

VST Status of Operations



Before Start of Operations

- **Acquire profound knowledge of instruments**
- **Participate at the commissioning**
- **Homogenize VST operations with respect to other instruments (“Paranalization”)**
- **Prepare input package for phase 2**
- **Staff Training**
- **Update Science Operation SW-tools**

Early Science Operations

1. “Front End” ***Phase 2 Package*** for PIs and Science Verification Team frozen (p2pp, sadt)
2. ***Science Verification*** with “Back End” pipeline and QC procedures implemented (**Surveys?**)
3. ***Paranalization*** in parallel to Dry Runs with Public Survey Observation Blocks
4. ***Start of Science Operations***

Operations Priorities

- Before freezing ***Phase2 Package***: Only technical observations (no science OBs in the queue)
- During ***“Science Verification”***, ***“Paranalization”*** & ***“Dry Runs”***: Priority is given to technical jobs, staff training and test observations if needed
- ***Science Operations***: Technical activities only in technical nights

Phase 2 Instrument Package

- Final edition of ***user manuals***
- ***WEB pages*** in Science Operations style
- Phase 2 ***instructions*** and ***rules***
- Input for ***execution time calculation***
- Input for ***phase 2 verification scripts***
- Final edition of ***template signature files***
- Feedback to quality control, pipeline operations

VST – operations & tools

v3 Tools p2pp, ot: OBs can be contained in groups, concatenations, relative time links.

Automatic Scheduling: OB priorities are calculated by software (most difficult observations first)

Data Quality: Evaluated by Operators, (it will require data reduction to check 32 frames/min)

No Support Astronomers at VST

Survey Telescope Support

- ***Night time support*** by well trained Telescope Operators (with engineering degree)
- ***Day to day support*** by shift coordinators and support astronomers (if needed)
- ***Case by case*** by Members of the Paranal Survey Telescope Group (Now: T. Szeifert, V. Ivanov, S. Mieske,... Soon: F.Selman, G.Carraro, S.Guieu, H. Boffin, P. Karbath, G. Lombardi)
- ***Beyond day by day*** support: IOT

Instrument Operation Team

- **Coordination between the departments and groups**
- **(For VISTA) we have invited CASU and the PI**
- **Teleconference about on monthly base**
- **Phase 2 packages**
- **Data quality control at different levels**

Beyond the day to day science operations support

VST – Scheduling

- **What about the 18% (500h/yr) of “unclear” sky?
VLT operators certified 82% as CLR or PHT**
- **What about the 28% (750h/yr) with FLI >0.7?**

Survey Telescope Operations

- Internat contact point: vst@eso.org
- External contact for PIs: usd-help@eso.org

Survey Telescope Operations

- **The end,...**

VST – Scheduling Example

<i>Filter</i>	<i>Seeing</i>	<i>FLI</i>	<i>Sky</i>	<i>DEC</i>	<i>AM</i>	<i>p</i>	<i>class</i>	<i>rank</i>
K	0.8[“]	1.0	THN	-4	1.7			
	0.66	1.0	0.90		0.78	0.47	50	B
Z	0.8[“]	0.3	THN	-43	1.7			
	0.38	0.58	0.90		0.93	0.19	20	C
Z	1.0[“]	1.0	CLR	-21	1.7			
	0.83	1.0	0.80		0.88	0.62	60	A
ST at sunset 19:50, RA 18:14*						0.18	20	A

(*setting target is observable for ~2.5h not ~8h)