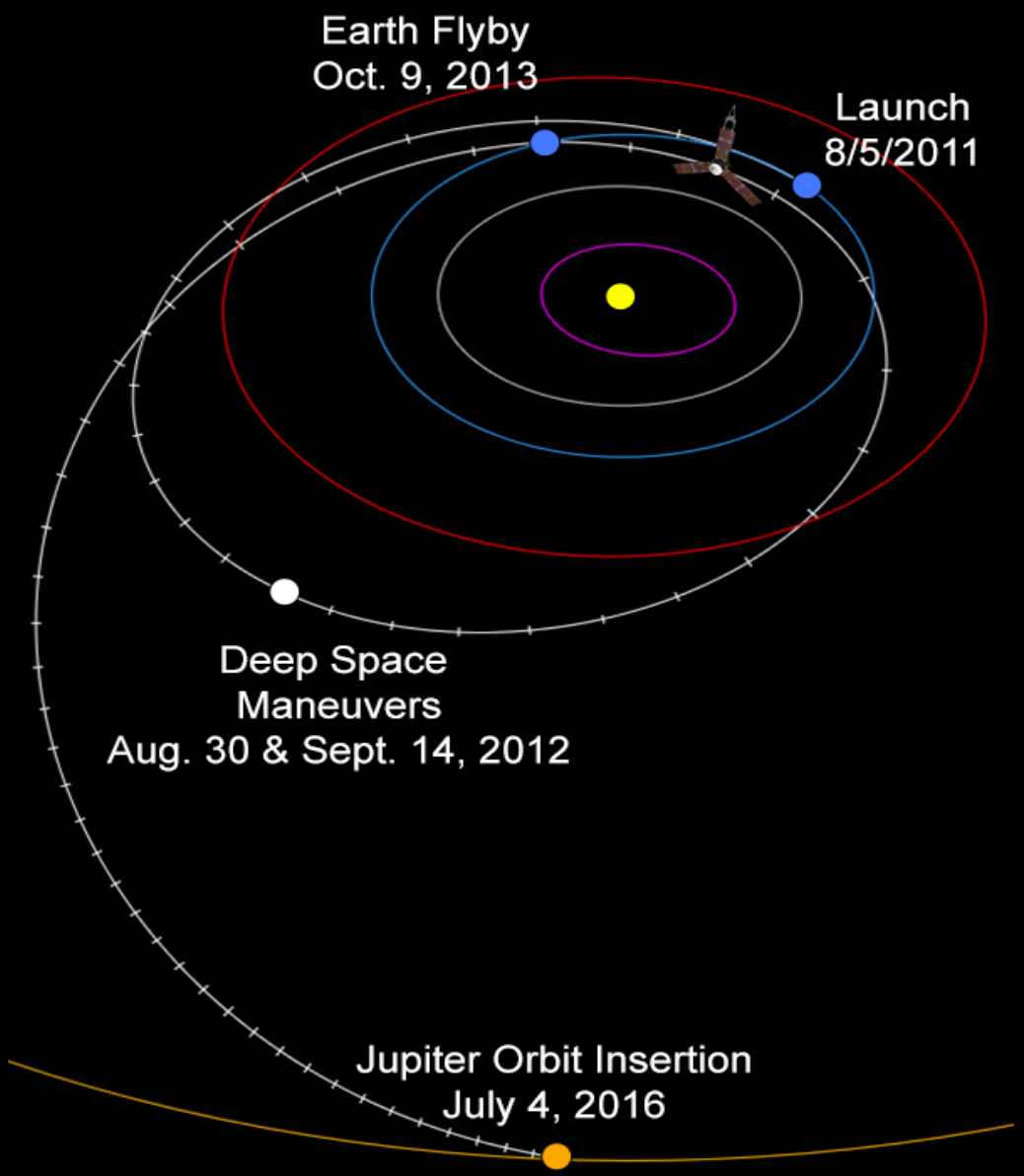
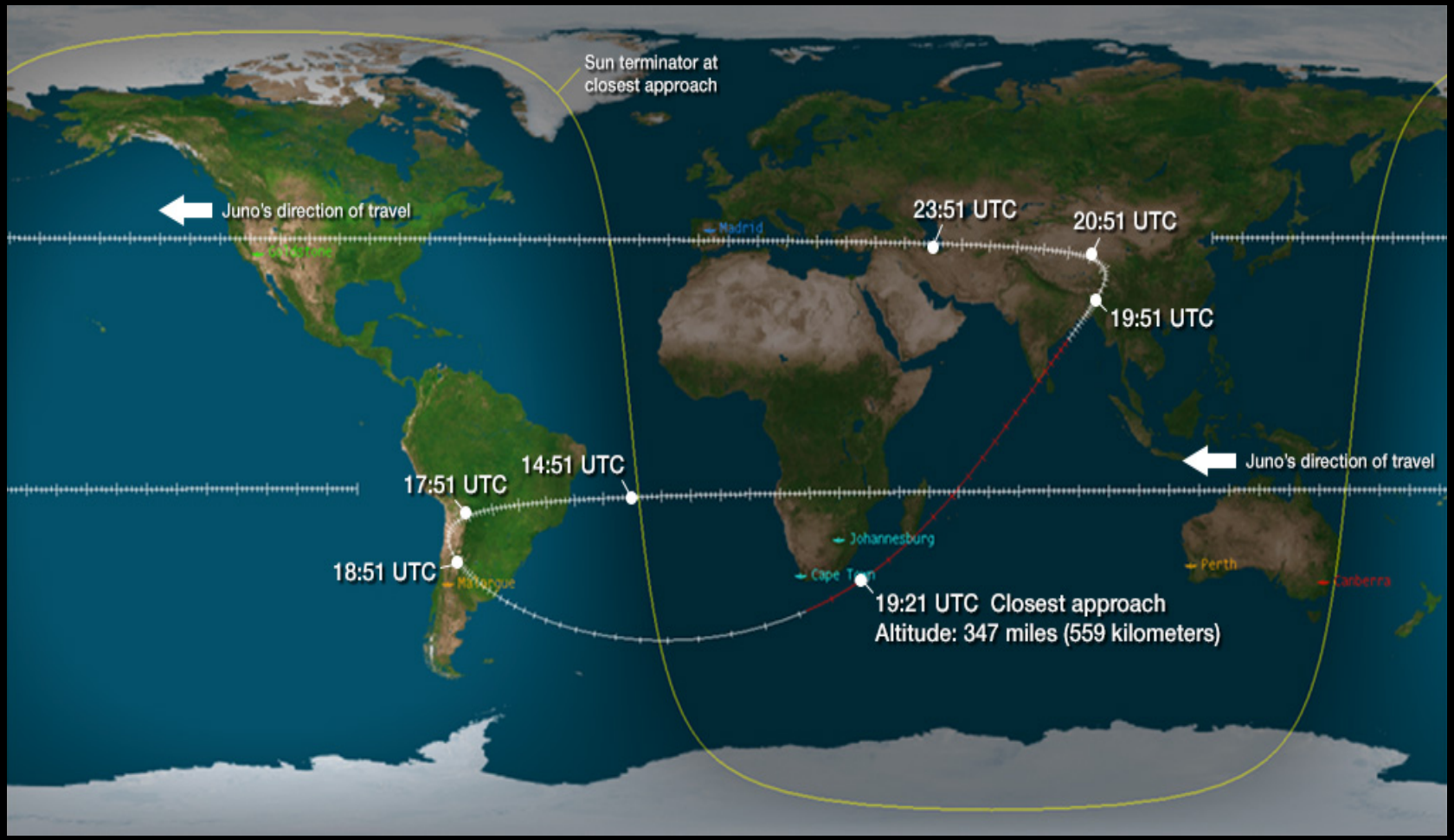
