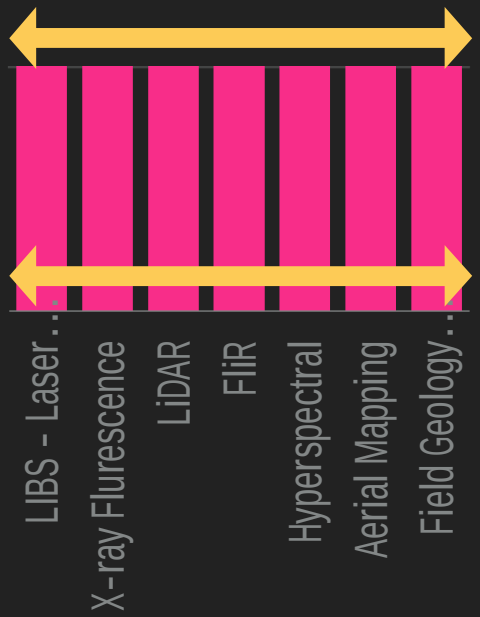

RISE4
REMOTE IN SITU AND SYNCHROTRON
STUDIES FOR SCIENCE AND EXPLORATION
SOLAR SYSTEM EXPLORATION RESEARCH
SSERVI
VIRTUAL INSTITUTE
APPLICATION TO NEW OPERATIONS
TRAINING, ANALOGUES, AND FUTURE MISSIONS

USING CHRONOLOGY TO ORGANIZE LARGE VOLUMES OF REAL-TIME DATA




Liz
Butch
6
Liz
Butch
EVA Still Camera
11:39:06:02
Drone
Jun 5 2017
17:39:06 UTC
CESIUM
bing
© Analytical Graphics Inc., © CGIAR-CSI, Produced using Copernicus data and information funded by the European Union - EU-DEM layers - © 2017 Microsoft Corporation - © 2017 DigitalGlobe - ©CNES (2017) Distribution Airbus DS
Jun 5 2017 16:50:00 UTC
Jun 5 2017 17:00:00 UTC
Jun 5 2017 17:10:00 UTC
Jun 5 2017 17:20:00 UTC
Jun 5 2017 17:30:00 UTC
Jun 5 2017 17:40:00 UTC
Jun 5 2017 17:50:00 UTC
Jun 5 2017 18:00:00 UTC
Jun 5 2017 18:10:00 UTC
Jun 5 2017 18:20:00 UTC
Jun 5 2017 18:30:00

