



Overview of Telescope Facilities



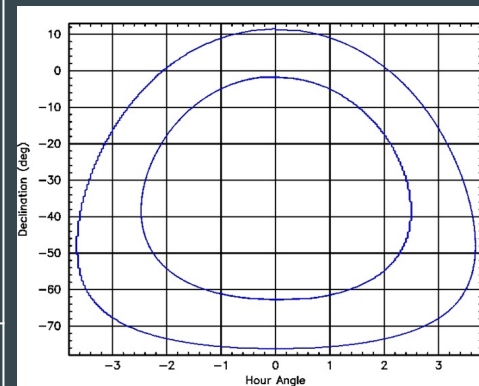
Rubin In-Kind Program

South African Optical Facility Access

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Key Numbers for SALT

Aperture	7 – 8.3 m effective (moving 11 m pupil) 92 x 1.2 m hexagonal segments 8 arcmin FoV
Wavelength range	320 – 900 nm (visible); 800 – 1700 nm (NIR)
Instrument suite	<p>Robert Stobie Spectrograph (RSS)</p> <ul style="list-style-type: none">• Low- medium res ($R \sim 350 - 9000$) longslit & MOS• Polarimetric modes (linear, circular, all-Stokes)• Fabry-Perot etalons for imaging spectroscopy <p>SALTICAM</p> <ul style="list-style-type: none">• Visible imaging camera with multiple filter sets• High speed (~ 10 Hz) capability <p>High Resolution Spectrograph (HRS)</p> <ul style="list-style-type: none">• Fibre-fed single object (+ sky)• Three resolution modes ($R \sim 15,000, 34,000, 70,000$)• High stability modes too <p>NIR IFU spectrograph (commissioning in 2022)</p> <ul style="list-style-type: none">• ~ 25 arcsec IFUs; $R \sim 2000 - 5200$
Other relevant facts	Can access $+11^\circ < \text{Dec} < -76^\circ$ (restricted viewing annulus on the sky)



Telescope Time Available

50 h per year

Applying for Telescope Time

- Semester based proposals (starting 1 May, 1 Nov)
- Phase 1 submitted to TAC; Phase 2 for detailed description
- ToOs can be submitted as part of accepted proposals
- Time is awarded in 4 priority classes (P0 – P3) with an oversubscription of 50% in P3 to guarantee a full queue

Observation Scheduling

All SALT observations are queue-scheduled

Observations undertaken by dedicated astronomy operations staff

Proposal targets maybe added (e.g. transients)

Accessing data products

- All raw and pipelined reduced data available by the next day. Raw data can be accessed immediately.

Key Numbers for SAAO Telescopes

Aperture	1.9 m , 1.8 m PRIME (commissioning in 2022) 1.6 m KMTNet, 1.4 m IRSF, 1.2 m MONET-South; 2 x 1.0 m, 0.65 m MeerLICHT, 2 x 0.4 m MASTER
Wavelength range	320 – 900 nm (visible) for most NIR for two (zyJH PRIME and JHK _s IRSF)
Instrument suite	Wide field (1.5 – 4 deg ²) imaging (PRIME) MeerLICHT, KMTNet Low-medium resolution spectroscopy (Spupnic on 1.9-m, Mookodi on 1.0 m) High speed photometry (SHOC on 1.0 m's, Mookodi on 1.0m) High speed polarimetry (HIPPO on 1.9 m)
Other relevant facts	The suite of telescopes are being incrementally networked into the SAAO's <i>Intelligent Observatory</i> .



Telescope Time Available

- 52 h per year

Applying for Telescope Time

- Trimester based proposals for SAAO telescopes
- Other hosted telescopes different proposal periods (see SAAO website for details)

Observation Scheduling

- Telescope time is currently allocated weekly to individual PIs or PI groups
- Remote observing increasingly supported

Accessing data products

- All raw can be accessed immediately following the observations.
- Data reductions are the responsibility of the individual astronomers who obtained the observations.
- Some reduction programs have been and are being developed.