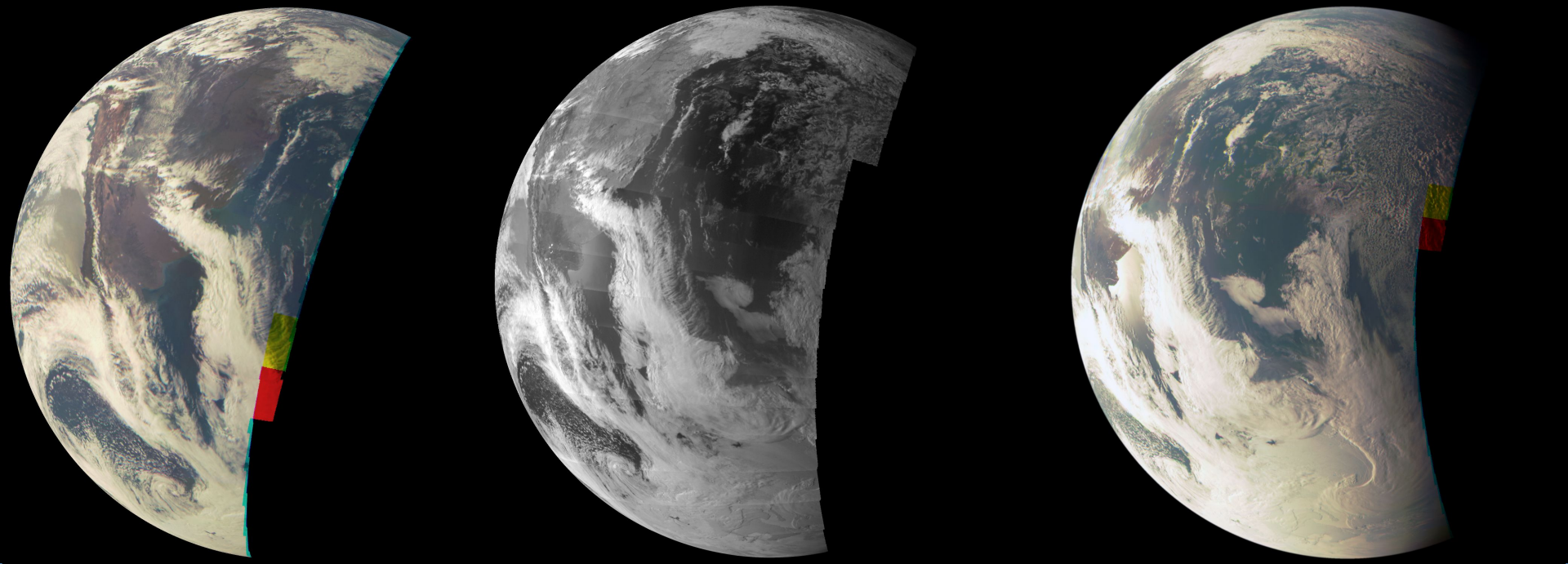
Juno Earth Flyby Science