APPLICATION TO NEW OPERATIONS

JOHNSON SPACE CENTER

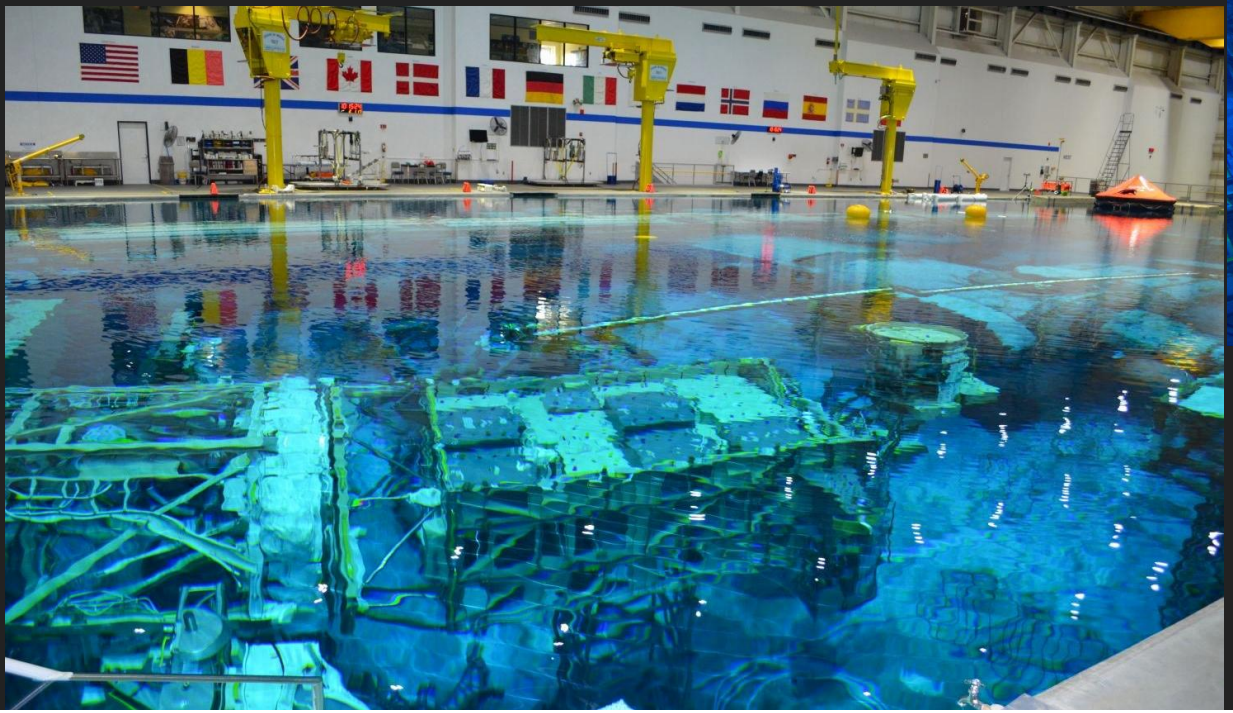

60015,1
E
N

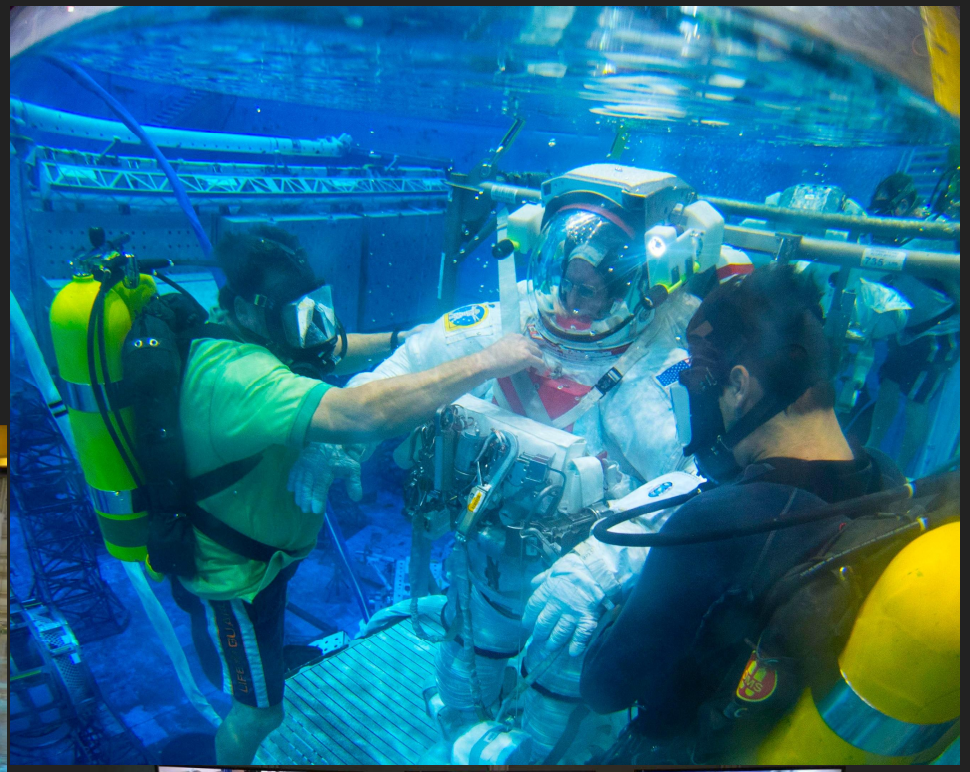

NOT AN
EXIT

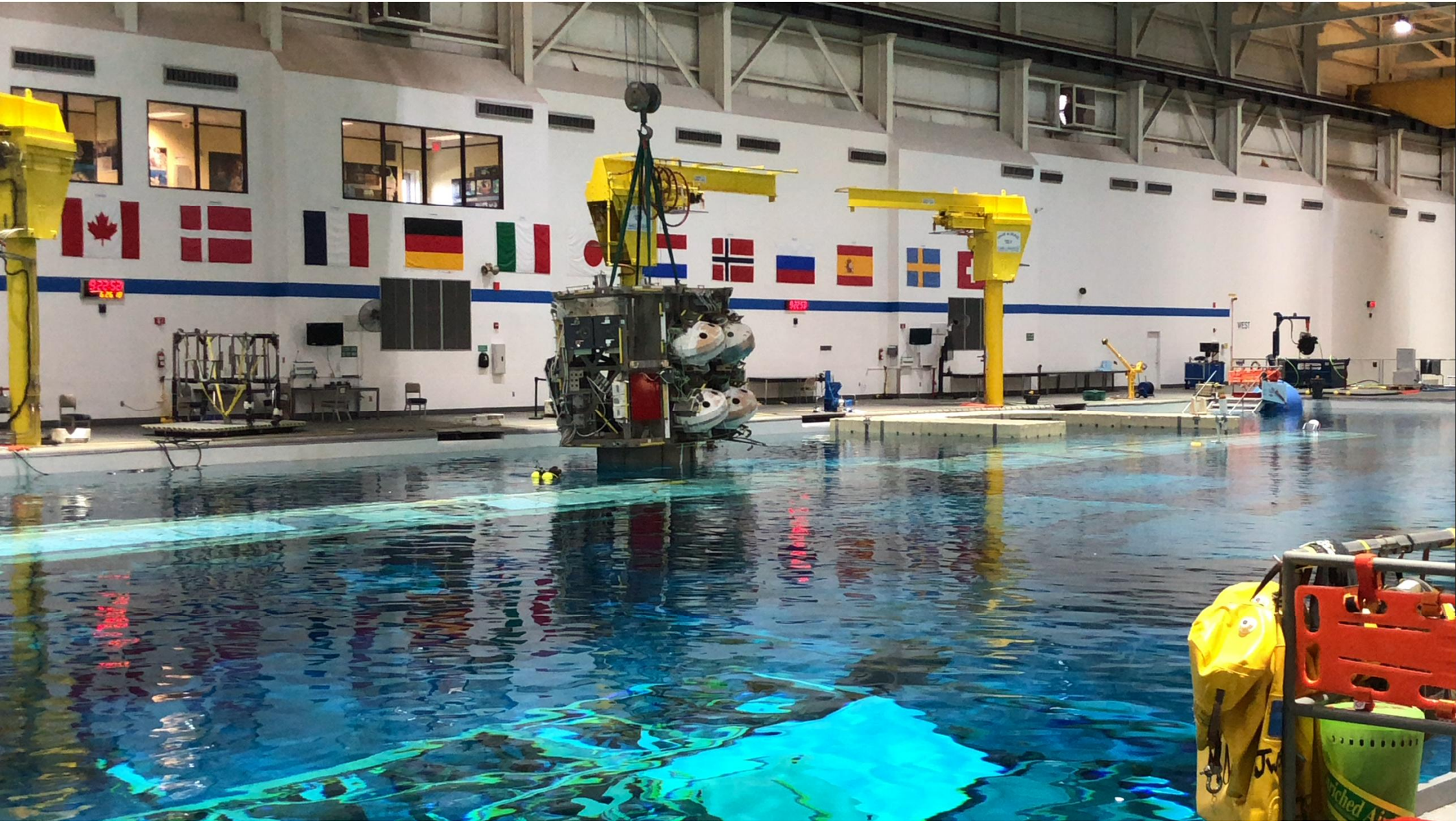

AP-17
307-39

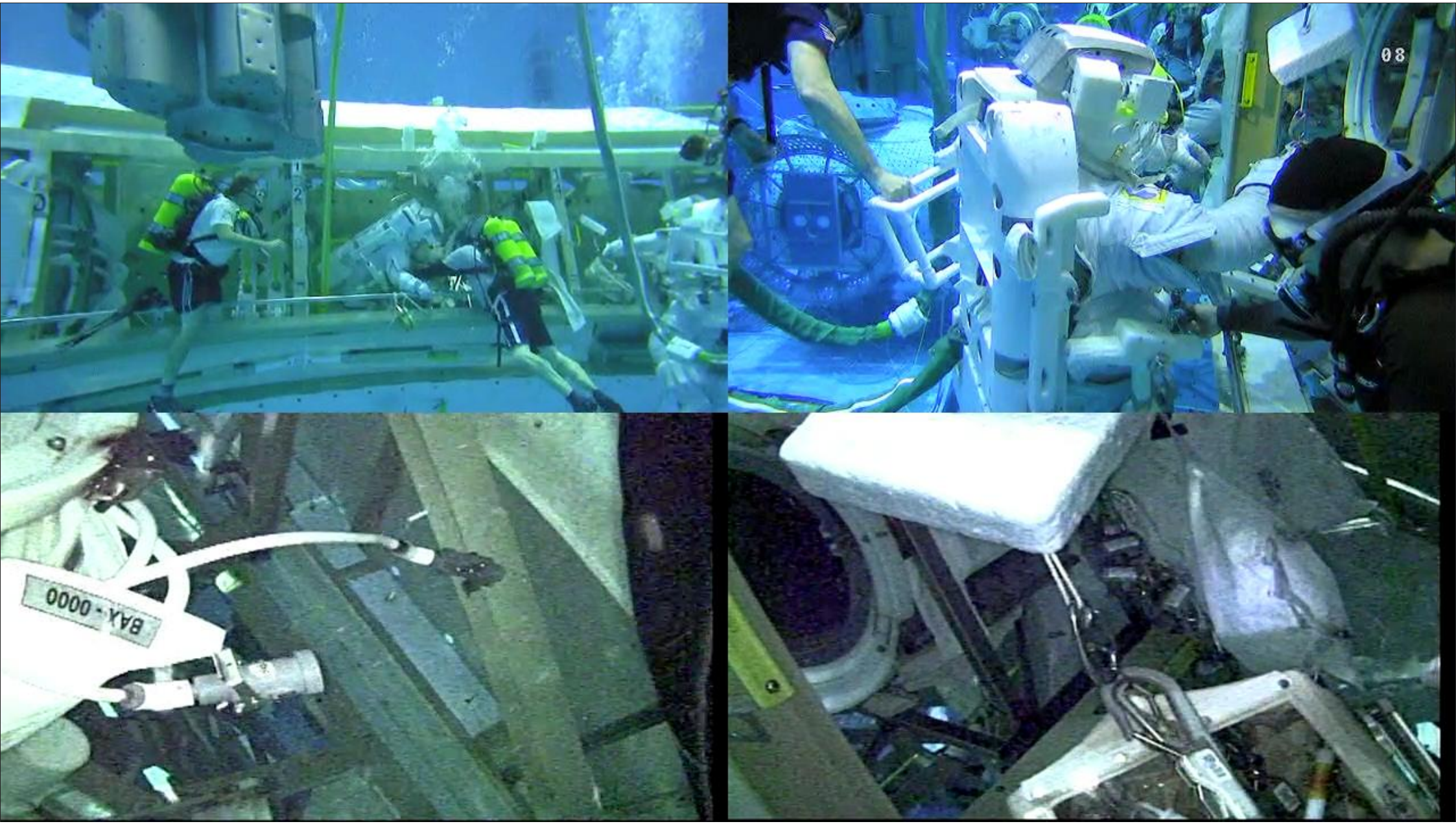
NEUTRAL BUOYANCY LAB

- Real-time displays of analog runs
- Video, Audio, Suit telemetry







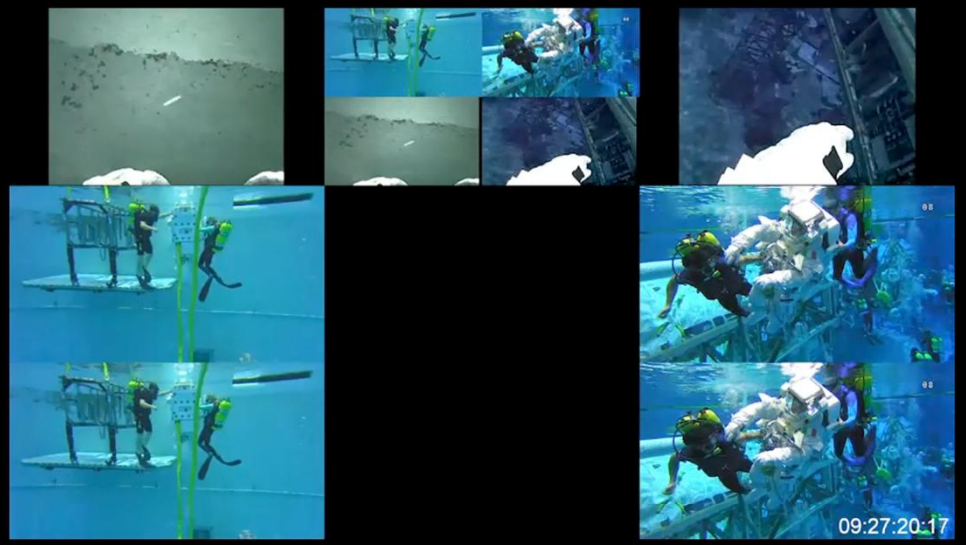

08
BAX - 0000

NBL Run Visualizer Prototype

Mission Time: 2018/07/11 09:27:19 CDT | GMT: 192/14:27:19

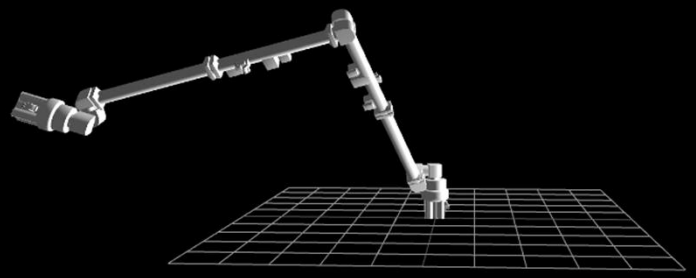
v0.4
Ben Feist

