



NEW Decadal Surveys for 2020's

The National Academy of Sciences' decadal surveys recommend ranked, consensus scientific priorities for the coming decade.

The 2020's surveys emphasize the health of the profession while mapping ambitious plans for answering our most pressing scientific questions.



Supporting the People, First and Foremost

Diversity, Equity, Inclusion, & Workforce Development

Ensuring broad access and participation is required to recruit, retain, and nurture the best talent, and to support continued American leadership in astronomy, planetary science, and heliophysics.

Protecting & Growing Grants

Fund the people doing the science, not just the facilities they use.

- **Augment Research & Analysis Funding** at NASA, NSF, & DOE
- Balance operations costs & research funding for **NSF MREFC**
- Augment funding for theory and laboratory astrophysics

Answering Our Biggest Scientific Questions

Uranus Orbiter

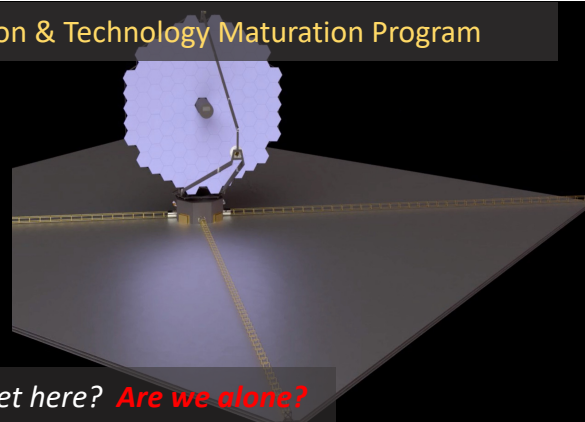


What's going on inside and around the ice giant planets?

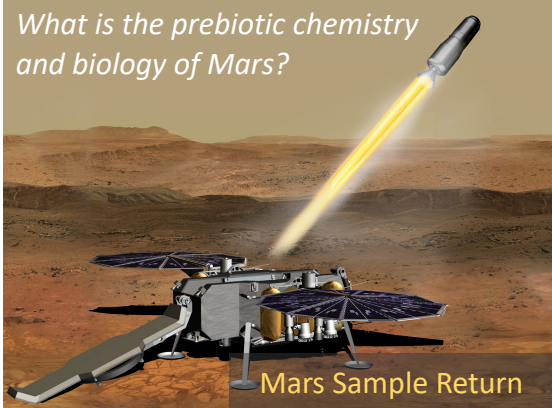
Great Observatories Mission & Technology Maturation Program



*How did we get here? **Are we alone?***

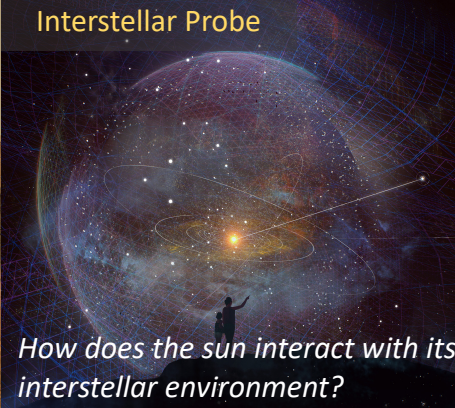


What is the prebiotic chemistry and biology of Mars?



Mars Sample Return

Interstellar Probe



How does the sun interact with its interstellar environment?

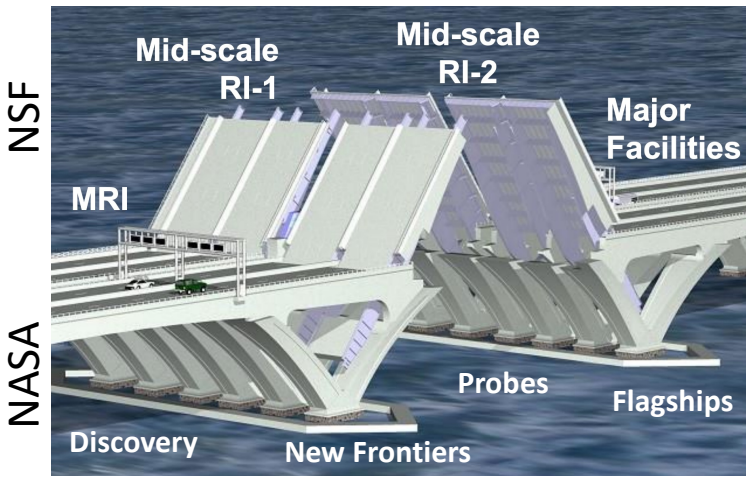
How does the universe work?



Extremely Large Telescopes



Bridging Gaps with a Balanced Portfolio



Supporting small and medium-sized missions is vital to develop technology, train students, and bridge scientific gaps not covered by large missions.

NEW NASA Astrophysics Probe Class: bridging the gap between small Explorer-class missions and large flagship missions (\$1B cost cap)

NASA **Discovery** and **New Frontiers** and NSF **Mid-Scale Research Infrastructure** programs support competitive, PI-led projects up to \$450M, \$850M, and \$20M, respectively.

Exceptional Projects Require Exceptional Growth

Ensuring the continued excellence of US Astronomy requires commitment to **growing the budgets at NASA, NSF, and DOE Office of Science**. Funding for astronomy must increase to both build new facilities and grow research grant opportunities.

The FY23 PBR designated flat or declining funding across most major astronomy line items. With current elevated inflation rates, this represents a funding cut.

Accomplishing decadal priorities while maintaining current missions and facilities is impossible without funding growth.

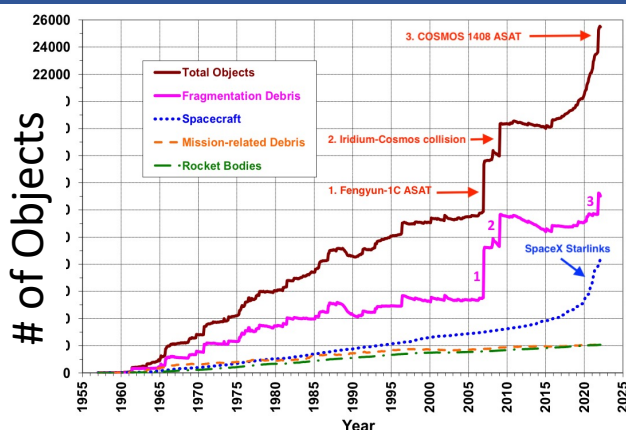
Account	FY22 Omnibus	FY23 PBR	FY23 Ask
NASA	24.0	26.0 (+8%)	--
SMD	7.61	7.99 (+5%)	9.00
NSF	8.84	10.50 (+13%)	11.00
DOE-SCI	7.48	7.80 (+4%)	8.80

All values in billions of USD

“The Astro2020 decadal proposes an ambitious program for the future. Aspirational and even audacious goals are important, because great nations do great things.” – Rep. Brian Babin (R-TX)

“It makes no sense to invest billions of dollars in research facilities if we don’t also invest in the students and researchers who can turn those capabilities into new knowledge.” – Rep. Haley Stevens (D-MI)

Mitigate Harms to Astronomy from Satellite Constellations



The recent, massive proliferation of commercial satellites in low earth orbit (LEO) **significantly threatens astronomy unless mitigating actions are taken.**

Satellites & debris reflect sunlight, leaving often-irreparable streaks across science images. Their radio transmissions interfere with radio telescopes as they pass overhead. Collision risk in LEO increases.

We need to **protect federal investment in astronomy**, the security of LEO for future use, and dark skies for human appreciation.