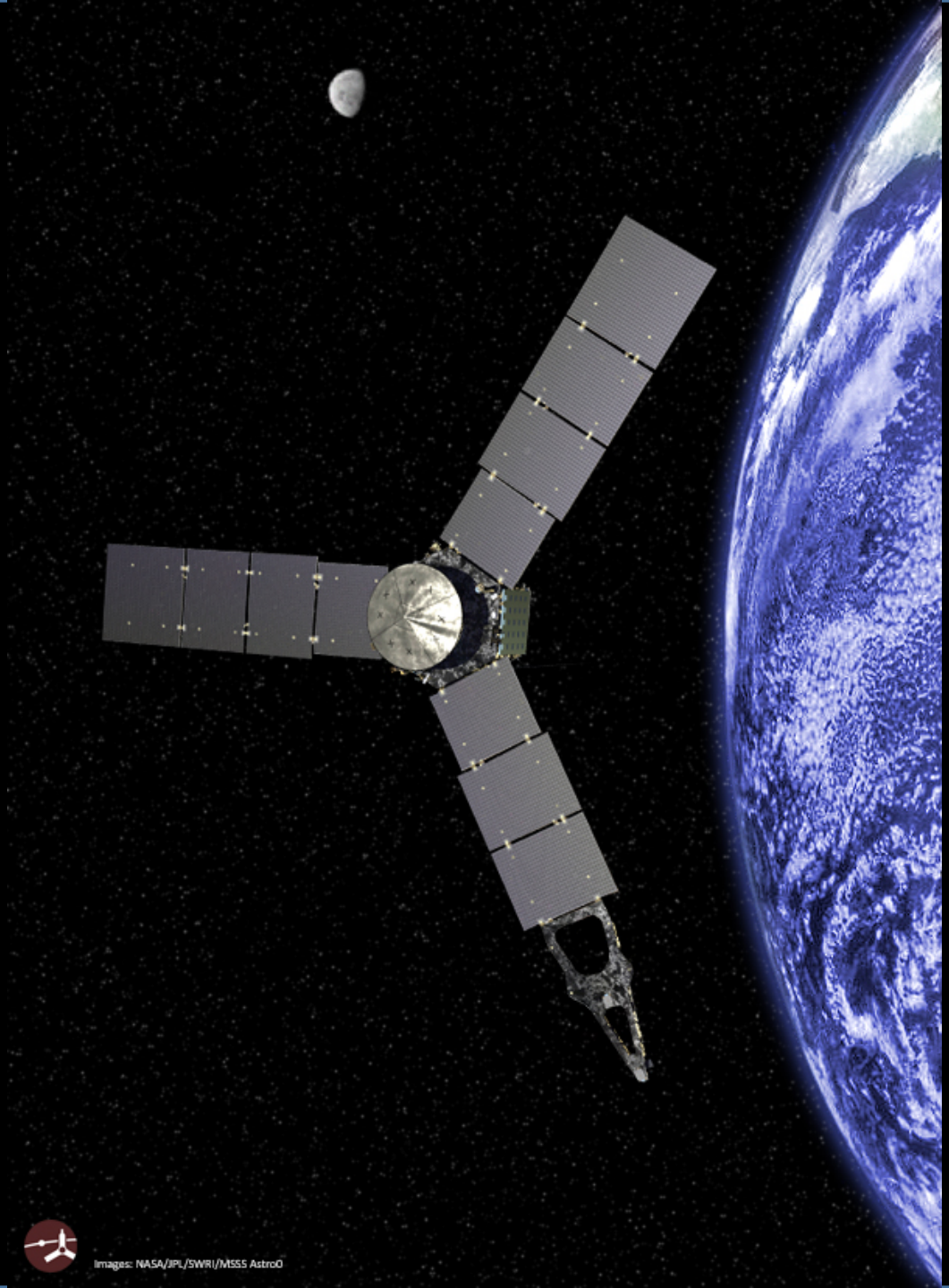
AGU Briefing
December 10, 2013

Scott Bolton
Juno Principal Investigator
Southwest Research Institute, San Antonio


Earth Flyby
Oct. 9, 2013
Launch
8/5/2011
Deep Space
Maneuvers
Aug. 30 & Sept. 14, 2012
Jupiter Orbit Insertion
July 4, 2016


Sun terminator at closest approach
Juno's direction of travel
Madrid
23:51 UTC
20:51 UTC
19:51 UTC
14:51 UTC
17:51 UTC
18:51 UTC
Juno's direction of travel
Johannesburg
Perth
Canberra
19:21 UTC Closest approach
Altitude: 347 miles (559 kilometers)





