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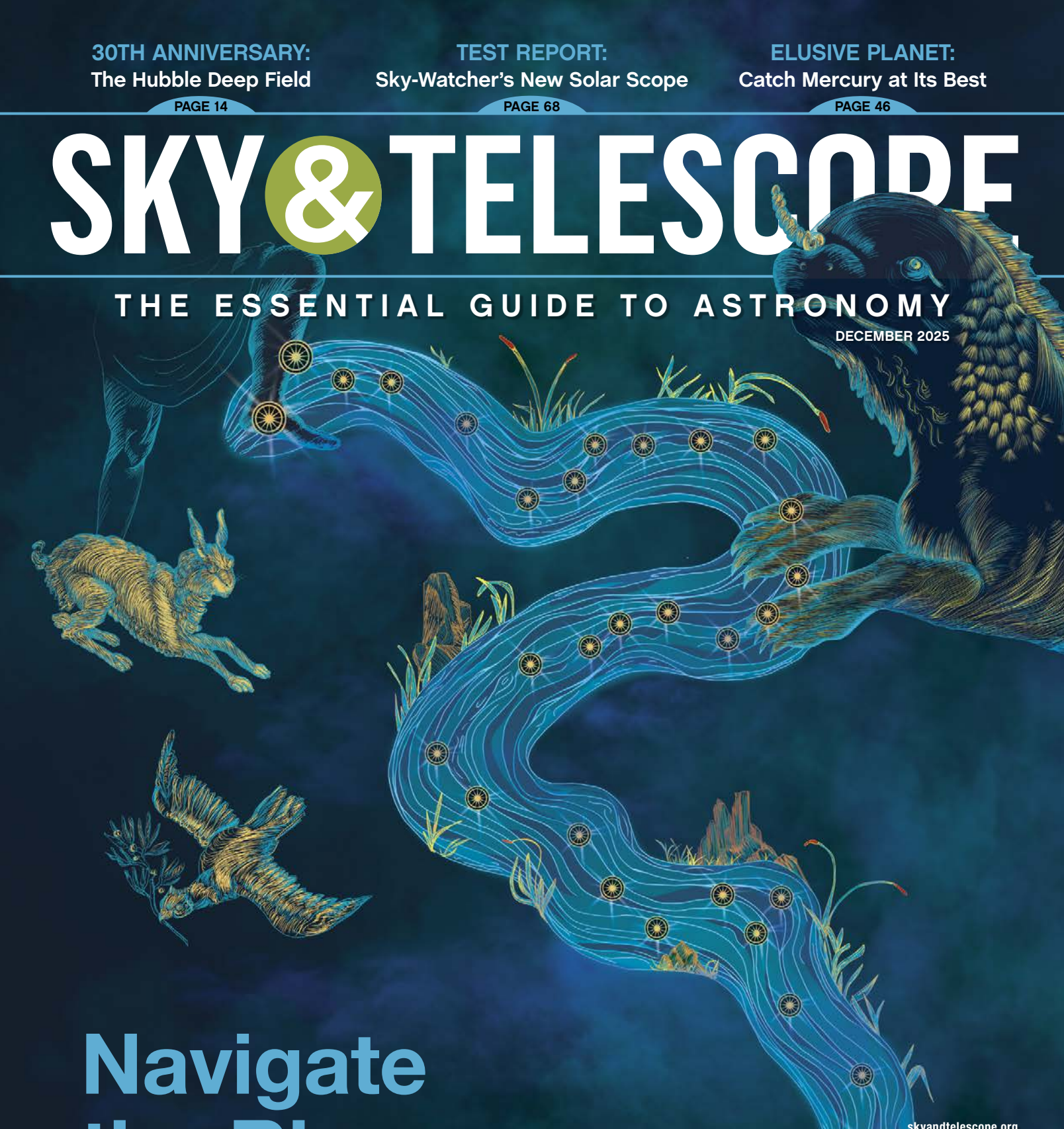
DECEMBER 2025



Navigate the River of Stars

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SCIENCE POLICY

Congress's NASA and NSF Budgets Counter Trump, Fund Science

CONGRESS RELEASED funding plans for NASA and the National Science Foundation (NSF) in July, a key — and hopeful — step to having a final budget signed into law by President Trump by the end of the fiscal year on September 30th.

In a strong rebuttal of the White House's request to slash NASA's science budget by 47%, the Senate draft proposed keeping NASA science funding at roughly current levels ($7.3 billion). The House version suggested 18% cuts (down to $6 billion).

The Senate's plan would fund programs on Trump's chopping block, including the Lunar Gateway and the DAVINCI and VERITAS missions to Venus as well as partnerships with the European Space Agency on the LISA gravitational-wave observatory and the Rosalind Franklin ExoMars Rover. The Senate would also fund extended missions such as those for Juno (at Jupiter), New Horizons (in the Kuiper Belt), MAVEN (at Mars), and the Chandra X-ray Observatory. The budget for the Nancy Grace Roman Telescope would nearly double from the White House request, which would aid an on-time launch, currently set for 2027.

