



National Aeronautics and
Space Administration

2023 NASA SCIENCE

SMD Community Town Hall

July 27, 2023

Nicky Fox

Associate Administrator

NASA Science Mission Directorate



Heliophysics

- Senior Review conducted in April, report to be released by end of September
- SMEX Step 1 selections to be announced no earlier than October
- GDC and DYNAMIC status
 - GDC Science Team met in July 2023
 - DYNAMIC AO released 19 May, proposals due 22 August
- 2023 Heliophysics Space Weather Vigil Focused Mission of Opportunity (VFMO) released June 2023
 - Preproposal Conference held on 13 July
 - Notice of Intent (mandatory) due by 9 August
 - Proposals due by 27 September
- Solar Eclipse Science Selection
 - 5 ROSES Selections
 - 3 Citizen Science Selections
 - 2 HITS Selections
- RockOn and RockSat-X sounding rockets LRD 15 August from Wallops
- Heliophysics Big Year
 - Annular Eclipse on 14 October
 - SunSpots: Albuquerque, NM; Kerrville, TX
 - For more information, please visit <https://solarsystem.nasa.gov/eclipses/home/>
- Save the Date: The Heliophysics Strategic Technology Office (HESTO) first annual symposium is being held 18-19 October
 - For more information on registration, please visit: <https://www.eventbrite.com/e/2023-annual-heliophysics-technology-symposium-tickets-652901715607>
- Atmospheric Wave Experiment (AWE) Launch to ISS in Nov. 2023



Biological & Physical Sciences

- **Dr. Lisa Carnell appointed Division Director**
- **Welcome, new team members**
 - Lynn Harrison, Deputy Program Scientist
 - Ursula Koniges, Deputy Program Scientist
 - Sarah Veasaw, Administrative Business Partner
 - Melanie White, Media Relations Strategist
- **Decadal Survey expected in August**
 - BPS's second Decadal
- **Solicitations & awards**
 - EPSCoR awards for STEM projects in underserved states
 - Physical Sciences Informatics (PSI) selections
- **Launched aboard SpaceX-28 (Jun 5)**
 - Cold Atom Lab (CAL) part upgrades
 - Plant Habitat-03B second-generation growth experiment
- **Upcoming launches & events**
 - ISS Research & Development Conference - July 31-August 3
 - NG-19 - August 4 – upgrades for CAL, crystal growth & heat transfer investigations



Dr. Lisa Carnell



Lynn Harrison



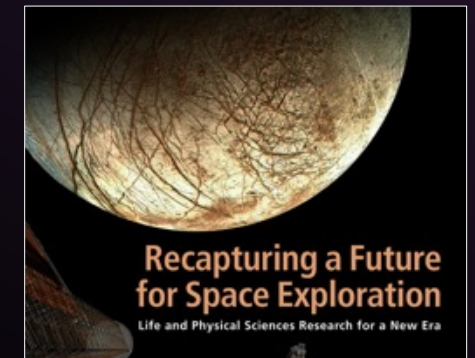
Ursula Koniges



Sarah Veasaw



Melanie White



Coming Soon



2023 Decadal Survey

Astrophysics

Highlights:

- **The Super Pressure Balloon Imaging Telescope (SuperBIT)** launch – April 16
- **Euclid** (ESA-led) launch – July 1
- **Nancy Grace Roman Space Telescope** progress
 - The spacecraft's primary structure moved to NASA's Goddard Space Flight Center's (GSFC) clean room in April.
 - GSFC completed and shipped Roman's Focal Plane System (FPS) to Ball Aerospace in Boulder, CO.
- NASA has selected 14 U.S.-based researchers to join the **Ultraviolet Transient Astronomy Satellite (ULTRASAT)** science team.

