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NASA DECOMMISSIONS SPITZER SPACE TELESCOPE AFTER 16 YEARS OF OPERATION

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This composite image made available by NASA shows the Large Magellanic Cloud galaxy in infrared light as seen by the Herschel Space Observatory and NASA's Spitzer Space Telescope. | Photo Credit: AP

NASA has decommissioned the Spitzer Space Telescope, one of its greatest observatories which has studied the universe by detecting cosmic infrared radiation for more than 16 years, the US space agency said in a statement.

Spitzer, which was launched in 2003, studied some of the most distant galaxies ever detected with the light from some of the cosmic bodies travelling for billions of years to reach the telescope, NASA said.

"Spitzer taught us how important infrared light is to understanding our universe, both in our own cosmic neighbourhood, and as far away as the most distant galaxies," said Paul Hertz, director of astrophysics at NASA Headquarters.

"The advances we make across many areas in astrophysics in the future will be because of Spitzer's extraordinary legacy," Mr. Hertz added.

By detecting infrared light, with wavelengths ranging from about 700 nanometres -- too small to see with the naked eye -- to about a millimetre, Spitzer could help astronomers unveil the presence of cosmic entities which are too cold to emit much visible light, including planets outside our solar system, and cold matter found in the space between stars, the US space agency noted.

Spitzer, the NASA astronomers said, also found a previously undetected ring around Saturn, composed of sparse dust particles that visible-light observatories cannot see.

"It's quite amazing when you lay out everything that Spitzer has done in its lifetime, from detecting asteroids in our solar system no larger than a stretch limousine to learning about some of the most distant galaxies we know of," said Michael Werner, Spitzer's project scientist.

According to NASA, the original mission planners didn't expect Spitzer to operate for 16-plus years.

"It wasn't in the plan to have Spitzer operating so far away from Earth, so the team has had to adapt year after year to keep the spacecraft operating," said Joseph Hunt, Spitzer project manager.

"But I think overcoming that challenge has given people a great sense of pride in the mission. This mission stays with you," Mr. Hunt said.

During the 2016 NASA Senior Review process, the agency had said, they made a decision to close out the Spitzer mission, which was initially planned for 2018 in anticipation of the launch of the James Webb Space Telescope (JWST), which will also conduct infrared astronomy.

However, as the launch of the JWST was postponed, the Spitzer mission was granted its fifth and final extension, which ended on Thursday.

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