

Australia gets \$72 million for the Giant Magellan Telescope

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This artist's rendering shows the Giant Magellan Telescope and support facilities at Las Campanas Observatory, Chile, high in the Andes Mountains. Credit: Todd Mason/Mason Productions

Pasadena, CA-The Australian government has announced that it will provide \$88.4 million AUD (\$72.4 million USD) to help fund the revolutionary 25-meter Giant Magellan Telescope (GMT) to be sited at Las Campanas Observatory in Chile's high-altitude Atacama Desert. This brings the funding that has been raised to date to \$200 million out of approximately \$700 million total needed to complete construction, which is scheduled for 2019.

The GMT will be built and operated by a consortium of institutions from the United States, South Korea, and Australia. Larger and more powerful than any previous optical telescope, it will be up to 100 times more sensitive than current ground-based telescopes, and will produce images



10 times sharper than those from the Hubble Space Telescope.

GMTO Corporation Board Chairperson and Carnegie Observatories director, Wendy Freedman said, "We are delighted at the success of our Australian colleagues. This funding will give Australian astronomers access to about 10% of the time on the GMT, and assure that they remain at the forefront of <u>astronomical research</u>. It provides another strong boost of forward momentum for the project, one of many it has received of late."

Harvey Butcher, Director of the Australian National University Research School of Astronomy and Astrophysics and Mount Stromlo Observatory said, "Involvement in GMT will strongly advance Australia's contributions to science and innovation and provide a focus for attracting the next generation of scientists and engineers."

"Australia's action strengthens the GMTO and will help us build the telescope we dream of in Chile. To achieve this dream takes money, talent, and grit. The Australians are bringing all three," said Patrick McCarthy, director of the GMTO.

The GMT will combine seven 8.4-meter primary mirror segments resulting in an equivalent 24.5-meter <u>telescope</u>. It will be used to explore currently unanswered questions about the nature of <u>dark matter</u> and <u>dark energy</u>, the origin of the first stars and first galaxies, and the mysteries of star formation, galaxy evolution, and black hole growth. The GMT will also play a key role in the detection and imaging of planets around nearby stars.

Source: Carnegie Institution



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