Play Pause



Front Back Left Right Top Bottom

Mousedown+ to move / rotate / zoom



09:27:19

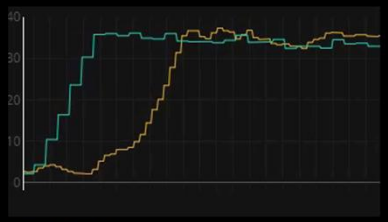
Control Input

SR: 0
SP: 0
SY: 0
EP: 0
WP: 0
WY: 0
WR: 0

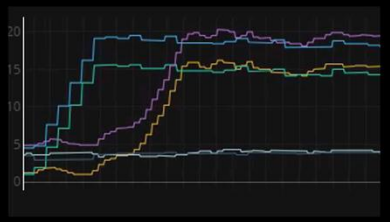
Joint Angles

SR: 12.03003
SP: -38.71031
SY: -21.29149
EP: -88.95077
WP: -64.96212
WY: 35.31557
WR: 31.22863

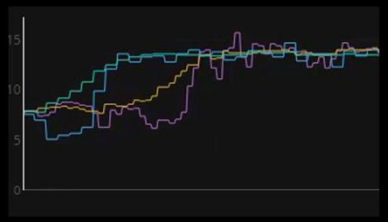
Depth (feet)



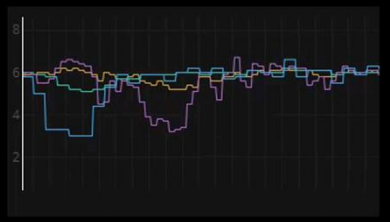
Pressure (psi)



Airflow (SCFM)

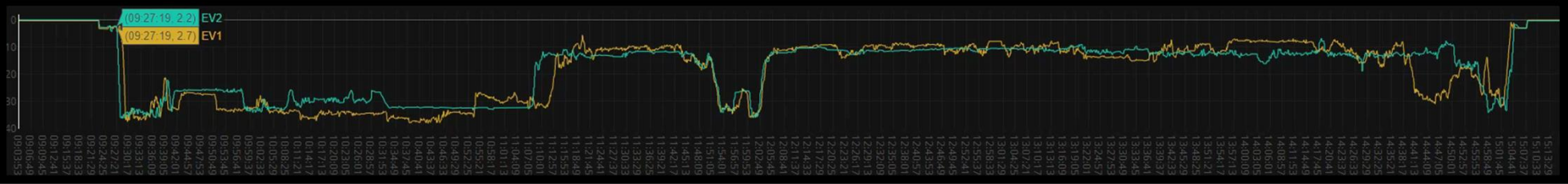


Airflow (ACFM)



Cooling Water (gpm)

