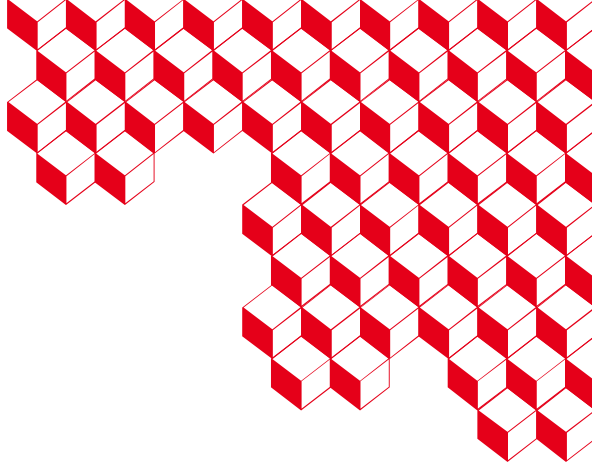


BA-T Diagnostics Tools

Nicolas Dagoneau (IRFU/DEDIP)

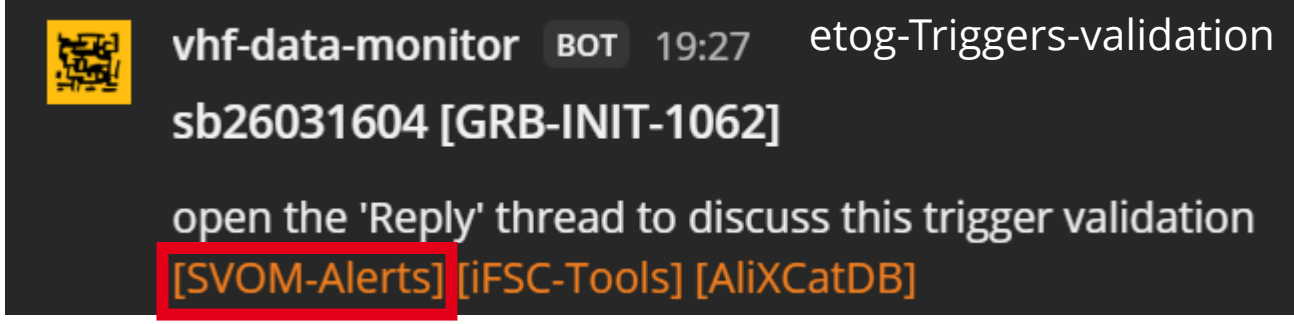
BA-T Workshop

March 2026

BA-T (validation) procedure

https://forge.in2p3.fr/projects/etog-validation/wiki/Burst_Advicate_Trigger_procedure

Notice status (wakeup)



BURST_ID	INSERTION TIME (UTC)	NOTICES
sb26030504	2026-03-05T07:14:30	grm-preliminary, grm-trigger, grm-refined, eclairs-preliminary, eclairs-wakeup, eclairs-refined, eclairs-grm_hr, not-slewing, mxt-initial, vt-candidate, retraction

Processing logs:

```
++GROUND_FLAG:
 2026-03-05T07:22:00.566688+00:00 [ON-HOLD]
  PASS: SkySnrMax 16.03 < 666
   PASS: SkySnrMax 16.03 >= 8.5
   PASS: SkySnrMax/SkySnrStd 13.04 >= 8.5
   PASS: SnrDiffMax2 11.50 >= 1.5
   BLOCKING: GLAT -2.76 is in [-10, 10] degrees
```

