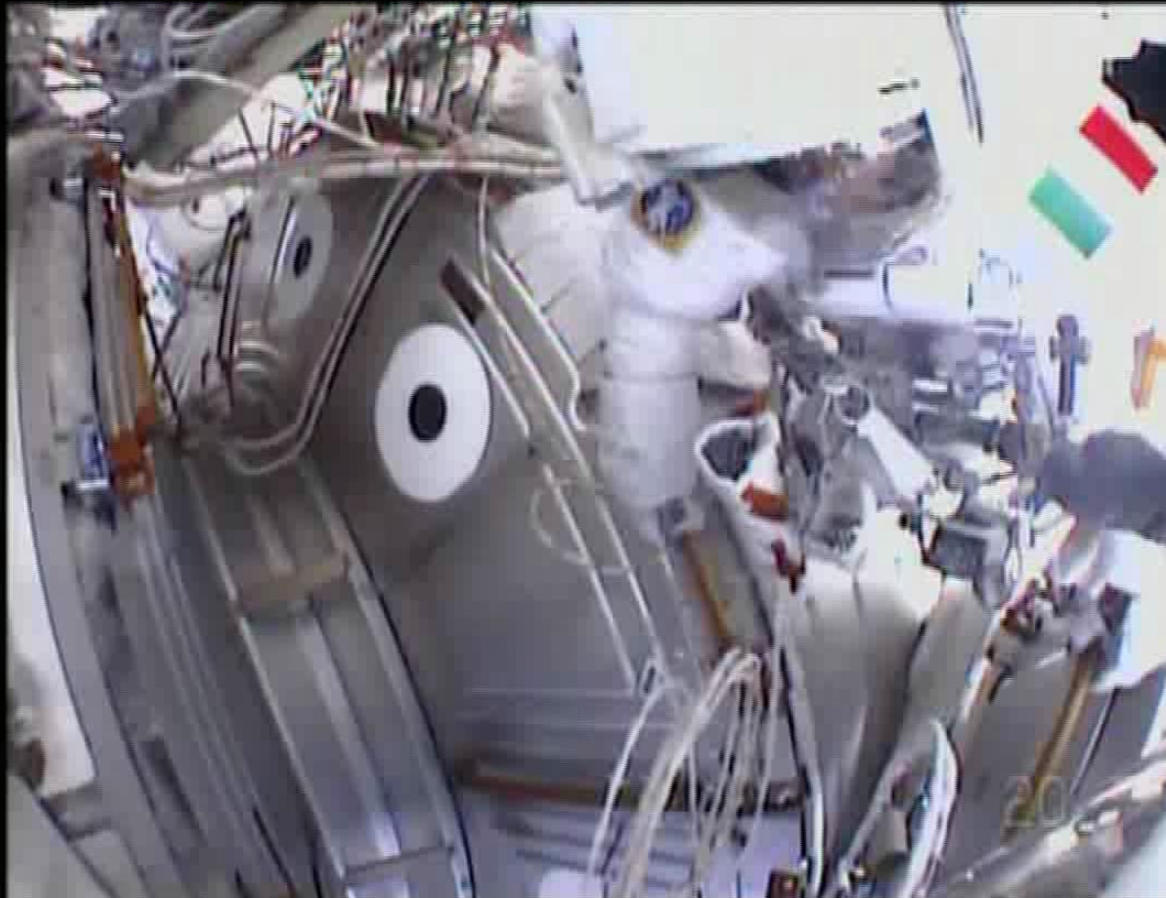
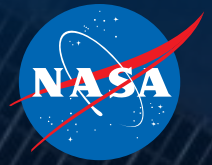
1st Water Call