Images: NASA/JPL/SWRI/MSSS AstroO

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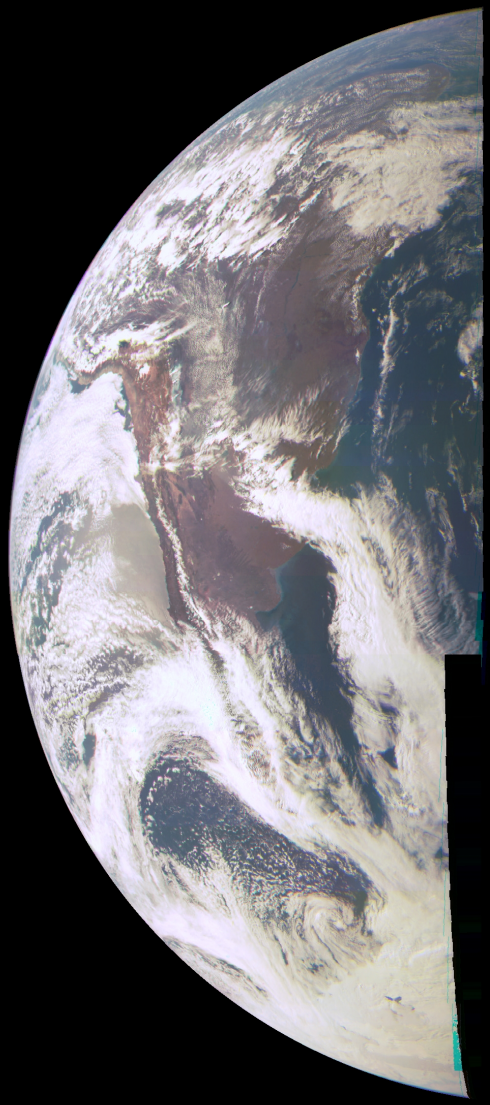
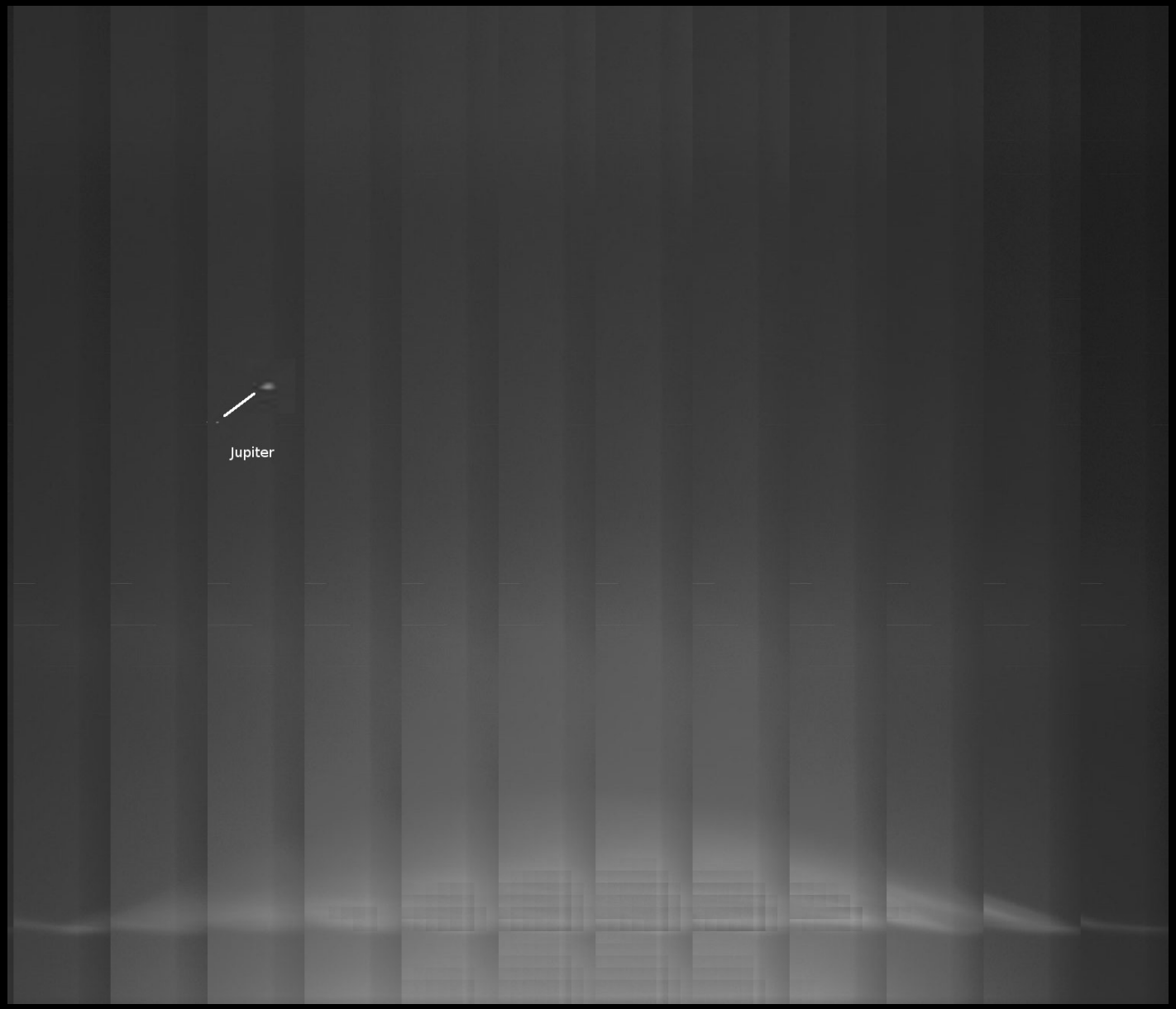
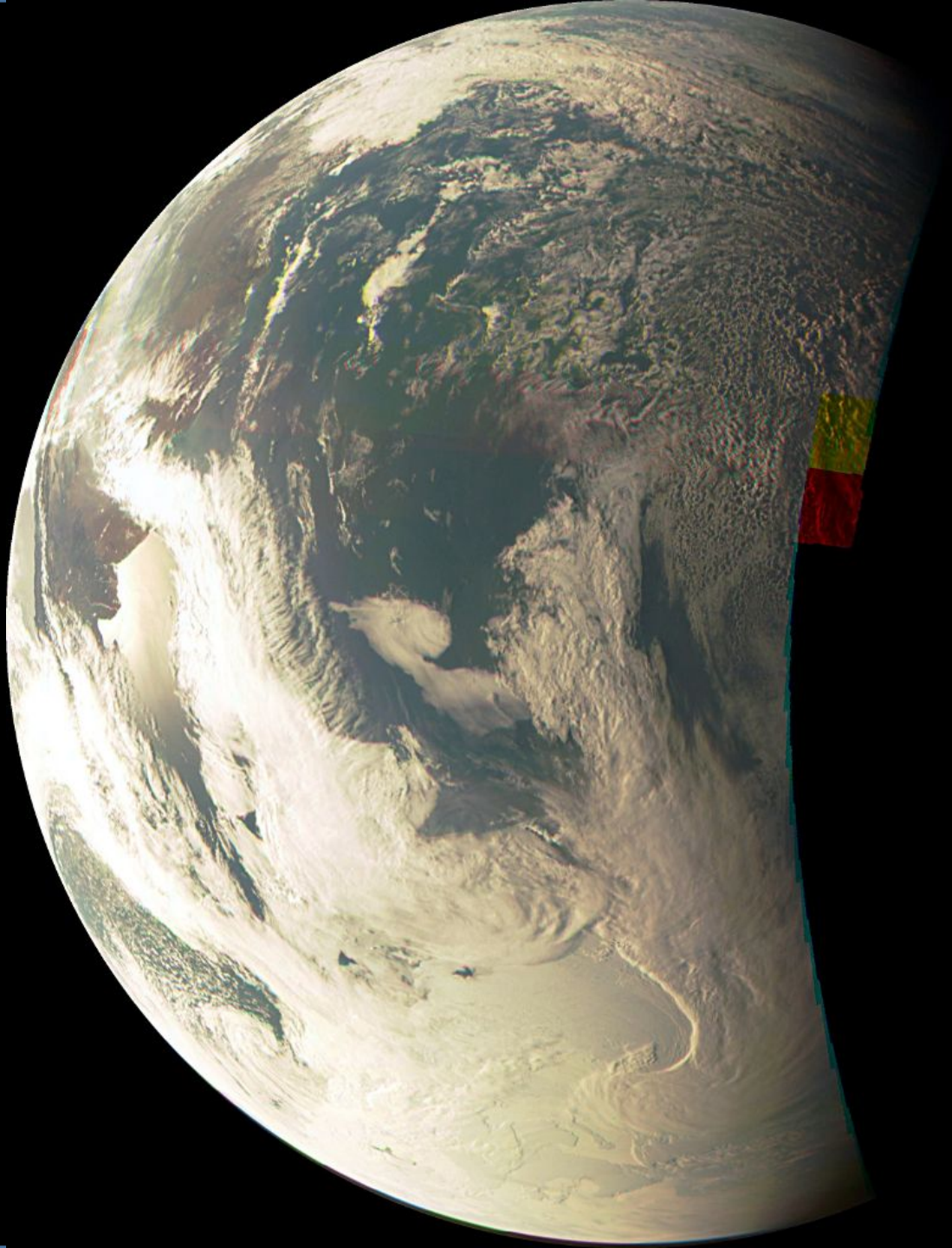