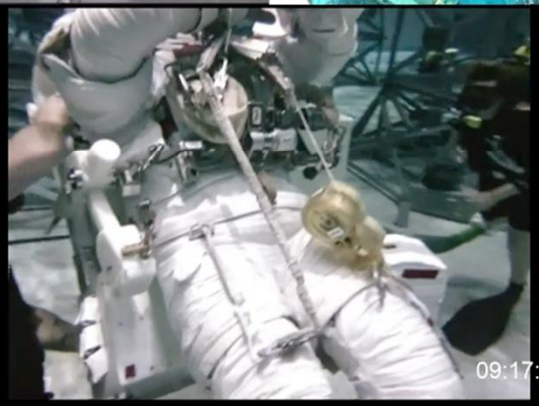
Depth (feet)



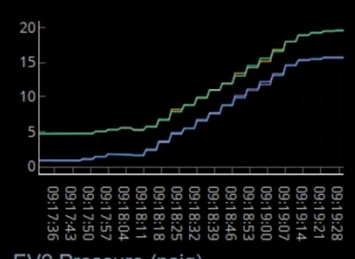
NBL Visualizer - Overpress Run

Mission Time: 2017/07/29 09:17:30 CDT | GMT: 210/14:17:30

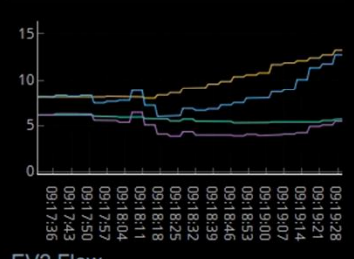
v0.5
Ben Feist



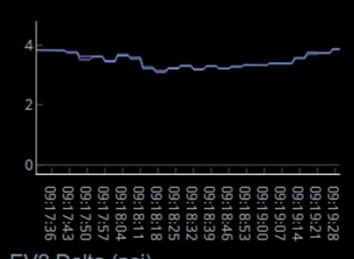
EV1 Pressure (psig)



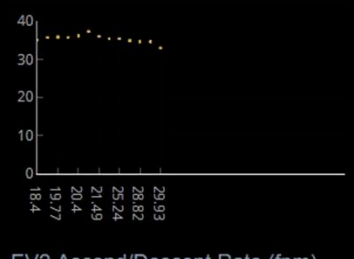
EV1 Flow



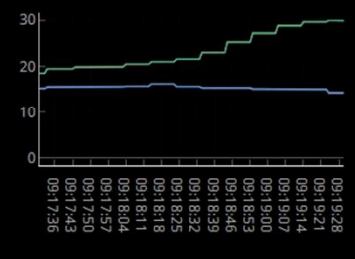
EV1 Delta (psi)



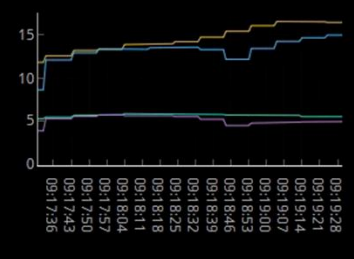
EV2 Press(x)/Depth(y) (2 mins)



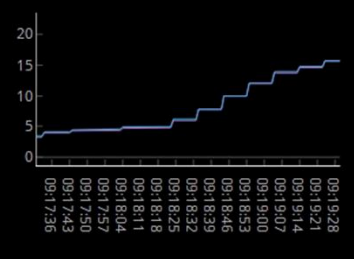
EV2 Pressure (psig)



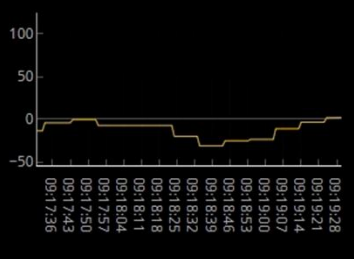
EV2 Flow



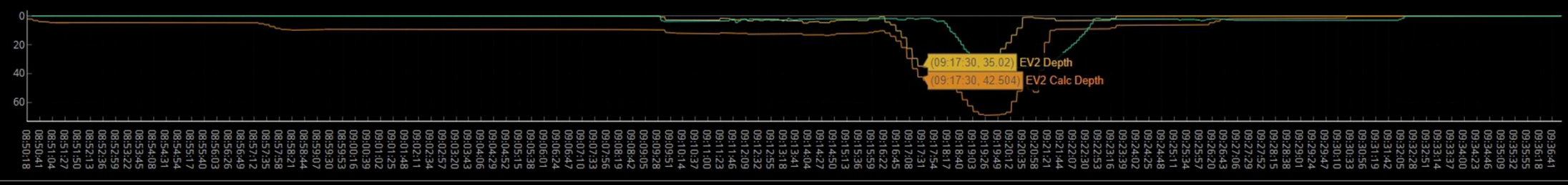
EV2 Delta (psi)



EV2 Ascend/Descent Rate (fpm)



Depth (feet)



NBL Visualizer V3 - Automated Data Import

Run Name: 2020-01-23_hoshide_cardman

v0.1
Ben Feist

Mission Time: 2020-01-23 08:41:22 CDT | GMT: 13:41:22

Video Stream: EV1-HOSHIDE

Crew Details

blue	white
EV2	EV1
Cardman, Zena	Hoshide, Akihiko

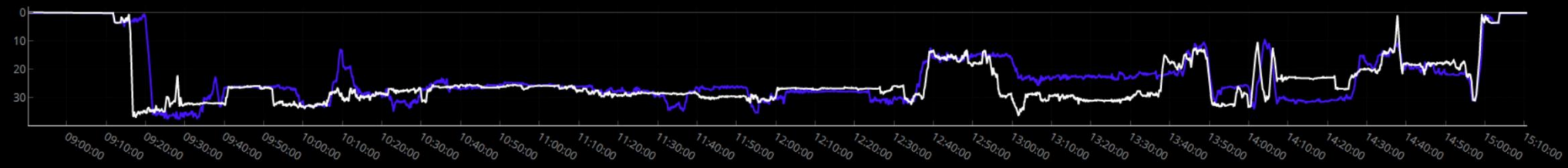
Telemetry Value Sampler

blue		white	
BLUE\P\EMU_DEPTH	0.19	WHITE\P\EMU_DEPTH	0.00
Depth -1 to 41 FT		Depth -1 to 41 FT	

```
06:41:10 Test A acquired by UNIT4.
06:42:12 Subject STANDBY STANDBY selected for Red EMU.
06:42:46 Subject Akihiko Hoshide selected for White EMU.
06:43:20 Subject Zena Cardman selected for Blue EMU.
06:43:35 Test A acquired by UNIT4.
06:44:01 White PD: HR-1 No Flow.
06:44:01 White PD: HR-2 No Flow.
```

