Observing with SOAR

Time in La Serena: [1]

OBSERVING MODES AT THE SOAR TELESCOPE
SOAR offers both classical (on-site) observing (SOAR Control Room, right), and remote observing (MSU Remote Observing Room, far right) for experienced users.

In this section you will find the tools you need for preparing your science proposal and then carrying out your program.

**Tracking at Non-Sidereal Rates with SOAR**

The SOAR telescope has the ability to track at non-sidereal rates, ideal for observing fast-moving Solar System targets. The maximum non-sidereal rates at which the telescope can track are determined by low-level software. The maximum rate in declination is ±2700 arcsec/hour and the maximum rate in right ascension is ±180 seconds of RA/hour. This specification for the RA rate limit means that the maximum RA rate in seconds of arc/hour on the sky is 2700*cos(declination). Note - at present, the guiders do not support non-sidereal targets, so observations must rely on the telescope tracking. For information on how to create target lists for Solar System objects go to this page.

<table>
<thead>
<tr>
<th>Tools for SOAR proposers</th>
<th>Tools for SOAR Observers</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Summary of Instrumentation Capabilities at SOAR</td>
<td>• SOAR Observing Calendar (NEW)</td>
</tr>
<tr>
<td>• Overheads, and Tips for observing efficiently with SOAR</td>
<td>• SOAR Visiting Astronomer’s Guide</td>
</tr>
<tr>
<td>• Optical instrumentation currently available at SOAR</td>
<td>• SOAR Remote Observer’s Guide</td>
</tr>
<tr>
<td>• Near Infrared instrumentation currently available at SOAR</td>
<td>• Creating Targets lists for SOAR</td>
</tr>
<tr>
<td>• Proposing for time on SOAR</td>
<td>• Instrument Setup forms and Night/End-of-Run Reports</td>
</tr>
<tr>
<td>• Access to Visitor Instruments</td>
<td>• Observing Log Forms</td>
</tr>
<tr>
<td>Acknowledgement of SOAR data in publications</td>
<td>• Weather, Sky conditions &amp; monitoring tools</td>
</tr>
</tbody>
</table>
Links
[1] https://time.is/La_Serena
[8] http://www.ctio.noao.edu/soar/content/infrared-instrumentation-soar-0
[10] http://www.ctio.noao.edu/soar/content/access-visitor-instruments