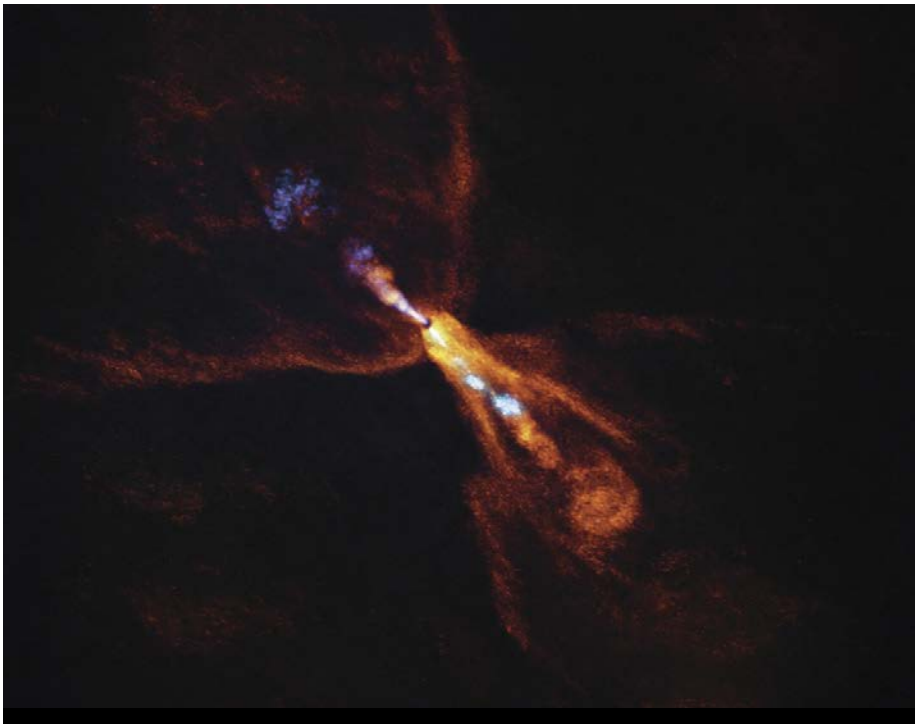
The NSF, which funds projects such as the Laser Interferometer Gravitational-wave Observatory (LIGO), would lose more than half its funding under Trump's budget. The Senate instead suggested funding NSF at a steady $9 billion, which includes funding both of LIGO's detectors rather than closing out one of them (*S&T:* Oct. 2025, p. 10). The House, meanwhile, put funding at $7 billion (a 23% cut).

Even though appropriations are ongoing as of press time, the Trump administration has already instructed NASA science programs to formulate "closeout plans" and to stop issuing press releases celebrating new science results. The agency has also been encouraging employees to leave their jobs through the government's deferred resignation program. A July 18th letter, sent to Acting NASA Administrator Sean Duffy and signed by 64 members of Congress, asks that no NASA actions be taken in alignment with the President's budget request before the final appropriations bill is passed. Doing so would "stand in direct violation of Congress's role," they write.

More than 300 NASA employees also signed a formal dissent to Duffy titled The Voyager Declaration. The letter lists concerns that the White House would shut down operational spacecraft, shrink the skilled space workforce, and decrease agency safety.

Ultimately, if the U.S. fails to fund science, "it's not going to be that somebody else picks up the slack," says Mike Boylan-Kolchin (University of Texas at Austin). "It's just going to be an overall . . . lack of knowing more about the universe we live in."

■ HANNAH RICHTER



ALMA (ESO / NAOJ / NRAO) / M. MCCLURE ET AL.

Webb Images Infant Solar System

More than 1,300 light-years away in the Orion Nebula, HOPS-315 is a young, Sun-like star that has only recently emerged from its natal cloud of dust and gas. A team led by Melissa McClure (Leiden Observatory, The Netherlands) observed this baby solar system with the James Webb Space Telescope and the Atacama Large Millimeter/submillimeter Array (ALMA), finding warm silicon monoxide (SiO) gas and solid grains rich in silicate minerals. The detections indicate the beginning stages of planet formation — a process that occurred in our own solar system some 4.5 billion years ago. "Our detections were consistent with the theory [of solar system formation] that says that these minerals need to condense close to the protostar, rather than farther out in the disk," McClure says. HOPS-315's young age makes it an excellent laboratory to study planet formation in the earliest stages of a star's life. The image and analysis appear in the July 17th *Nature*.

■ ARIELLE FROMMER

Read more at skyandtelescope.org/HOPS315.