Recent/Upcoming activities:

- First Habitable Worlds Conference, STScI, July 10-14
- Release of Probe Announcement of Opportunity – July 2023

Upcoming launches for 2023:

- JAXA's **X-Ray Imaging and Spectroscopy Mission (XRISM)** launch – NET Aug. 26
- **NASA's Galactic / Extragalactic ULDB Spectroscopic Terahertz Observatory (GUSTO)** balloon launch ~Dec. 2023



Earth Science

TEMPO: Launched April 7, 2023 (EVI-1)

- First space-based instrument for hourly monitoring of daytime air pollutants across the North American continent

TROPICS: Four CubeSats launched May 2023 (EVI-3)

- Unprecedented information on the inner-core conditions of tropical cyclones to understand intensification

Inaugural year of Student Airborne Research Program (SARP) East

- New cohort nearly doubles number of students participating

PoISIR selected as Earth Venture Instrument – 6

- Will study ice clouds that form at high altitudes to inform climate models; PI: Vanderbilt University, Deputy PI: GSFC

Earth information Center now open at NASA Headquarters!

- Visit go.nasa.gov/eic



TROPICS will monitor air pollution from geostationary orbit



SARP East student researchers collect Earth science data during a flight above Hampton Roads, VA in June



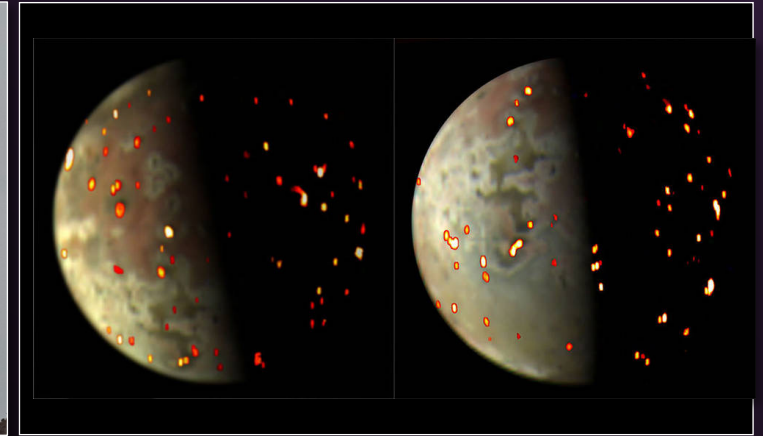
Guests take in the Earth Information Center following the Ribbon Cutting ceremony on June 21

Planetary Science

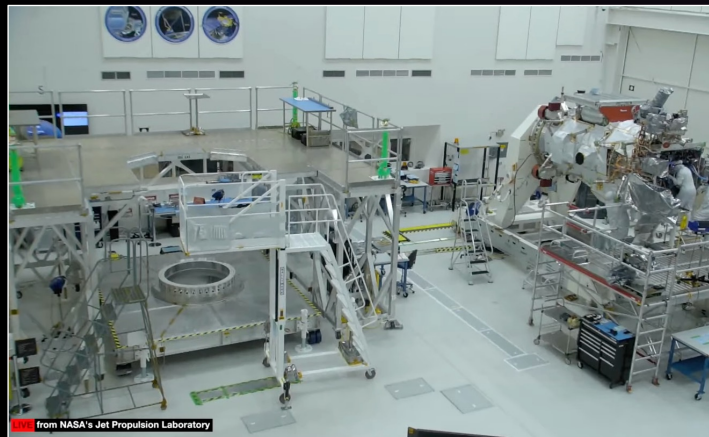
- **JUICE:** Launched April 14 from French Guiana; arrives at Jupiter in 2031
- **Juno:** 50th Jupiter orbit completed in April; several close flybys of Io coming soon
- **Europa Clipper:**
 - Spacecraft stacked into final flight configuration in June – all instruments are now delivered
 - Message in a Bottle campaign launched:
go.nasa.gov/MessageInABottle
- **Coming soon:**
 - **OSIRIS-REx:** Sample delivery September 24, Utah Test and Training Range
 - **Psyche:** Launch window opens October 5



JUICE launch, April 14, 2023



Composite views of volcanic activity on Io



Live view of Europa Clipper ATLO (ClipperCam, July 12, 2023)



Psyche spacecraft at KSC



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