

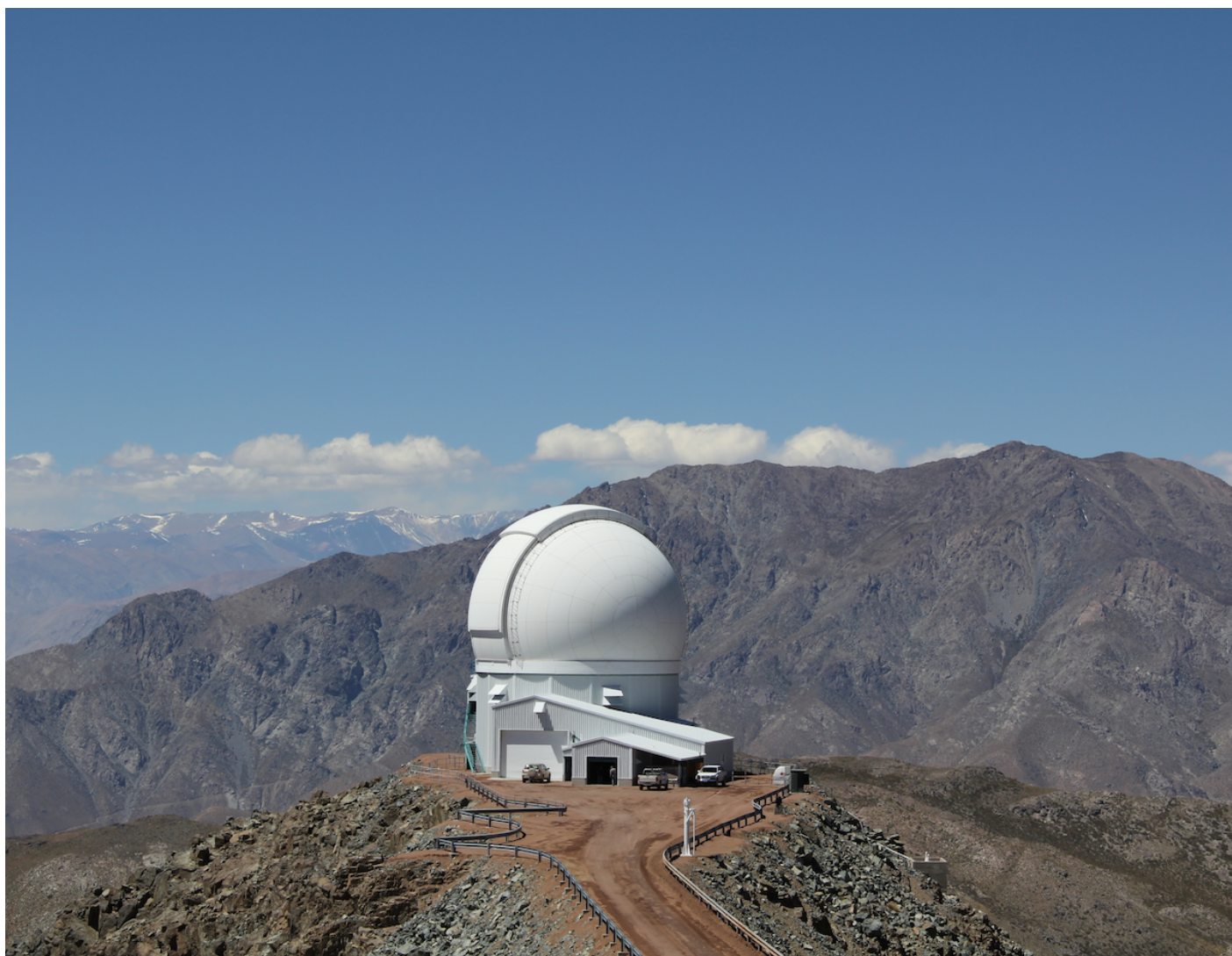


Published on SOAR (<http://www.ctio.noirlab.edu/soar>)

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## About SOAR



[1]The Southern Astrophysical Research (SOAR) Telescope is a 4.1 meter aperture telescope designed to work from the atmospheric cut-off in the blue (320 nm) to the near infrared, with excellent optical image quality, fast slewing and with a suite of up to nine instruments mounted ready for use. SOAR has been

designed to produce the sharpest images possible with any ground-based telescope.

It was funded by a partnership between [NSF's National Optical-Infrared Astronomy Research Laboratory \(NSF's NOIRLab\)](#) [2]; formerly the U.S. National Optical Astronomy Observatory - NOAO), on behalf of the U.S. [National Science Foundation](#) [3], the [Ministério da Ciência, Tecnologia e Inovações](#) [4] (MCTI) of the Federal Republic of Brazil, the [University of North Carolina at Chapel Hill](#) [5] (UNC), and [Michigan State University](#) [6] (MSU). The SOAR telescope is [situated on Cerro Pachón](#) [7] - IV Region - Chile, at an altitude of 2,700 meters (8,775 feet) above sea level, only ~400m from the [Gemini South Observatory](#). [8] Our [offices](#) [9] are located in the [AURA](#) [10]/[CTIO](#) [11] compound, in the city of La Serena, Chile.

The telescope uses active optics on its primary and secondary mirrors to attain an image quality of ~0.5 arcsec at 0.8  $\mu\text{m}$  under good seeing conditions. With the SOAR Adaptive Optics Module (SAM) commissioned in 2013, SOAR has achieved images as good as 0.25 arcsec FWHM at 0.8 $\mu\text{m}$  over a field of view of 3x3 arcmin, a resolution which approaches the image quality of HST. For more information on the technical specifications of the telescope, [see this page](#) [12]

***SOAR is among the foremost research facilities available to astronomers in the southern hemisphere, producing the best image quality at wavelengths from optical to near-infrared, and at the same time offering both imaging and spectroscopic capabilities.*** Because of this SOAR is now routinely delivering exciting and high impact science to the astronomy community worldwide.

**If you are an astronomer or scientist interested in using SOAR, [click on this link](#) [13] to find out about the instruments and observing modes available.**

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[2] <https://nationalastro.org/>

[3] <http://www.nsf.gov>

[4] <http://www.mctic.gov.br/portal>

[5] <http://www.physics.unc.edu/>

[6] <http://www.pa.msu.edu/>

[7] <http://www.ctio.noirlab.edu/soar/content/location>

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[9] <http://www.ctio.noirlab.edu/soar/content/contact-us>

[10] <http://www.aura-astronomy.org/>

[11] <http://www.ctio.noao.edu>

[12] <http://www.ctio.noirlab.edu/soar/content/soar-technical-specs>

[13] <http://www.ctio.noirlab.edu/soar/content/soar-astronomersobservers>

[14] <http://www.ctio.noirlab.edu/soar/content/soar-organization>

[15] <http://www.ctio.noirlab.edu/soar/content/committees>

[16] <http://www.ctio.noirlab.edu/soar/content/history-soar-telescope-project>