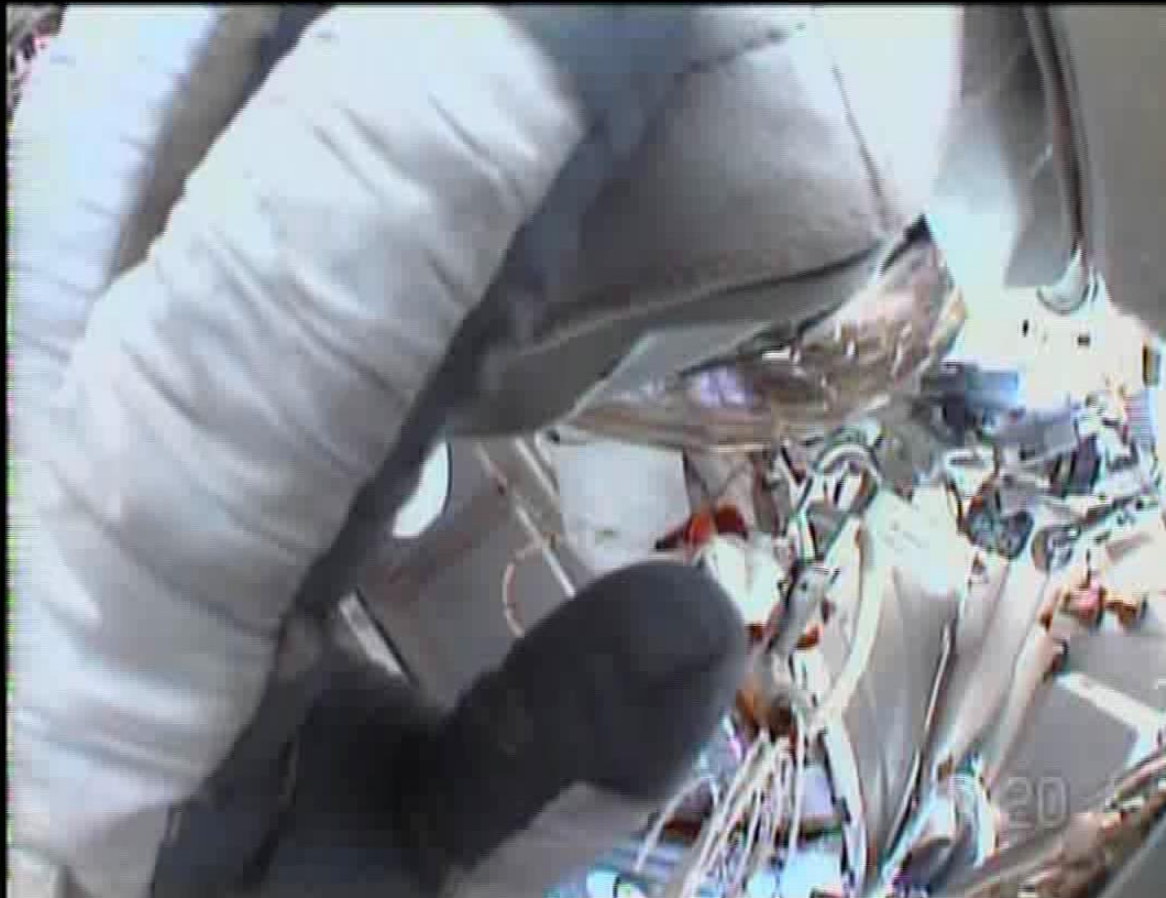
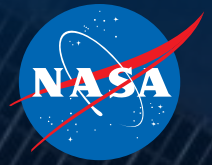
Water Discussion



