Information about the Planetary Decadal Survey (DS) In preparation for the next Planetary DS, focused on ~2023-2032

Provided to the community by MPO/MEPAG Last updated: June 15, 2020

Send suggestions for additions to MEPAGmeetingQs@jpl.nasa.gov.

The statement of task and official website for the Planetary Science and Astrobiology Decadal Survey 2023-2032

- https://sites.nationalacademies.org/SSB/SSB_198165 (redirects to the same site)
- The Chairs are Phil Christensen (ASU) and Robin Canup (SwRI).
- The DS schedule, based on information on the official website and presentations:
 - o Sept 2019: organizing meeting and town hall at EPSC-DPS
 - o Nov 2019: LPI launches white paper proposal website
 - o Dec 2019: DS town hall at AGU meeting
 - o Jan 2020: National Academies adopts statement of task (see site above)
 - o Jan 2020: Proposals submitted to NASA/NSF and funded; first of community/early-career webinars
 - March 27, 2020: Website opened for white paper submission; virtual meeting to share information about Decadal Survey with Early Career community members (replaced in-person LPSC event)
 - o <u>July 15, 2020</u>: Deadline for submission for **science** white papers
 - o August 15, 2020: Deadline for submission for **mission concept** white papers
 - o September July 15, 2020: Deadline for submission for all other white papers
 - o August/September 2020: committee/panel meetings, respectively, begin
 - o ~October 2021: First complete draft of survey report assembled
 - o By March 31, 2022: Survey report released
- Nominations were due by May 1st. Self-nominations were welcomed.
 - o Only eligibility restriction: First authors of <u>mission-focused</u> white papers (and PIs of ongoing mission concept studies) cannot serve on the steering group or on the any panel considering their mission.
- Information about white paper specifications and how to be involved:
 - o <u>Vimeo recording</u> of a virtual informational meeting about writing white papers (May 7, 2020)
 - o White paper specifications
- There will be a number of Early-career events to share information about the process, see www.nas.edu/planetarydecadal.
 - o Graduate students will be recruited to take notes at Decadal Survey meetings and will receive an honorarium for that work (but no support for travel expenses). A call for volunteers will come out after the meeting schedule/locations are known.
 - o Additional information about Early Career Participation Options are listed here (linked from main site)

Web-forums for community collaboration on white papers

- By Lunar and Planetary Institute (LPI), all planetary topics: https://www.lpi.usra.edu/decadal_whitepaper_proposals/
- By AAS Division of Planetary Sciences (DPS), all planetary topics including "State of the Profession"-related white paper topics (and contains links to AG pages): https://dps.aas.org/decadal-2022-hub

Presentations and Reports generated in preparation for the next Planetary DS

- Presentations by David Smith or Colleen Hartman (NASEM)
 - o <u>Vimeo recording</u> of a virtual informational meeting about writing white papers (May 7, 2020)
 - o OPAG March 2020: https://www.lpi.usra.edu/opag/meetings/feb2020/presentations/Hartman.pdf
 - o <u>MEPAG 36</u> (July 2019): <u>https://mepag.jpl.nasa.gov/meeting/2018-04/15_Smith-Academies.MEPAG-2018.pdf</u>

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- o 9th Mars (lunch presentation: July 2019): https://mepag.jpl.nasa.gov/DecadalSurvey/DecadalSurvey/DecadalSurvey-9thMars.pdf
- Presentations and discussion at September 2019 CAPS meeting
- Report from NASA Committee on Astrobiology and Planetary Science (CAPS), Getting Ready for the Next Planetary Science Decadal Survey (2017)

Discussion about the upcoming Planetary DS within MEPAG

- MEPAG discussion about preparations for the DS
 - o MEPAG 36: MEPAG Preparations for the Next Decadal Survey (by J.R. Johnson, MEPAG Chair)
 - o MEPAG VM7: Update on Decadal Survey Presentations (by R.A. Yingst, MEPAG Chair)
- Topics of study and high-priority questions
 - o MEPAG 37: Big Questions (by R.A. Yingst, MEPAG Chair)
 - o <u>MEPAG 36</u>: <u>Forum presentations on mission concepts</u> (listed and linked below the agenda) + <u>Summary</u> (J.R. Johnson, MEPAG Chair)
- Facilitation of community information and collaboration
 - o MEPAG 37 pres (by S. Diniega, MPO/JPL)
 - o MEPAG VM6 pres (by S. Diniega, MPO/JPL)

Other recent community-sourced listings of high-priority science

- 2018 MEPAG Goals Document (note that a revision is ongoing Fall 2019-Spring 2020)
- Ninth International Conference on Mars: Integration Reports (2019)
- MEPAG studies, including
 - o Ice and Climate Evolution Science Analysis Group (ICE-SAG, 2019)
 - o Next Mars Orbiter Science Analysis Group (NEX-SAG, 2017)
- <u>International Mars Sample Return Objectives & Samples Team (iMOST) report</u> (2018; behind paywall also see documents posted on <u>MEPAG</u>, <u>under SMD/IMEWG</u>)
- NASA workshop: Vision 2050 reports, including a Mars-focused summary
- Mars conference reports, including
 - o 6th International Conference on Mars Polar Science (2016; behind paywall)
 - o Amazonian Climate Workshop (2018; behind paywall)
 - o Biosignatures Workshop (2016; behind paywall)
- Keck Institute of Space Studies reports, including
 - o Unlocking the climate record stored within Mars' Polar Layered Deposits (2017-18)
 - o Mars X: Mars subsurface exploration (2018)

Information about the last Planetary Decadal Survey (Visions and Voyages (V&V): 2013-2022)

- Official NASA page on the last Planetary DS
 - \circ Contains links to committee meetings, community white papers, mission and technology studies, NASA response to V&V, etc.
- Visions and Voyages, the document
- Planetary Science blog, "Primer for the Planetary DS" (specifically about V&V)
- Mid-term assessment (Visions into Voyages, 2017), includes committee meeting content and link to report

Information about NASEM and DS, including for other NASA Communities

- https://en.wikipedia.org/wiki/Planetary Science Decadal Survey, includes listing of historical NASA directional studies
- Links to the most recent NASA DS (Astrophysics, Planetary, Heliophysics, Earth)
 - o NASA Astrophysics DS (kicked off in 2019)
 - o Community preparation for the NASA Astrophysics DS