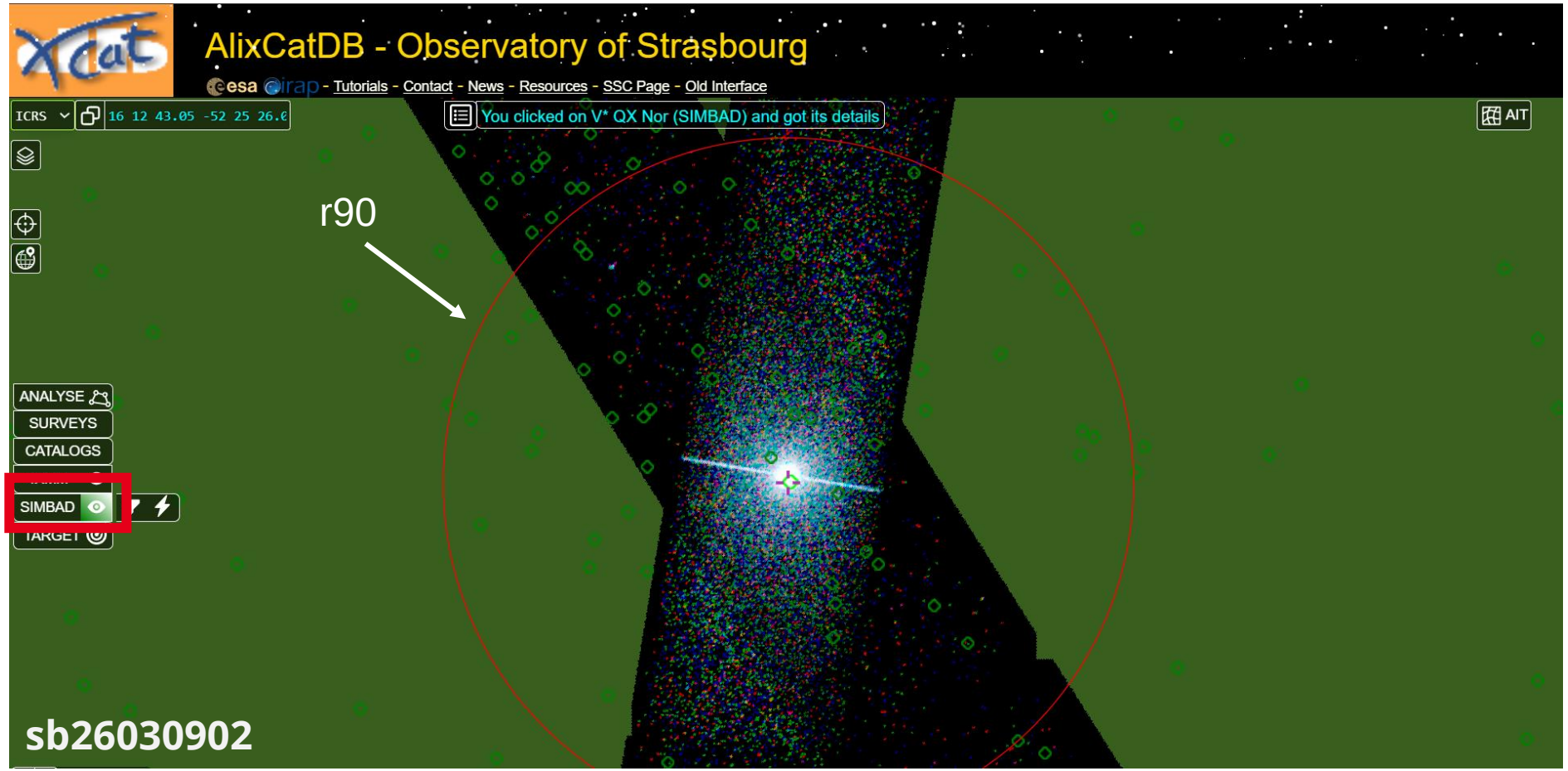
Sky map: AlixCatDB

vhf-data-monitor BOT 19:27 etog-Triggers-validation

sb26031604 [GRB-INIT-1062]

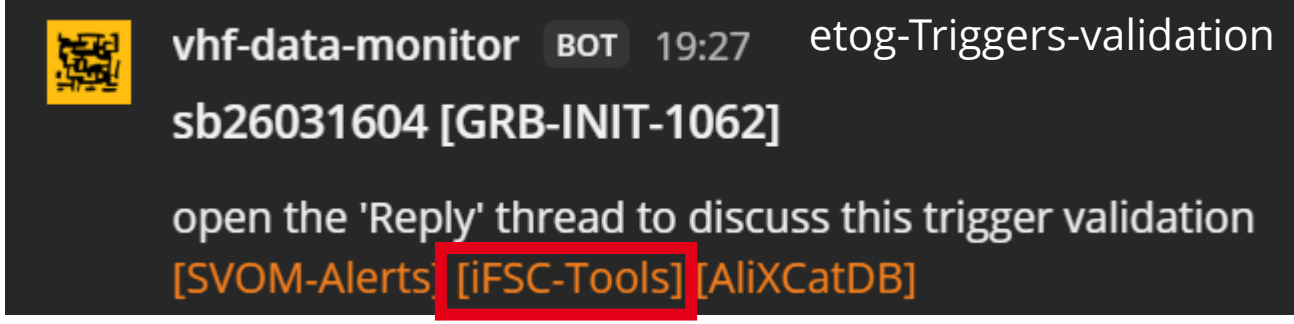
open the 'Reply' thread to discuss this trigger validation