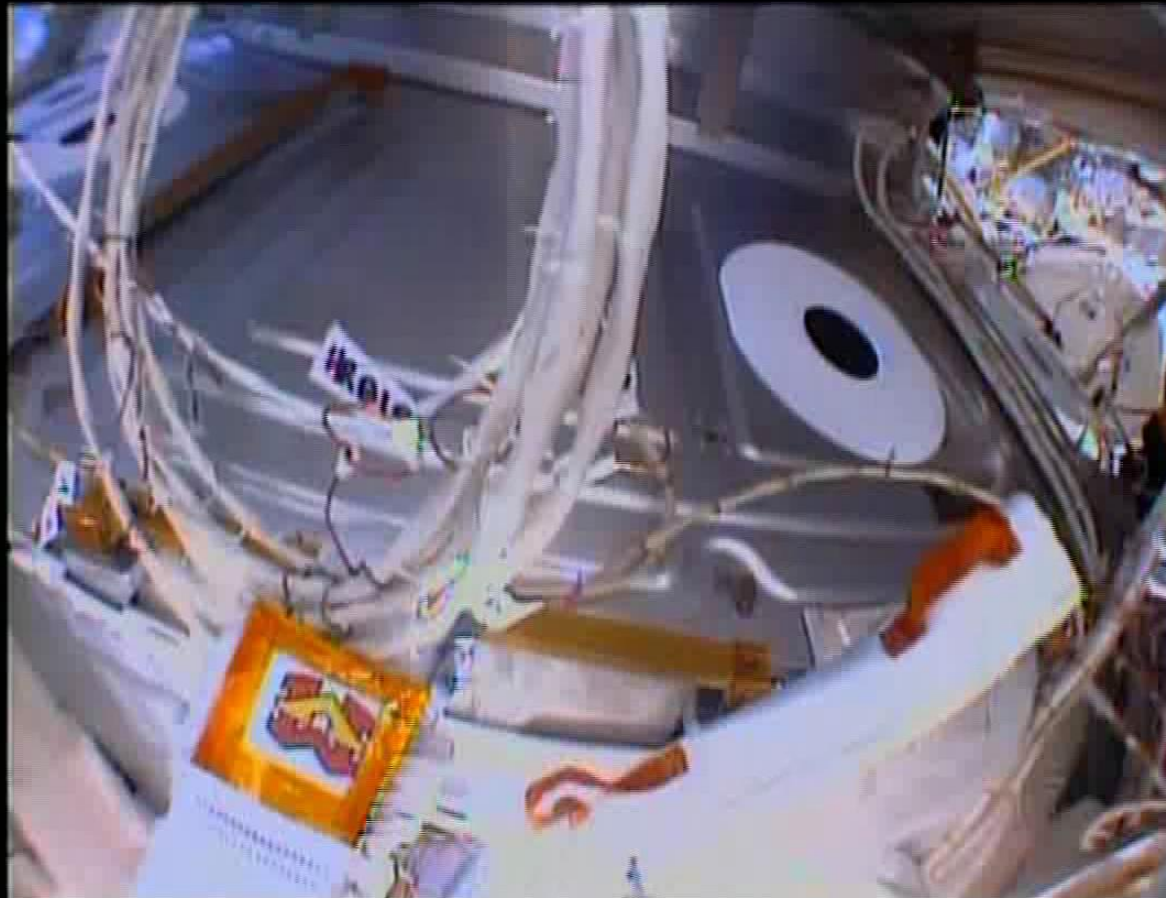
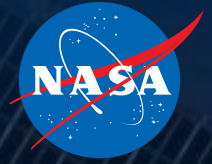
Water Discussion



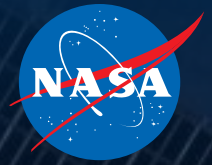
EV1/EV2



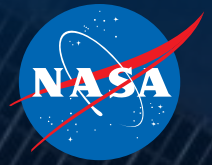
Comm Check



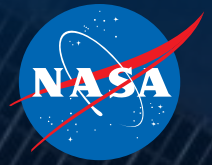
Water Increase



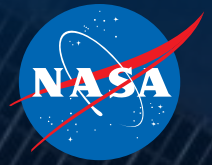
Terminate



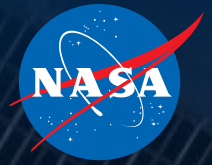
Back @ Airlock



Luca Check



Helmet Removal



Water Dynamics