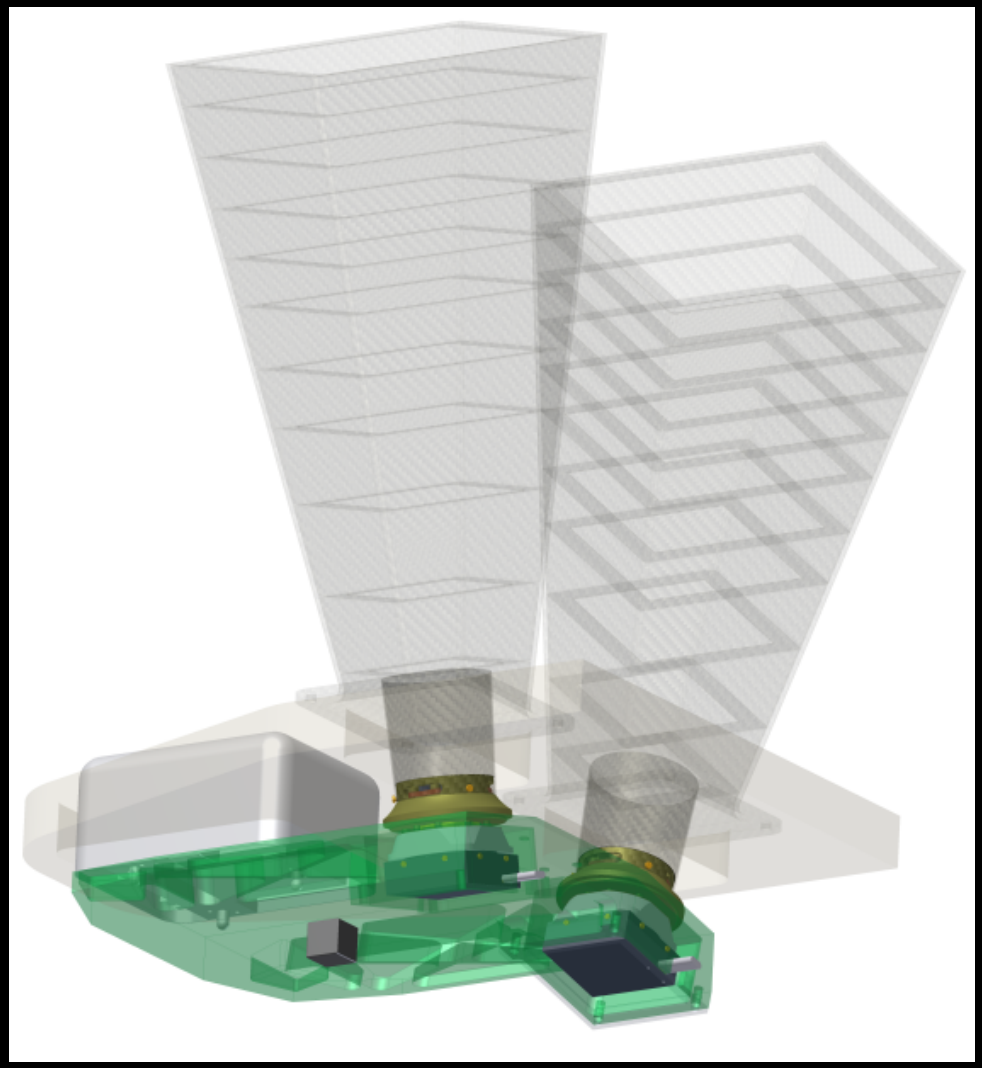
JUNOCAM VIRTUAL IMAGE PROCESSING TEAM

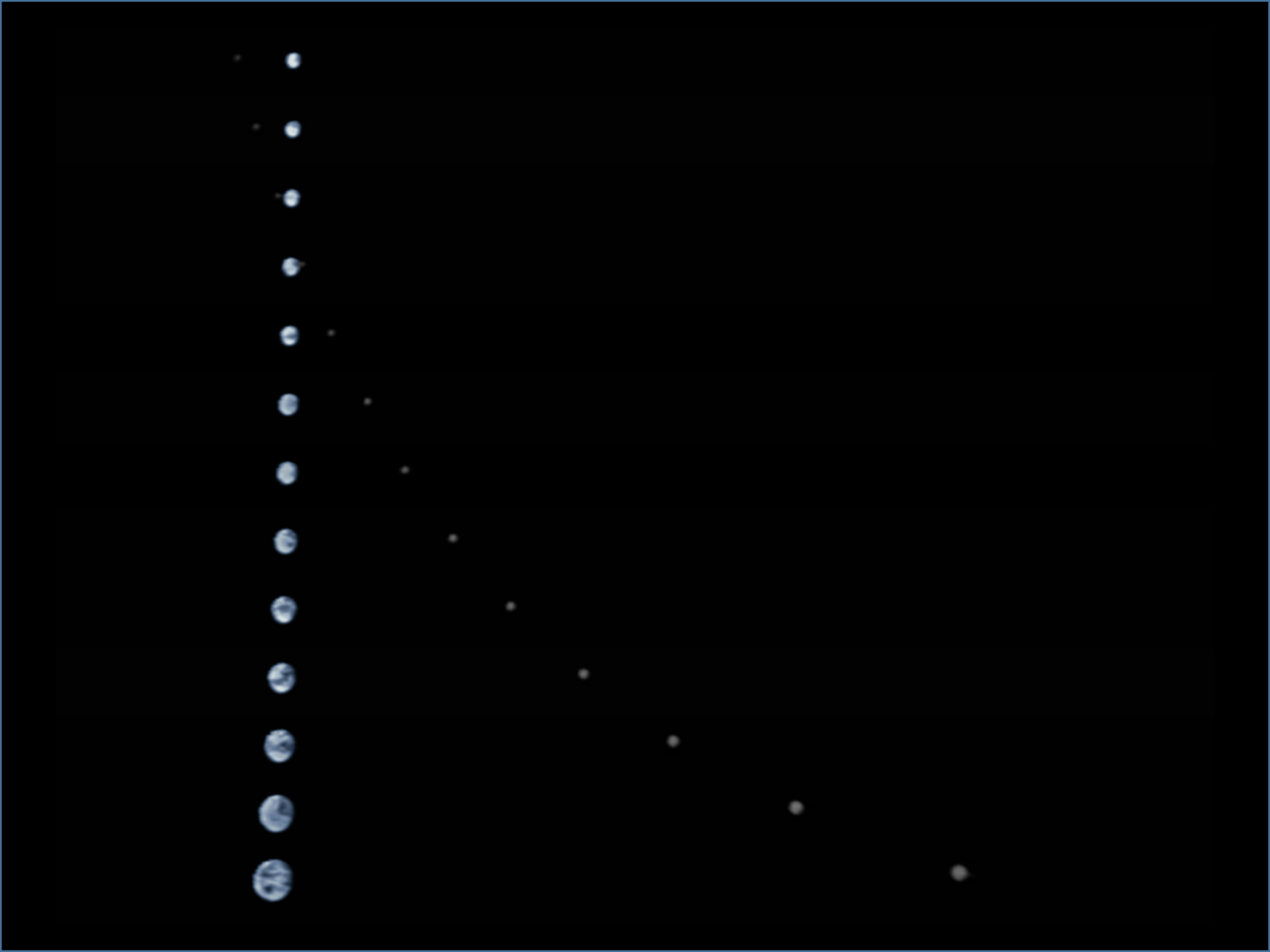
NASA/JPL/SwRI/MSSS/"Gerald"