Chart: EMU_DEPTH

Depth -1 to 41 FT



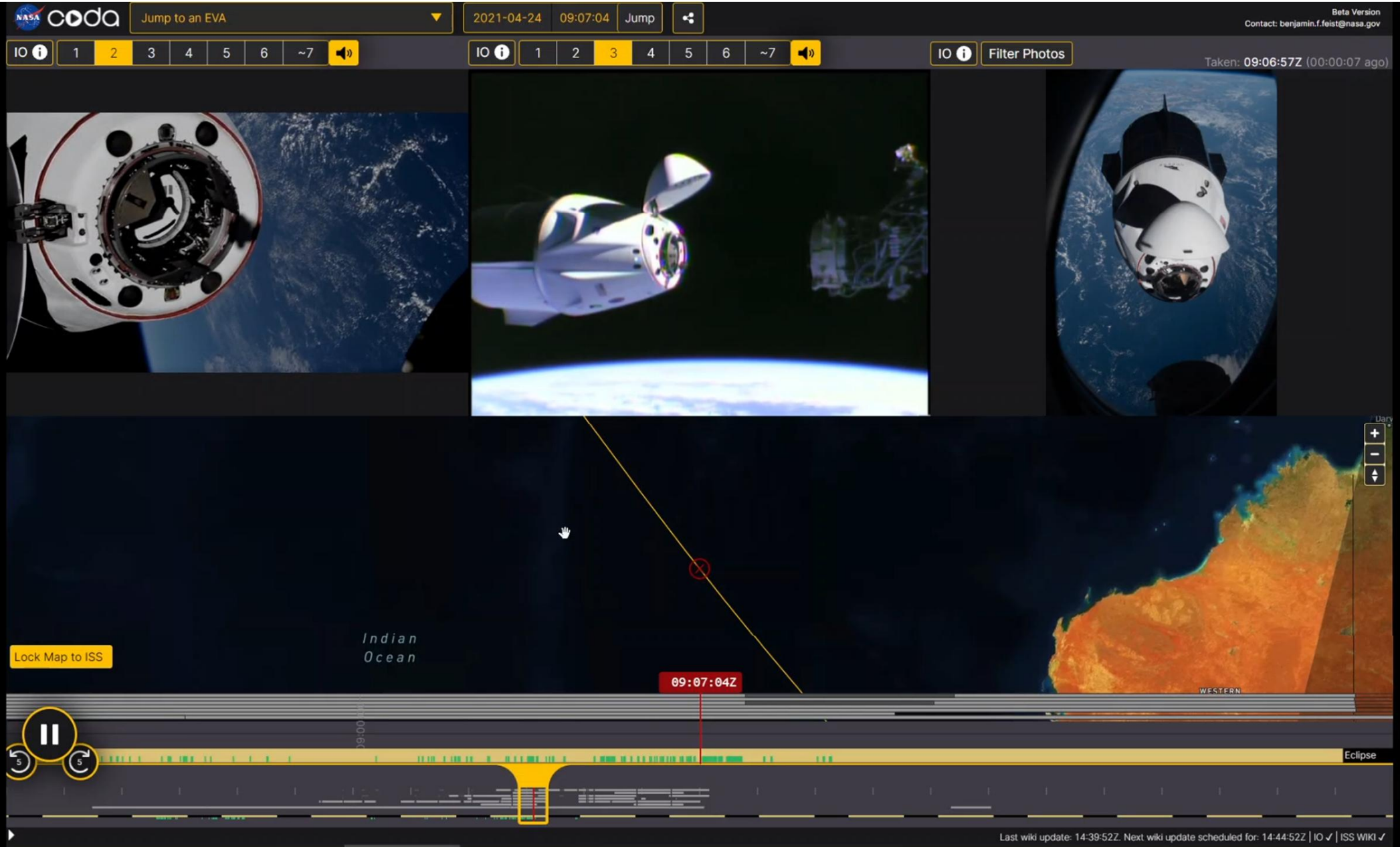

NASA
National Aeronautics and Space Administration

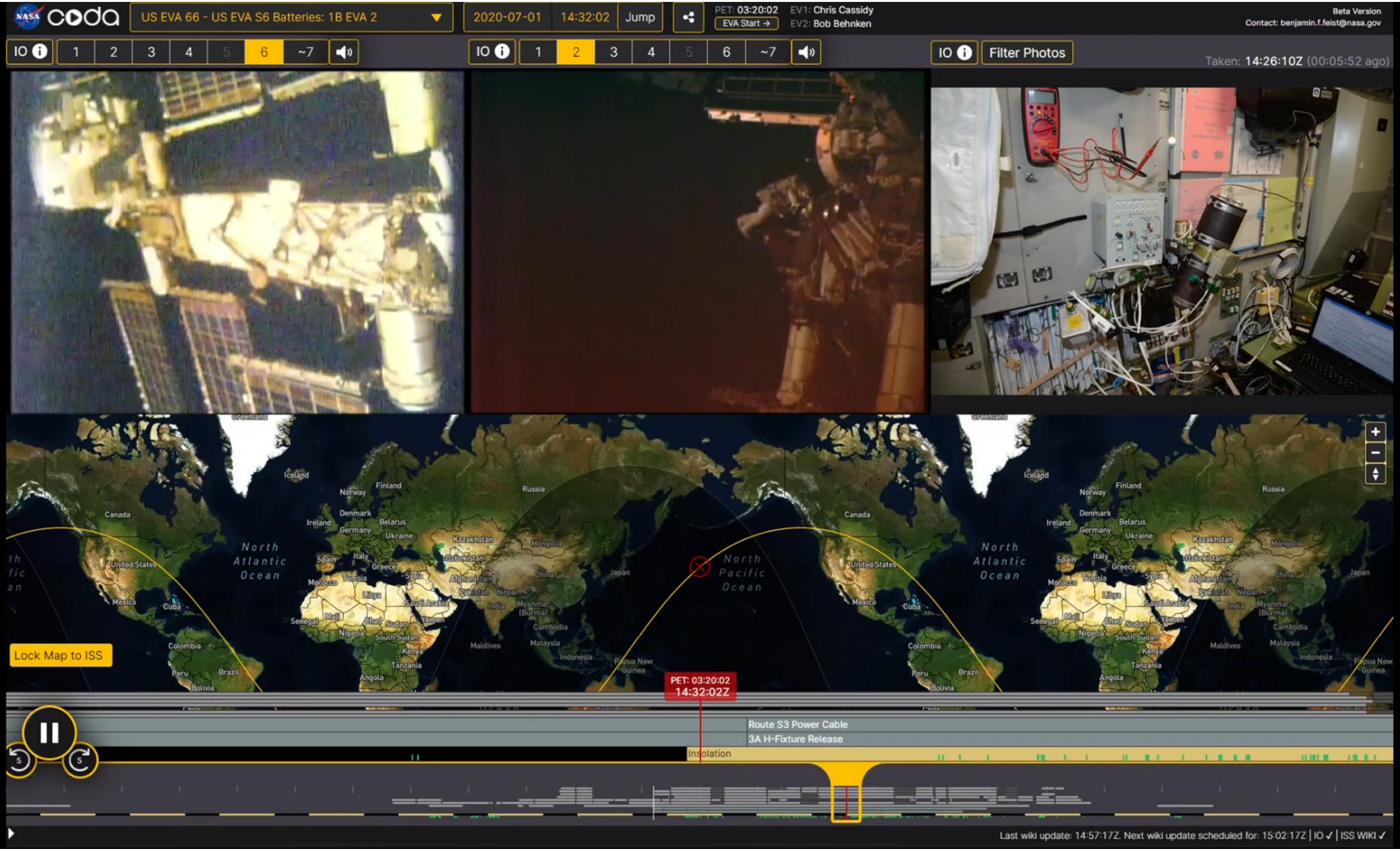

MISSION CONTROL CENTER
CIRCA 1981
Mission Control Center
Mission Control is the nerve center for America's manned space program. The men and women who work here have been vital to the success of every manned space flight since Gemini 4 in 1965. Today, Mission Control is the hub of communication and support for the Space Shuttle from liftoff to landing. Teams of experienced engineers and technicians use sophisticated computerized equipment to monitor systems and activities aboard the Space Shuttle 24 hours a day, ready for major maneuvers, schedule changes, and the unexpected.
210-217
229-242
223-225
231-239

