



FACT SHEET

Arecibo Observatory Update

December 2021

Stewarded by U.S. National Science Foundation since the 1970s, Arecibo Observatory has contributed to scientific discoveries including the demonstration of gravitational waves from a binary pulsar and the first discovery of an extrasolar planet. In 2020, Arecibo Observatory's 305-meter telescope collapsed. Since then, NSF has provided regular updates regarding efforts to address the damage and restore parts of the observatory after the collapse. The periodic updates and images can be found at [Arecibo News Media | National Science Foundation \(nsf.gov\)](#).

The Observatory Today

The Arecibo Observatory is still functioning, primarily focusing on observing capabilities not related to the 305-m telescope. Educational programs continue, with some being held virtually due to COVID-19. In addition, scientists continue to analyze existing data and other staff continue to work with instrumentation that was not associated with the 305-m telescope, such as the Lidar and other optical observing tools. Researchers are able to work in the office building at the facility and continue to use the data collected from observations at Arecibo over the past 50 years. Recently, Arecibo data was used to support NASA's DART and OSIRIS-REx missions. In addition, scientists have published papers on unique pulsars discovered in surveys using Arecibo in recent years.

Status of Emergency Cleanup

- The emergency cleanup team has completed the majority of the emergency cleanup and repairs. Next steps include completing repairs to areas with damaged concrete, removal of work vehicles and equipment from the site, and storage of salvaged items.
- Most of the equipment related to the 305-m telescope was destroyed in the collapse and is no longer usable. Debris and broken equipment were cleaned up and disposed of offsite, following environmental, health and safety regulations. Some equipment was saved for historical purposes and as part of the forensic investigation, which is ongoing.
- All materials designated for disposal will continue to be hauled to recycling facilities in Puerto Rico. Objects of potential scientific, cultural, or historic value are being stored on site.
- An NSF facility, the Arecibo Observatory is managed by the University of Central Florida with Universidad Ana G. Mendez and Yang Enterprises under a cooperative agreement. UCF contracted with Thornton Tomasetti to assist with the emergency cleanup efforts.
- As of October 2021, NSF has allocated approximately \$40 million toward emergency cleanup.

What's Next

NSF is considering a broad range of options for the future of Arecibo Observatory. No decisions have been made at this time. As with any investments by NSF, proposals for potential new telescopes or other

instrumentation, as well as ideas for new educational programs at Arecibo Observatory, must be formally submitted to the agency and will be evaluated according to two main criteria: intellectual merit and broader impacts. Environmental reviews may also need to be completed.

About the National Science Foundation

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