Jupiter

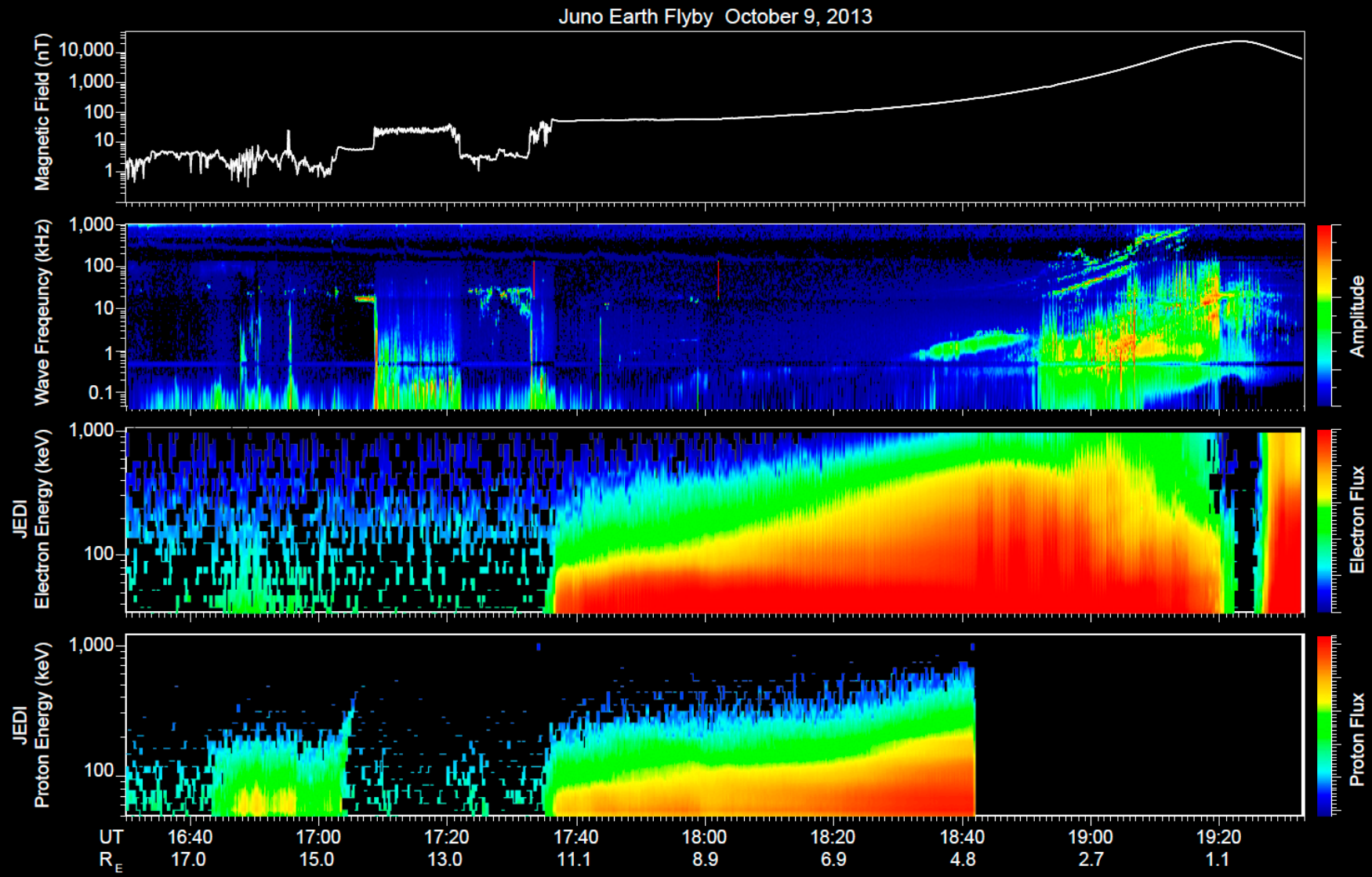


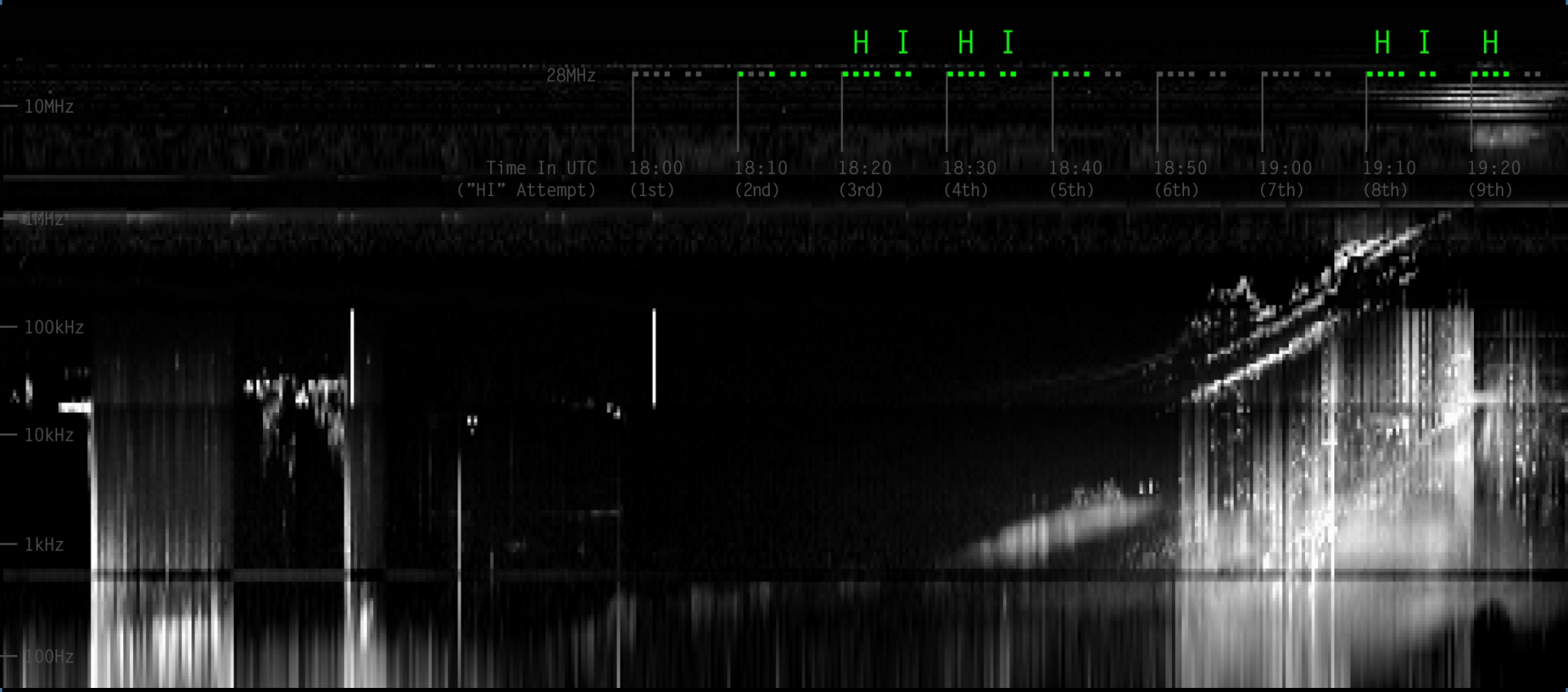
John Jorgensen
Juno star-camera team lead
Danish Technical University, Copenhagen





Bill Kurth
Co-Investigator for the Juno Waves Investigation
University of Iowa, Iowa City


Juno Earth Flyby October 9, 2013
Magnetic Field (nT)
10,000
1,000
100
10
1
Wave Freqeuncy (kHz)
1,000
100
10
1
0.1
Amplitude
JEDI
Electron Energy (keV)
1,000
100
Electron Flux
JEDI
Proton Energy (keV)
1,000
100
Proton Flux
UT
16:40
17:00
17:20
17:40
18:00
18:20
18:40
19:00
19:20
R E
17.0
15.0
13.0
11.1
8.9
6.9
4.8
2.7
1.1


H I H I H I H
28MHz
10MHz
Time In UTC
("HI" Attempt)
18:00
(1st)
18:10
(2nd)
18:20
(3rd)
18:30
(4th)
18:40
(5th)
18:50
(6th)
19:00
(7th)
19:10
(8th)
19:20
(9th)
1MHz
100kHz
10kHz
1kHz
100Hz

JUNO
EARTH FLYBY