COLLABORATIVE OPERATIONS DATA ACTIVATION

CODA

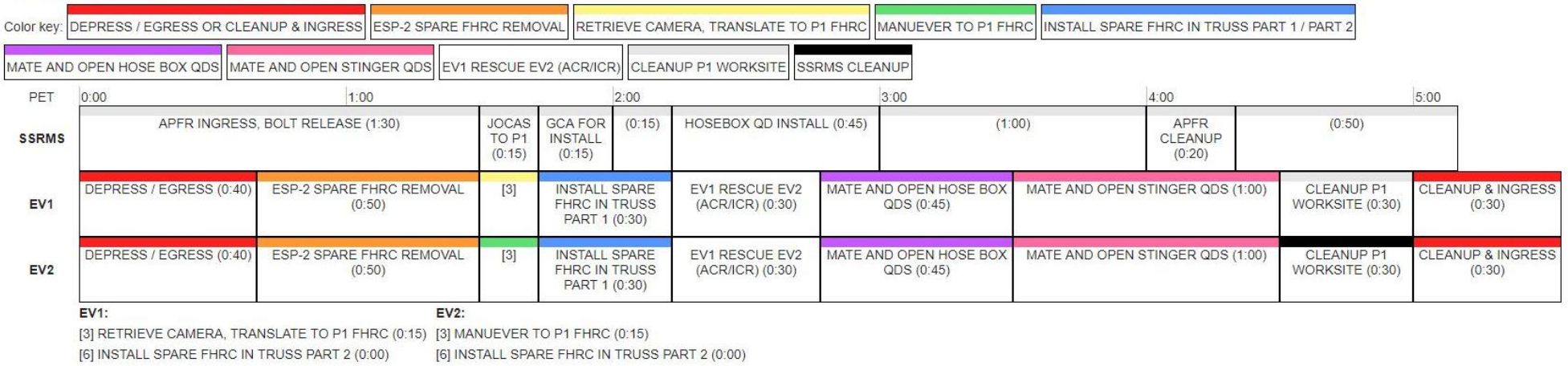
- Consolidate the context of missions, training, and testing into an easy-to-use platform to relive and revisit each moment


coda
Jump to an EVA
2021-04-24
09:07:04
Jump
Beta Version
Contact: benjamin.f.feist@nasa.gov
IO
1
2
3
4
5
6
~7
IO
1
2
3
4
5
6
~7
IO
Filter Photos
Taken: 09:06:57Z (00:00:07 ago)
Indian
Ocean
Lock Map to ISS
09:07:04Z
WESTERN
Eclipse
Last wiki update: 14:39:52Z. Next wiki update scheduled for: 14:44:52Z | IO ✓ | ISS WIKI ✓


coda
US EVA 66 - US EVA S6 Batteries: 1B EVA 2
2020-07-01
14:32:02
Jump
PET: 03:20:02
EVA Start →
EV1: Chris Cassidy
EV2: Bob Behnken
Beta Version
Contact: benjamin.f.feist@nasa.gov
IO
1
2
3
4
5
6
~7
IO
1
2
3
4
5
6
~7
IO
Filter Photos
Taken: 14:26:10Z (00:05:52 ago)
Lock Map to ISS
North Atlantic Ocean
North Pacific Ocean
PET: 03:20:02
14:32:02Z
Route S3 Power Cable
3A H-Fixture Release
Insolation
Last wiki update: 14:57:17Z. Next wiki update scheduled for: 15:02:17Z | IO ✓ | ISS WIKI ✓


Waiting for io.jsc.nasa.gov...

Planned Timeline [edit | edit source]



EV1:

[3] RETRIEVE CAMERA, TRANSLATE TO P1 FHRC (0:15)

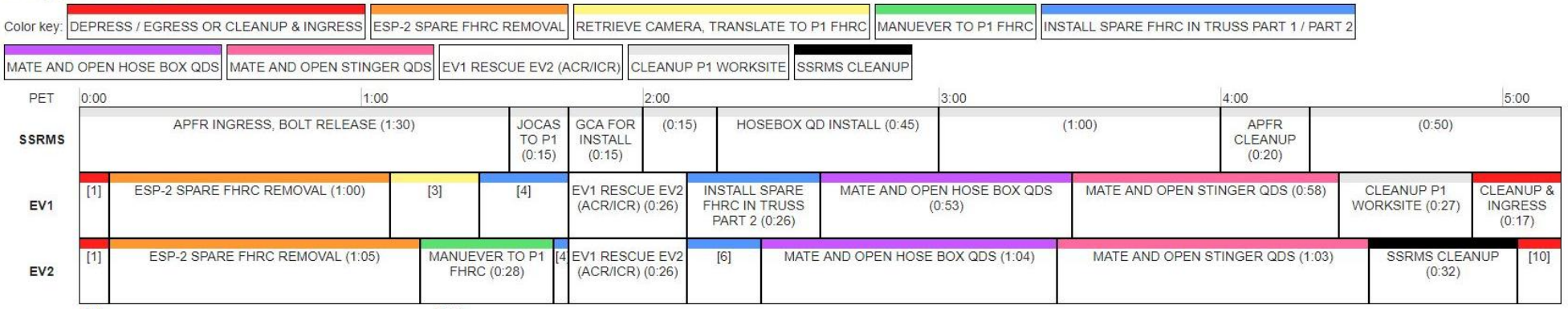
[6] INSTALL SPARE FHRC IN TRUSS PART 2 (0:00)

EV2:

[3] MANUEVER TO P1 FHRC (0:15)

[6] INSTALL SPARE FHRC IN TRUSS PART 2 (0:00)

As Executed Timeline [edit | edit source]



EV1:

