

La Silla Paranal Users Workshop

Phase 2 process, policies & recent news

Marina Rejkuba

User Support Department Head

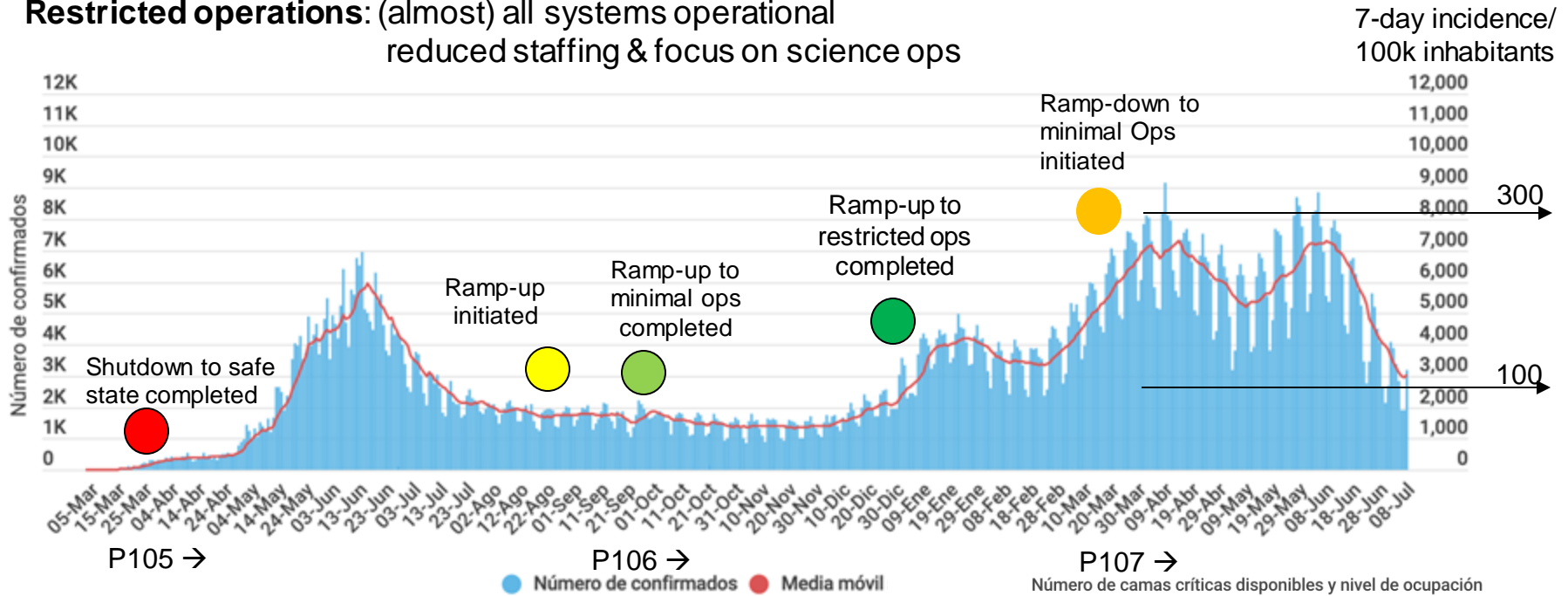


Observatory & operations status

Safe state: no science operations; keeping the site & equipment safe

Minimal operations: science operations with some telescopes/some instruments

Restricted operations: (almost) all systems operational
reduced staffing & focus on science ops

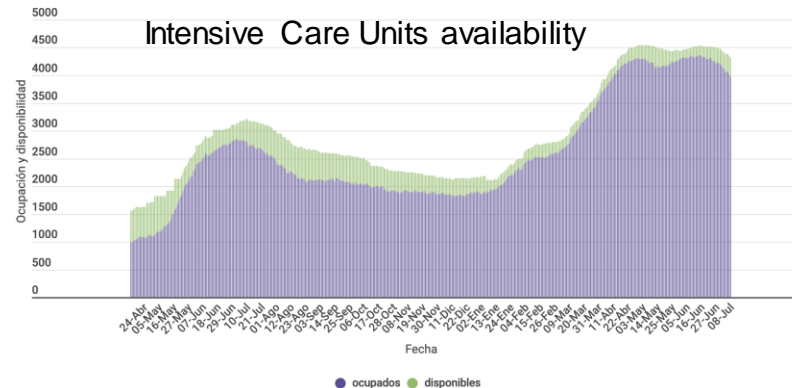


Latest Observatory status updates:

<https://www.eso.org/sci/facilities/lpo/news.html>

Regular gate reviews ~2 weeks

- Priority: operations
- 2 week shifts → 12/11 days shifts in winter



- Currently in operation:
 - VLT 3-4 UTs or VLTI with UTs; no surveys, no VLTI-AT
 - La Silla: NTT + 3.6m
 - APEX

- Pandemic affected maintenance & possibility to schedule interventions:
 - HAWK-I – pending recommissioning – ready @P108 start
 - VISIR – pending move & recommissioning at UT2 – to be ready at the start of P108
 - KMOS – 6 arms not-operational
 - OmegaCAM – CCD#77 not operational
 - MATISSE – DIL motor problems – configuration fixed to low resolution

Phase 2 process

■ Service Mode observation preparation:

- Phase 2 preparation starts with Webletters release
- Phase 2 deadline: 12 August
- Review & update/optimisation of observing material
- Ready for the start of observing period: 1 October

■ Resources

- Instrument webpages:
 - User Manual, Template Manual, Calibration Plan, Tools Manuals
- Observation preparation software
 - p2, FIMS, KARMA, FPOSS, ObsPrep, p2fc, ETC
- Phase 2 webpages – policies & guidelines
- Helpdesk: <https://support.eso.org>

Service Mode Goals

- Maximize **science efficiency** - highest scientific priority & matching to required observing conditions
- Maximize **operational efficiency** - sharing calibration data between programmes
- Maximize the **scientific use** of telescope time – having observations that can effectively use current observing conditions
- Maximize the **scientific productivity** - uniform datasets that have all necessary calibrations for archival re-use of data

Service Mode Scheduling

■ Flexible scheduling

- Operator decides on which OB/programme to execute next within hour(s) or minutes of the previous observation
- Adjusting the next observation to match constraints and scientific priority
- Time critical windows may increase priority, but may also lead to failing OBs

■ Each observation is independent from each other

- Concatenations, groups, time-links
- Complex linking between OBs (observe this if that is complete, otherwise ...) or real-time decisions are not possible → (d)VM

Phase 2 policies

■ Phase 1 = Phase 2

- Constraints can be relaxed @Phase 2
- Targets + setup are binding
 - Change request requires sound scientific justification
 - No major changes in RA distribution

■ SM observations: up to 1h long

- Waiver request requires scientific justification
- Longer OBs may be approved but constraints are guaranteed during first 1h of execution start
- Saving overheads may result in lower chance for execution

■ Time-critical OBs can expire

Time critical observations

■ Absolute time windows

- Absolute means ... Absolute, i.e. MUST be executed then or otherwise is not useful
- No adjustments after the observation(s) expires

■ Relative time delay between OBs execution

- Monitoring of some variable targets where the relative delays are needed
- If scientifically justified partly failed/expired sequence may be continued → request to USD via <https://support.eso.org>

■ VLTI imaging of variable targets (time-critical)

NEW: VLTI Nested containers and Imaging Programme observations

- VLTI: groups of concatenations (sci+cal) and time-links of concatenations are possible in P108
- Imaging programmes: observations for different baselines must be within the same Run ID
- Observations planned during Imaging Slots
- Time-critical imaging programmes may exceptionally request to repeat expired observations for:
 - A-rank
 - the time interval during which the image must be completed (Imaging Time) is specified in proposal
 - The Imaging Time \geq 1 month
 - Up to 15 concatenations per target

- Since 5 July: helpdesk portal on the web:
 - Contact us through <https://support.eso.org>
 - Knowledgebase
 - usd-help@eso.org decommissioned
- Change requests & Waivers
 - p2 web form
- Nested Containers for VLTI introduced in P108