

Vatican Advanced Technology Telescope

The VATT telescope has an Alt/Az mount and uses a 1.8-m f/1.0 honeycombed construction, borosilicate primary mirror developed by the University of Arizona Mirror Lab. Its secondary mirror is a 0.38-m f/0.9 Zerodur manufactured by the Space Optics Research Laboratory ¹⁾.



Both observing time and responsibility for VATT are shared with the University of Arizona on a 75% The Vatican Observatory Research Group VORG, 25% basis. Limited resources prevent VATT from being a visitor observatory, but collaborations are welcomed by VORG, especially when suitable instrumentation is provided for shared use at VATT. ²⁾

Altitude : 3191 meters = 10,469 ft
Latitude : 32° 42' 04.69" N
Longitude : 109° 53' 31.25" W
Optical System : aplanatic Gregorian, f/9
Focal Length : 16.48 m
Primary Mirror : f/1.0, Diameter 1.83 meters = 72 inches
Secondary Mirror : f/0.9, Diameter 0.38 meters = 14.96 inches
Back Focal Distance : 50.80 mm (effective)
Vignetting-Free Field : 72 mm diameter (15 arcmin)
Image Scale : 12.52 arcsec/mm
Image quality : 0.1 arcsec throughout 6.8 arcmin diameter flat FOV
Mount : altitude-azimuth with derotator

[Read-Me before applying for VATT time](#)

[List of Approved Observers](#)

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[Useful Astronomy Links](#)

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[Dome, Security & Finderscope Cameras](#)

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Safety

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What's New at VATT

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The Telescope & Instruments

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- [A paper on Mt Graham atmosphere](#)
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- [Instrumentation and Computers](#)
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Base Camp & Swift Trail

- [Base Camp and Swift Trail](#) prior to your arrival

Start up and shutdown:

- [VATT Warm Startup Checklist](#)
- [VATT Warm Shutdown Checklist](#)
- [VATT Ash Shutdown/Startup Checklist](#)
- [VATT Lightning Shutdown Checklist](#)
- [VATT Lightning Startup Checklist](#)

Individual tasks

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Telescope Operation

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- [VATTspec](#)
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- [Dome Flats](#) (Gabor style)
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Peripheral Systems

- [Mirror Cell Thermal Reader](#)
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Data Retrieval

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Maintenance and Engineering

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Superannuated Contents

- [Collimate VATT \(Old\)](#)
- [VATT Warm Startup Checklist \(2011\)](#)
- [VATT Warm Shutdown Checklist \(2011\)](#)
- [Calibrate](#)
 - [VATT Instructions \(2005\)](#)
- [VATT Streamlined Warm Startup Checklist](#)
- [Remote Observation Checklist](#)
 - [Warm Startup Checklist for VATT operation during PEPSI runs](#)

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<http://vaticanobservatory.org/VATT/>

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