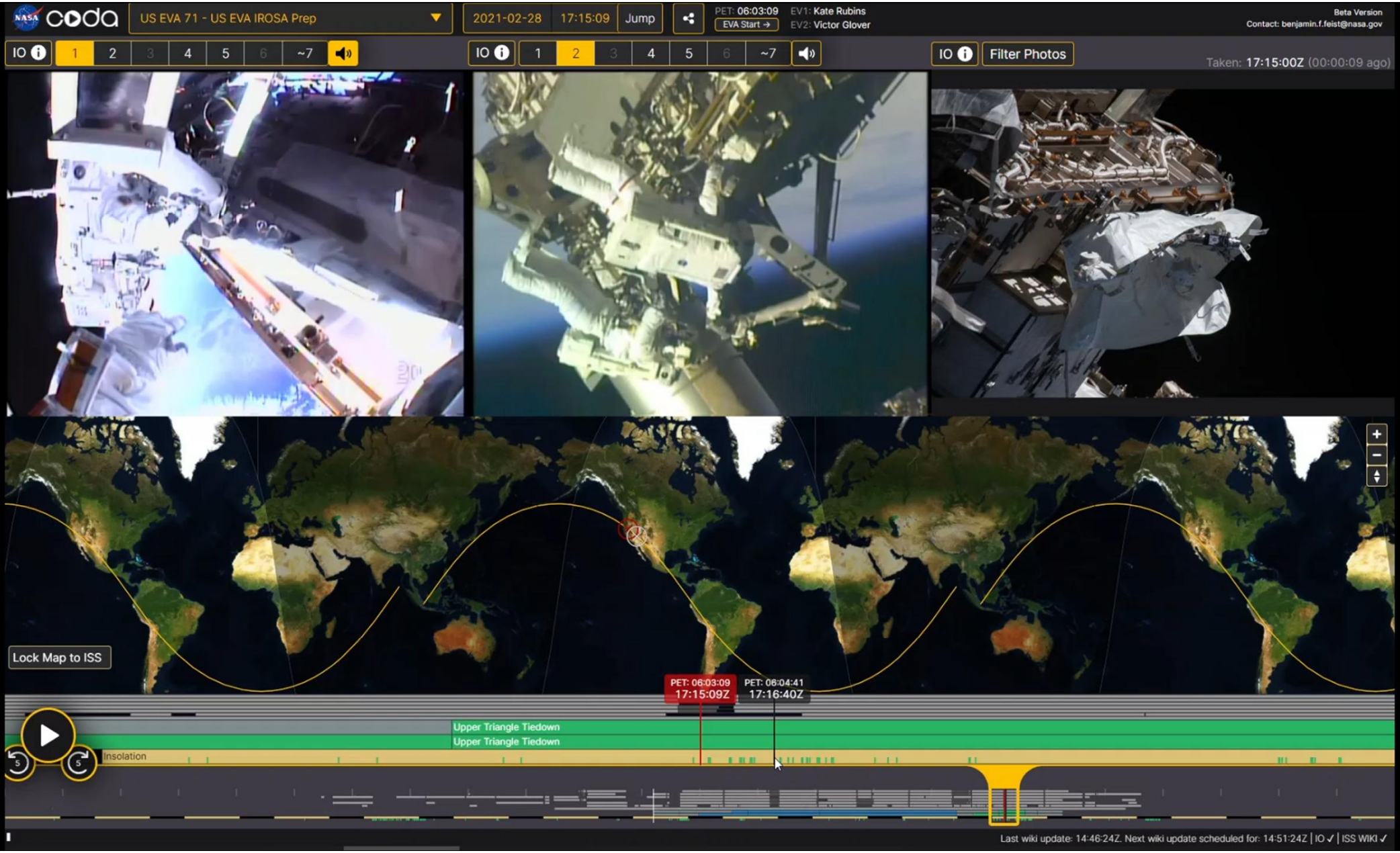
[1] DEPRESS / EGRESS (0:08)

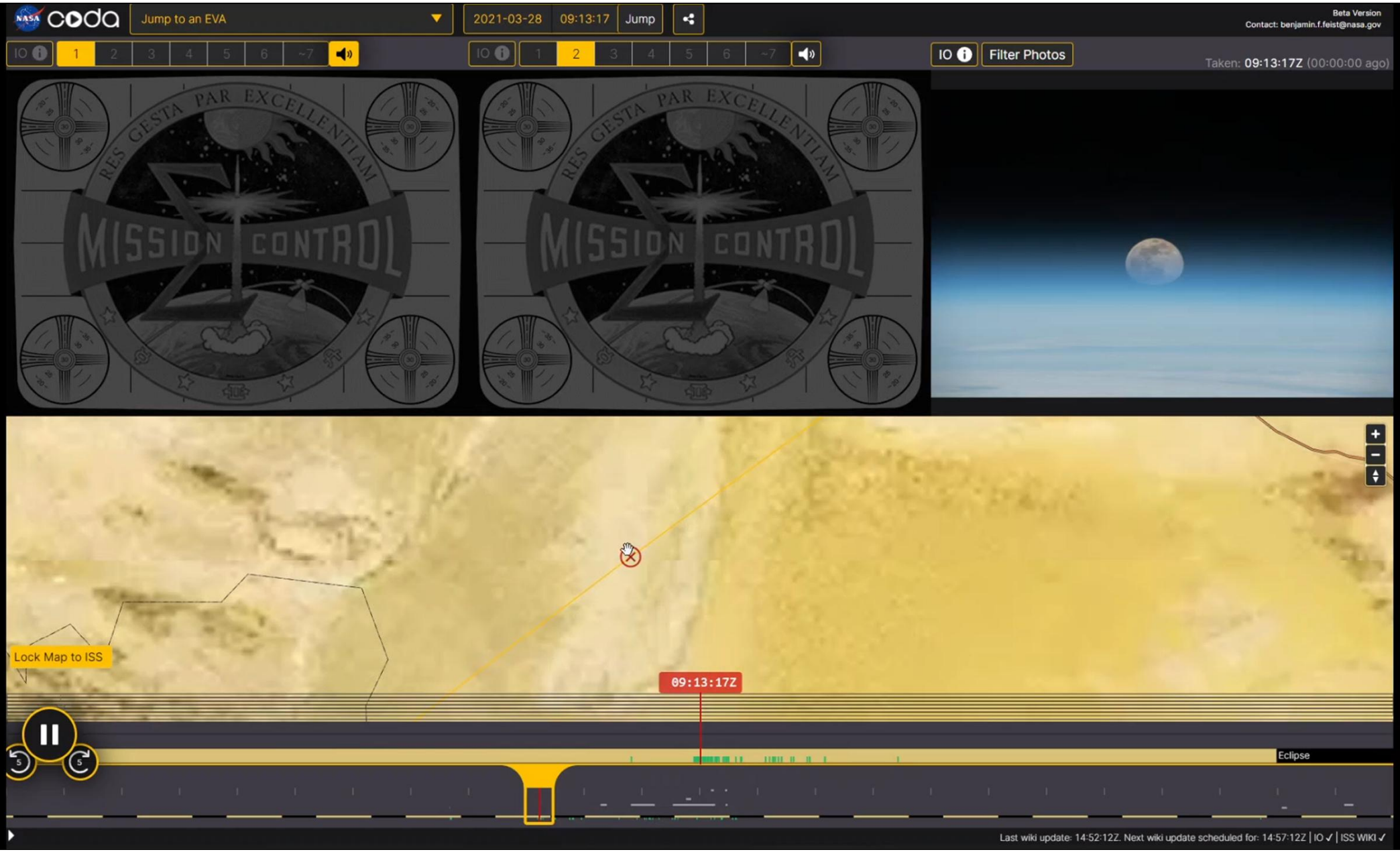
[3] RETRIEVE CAMERA, TRANSLATE TO P1 FHRC (0:18)

EV2:

[1] DEPRESS / EGRESS (0:08)

[4] INSTALL SPARE FHRC IN TRUSS PART 1 (0:02)


coda
US EVA 71 - US EVA IROSA Prep
2021-02-28
17:15:09
Jump
PET: 06:03:09
EVA Start →
EV1: Kate Rubins
EV2: Victor Glover
Beta Version
Contact: benjamin.f.feist@nasa.gov
IO
1
2
3
4
5
6
~7
IO
1
2
3
4
5
6
~7
IO
Filter Photos
Taken: 17:15:00Z (00:00:09 ago)
Lock Map to ISS
PET: 06:03:09
17:15:09Z
PET: 06:04:41
17:16:40Z
Upper Triangle Tiedown
Upper Triangle Tiedown
Insolation
Last wiki update: 14:46:24Z. Next wiki update scheduled for: 14:51:24Z | IO ✓ | ISS WIKI ✓


coda
Jump to an EVA
2021-03-28
09:13:17
Jump
Beta Version
Contact: benjamin.f.feist@nasa.gov
IO
1
2
3
4
5
6
~7
IO
Filter Photos
Taken: 09:13:17Z (00:00:00 ago)
RES GESTA PAR EXCELLENTIAM
MISSION CONTROL
Lock Map to ISS
09:13:17Z
Eclipse
Last wiki update: 14:52:12Z. Next wiki update scheduled for: 14:57:12Z | IO ✓ | ISS WIKI ✓

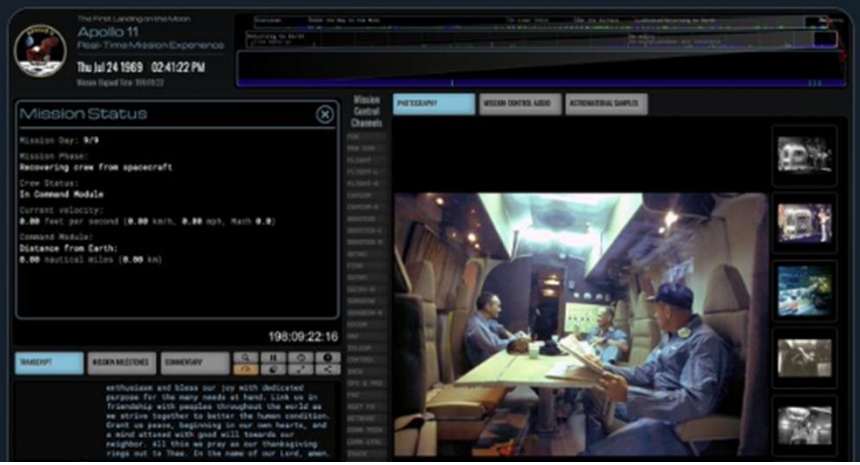

ARTEMIS

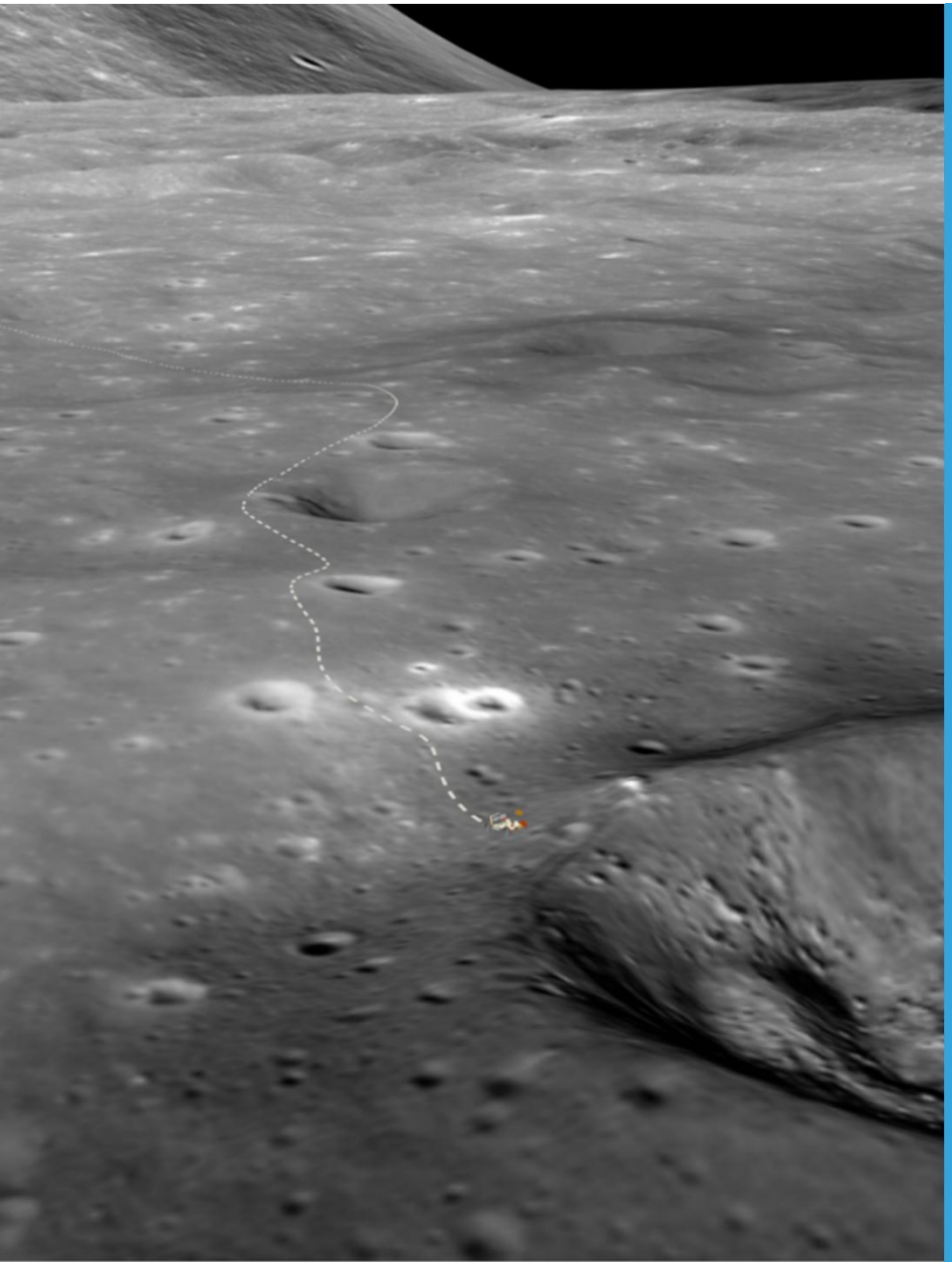
Imagine if the crew, science team, MCC team, and members of the public all used the same system to track Artemis in Real Time.

Chris Jennings
@cjina2

Thanks @BenFeist for the absolutely incredible apolloinrealtime.org/11/!

Can't wait to use the websites you create to track our return to the moon and our trek to Mars.





THANK YOU

apolloinrealtime.org

@benfeist