[SVOM-Alerts] [iFSC-Tools] [AliXCatDB]



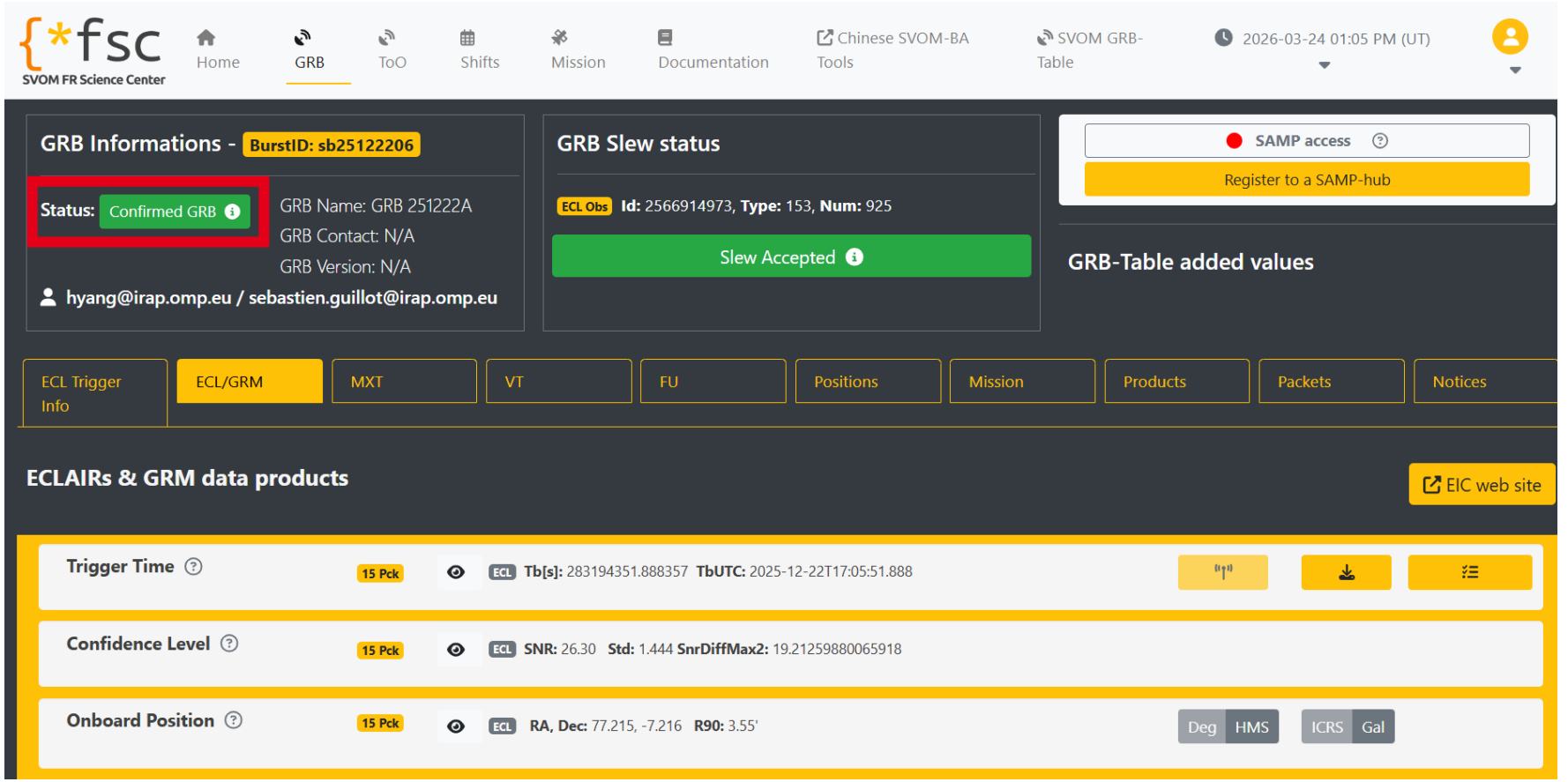
iFSC-Tools

With shadowgram: sb25122206, sb25120305
With sub-image: sb25032706

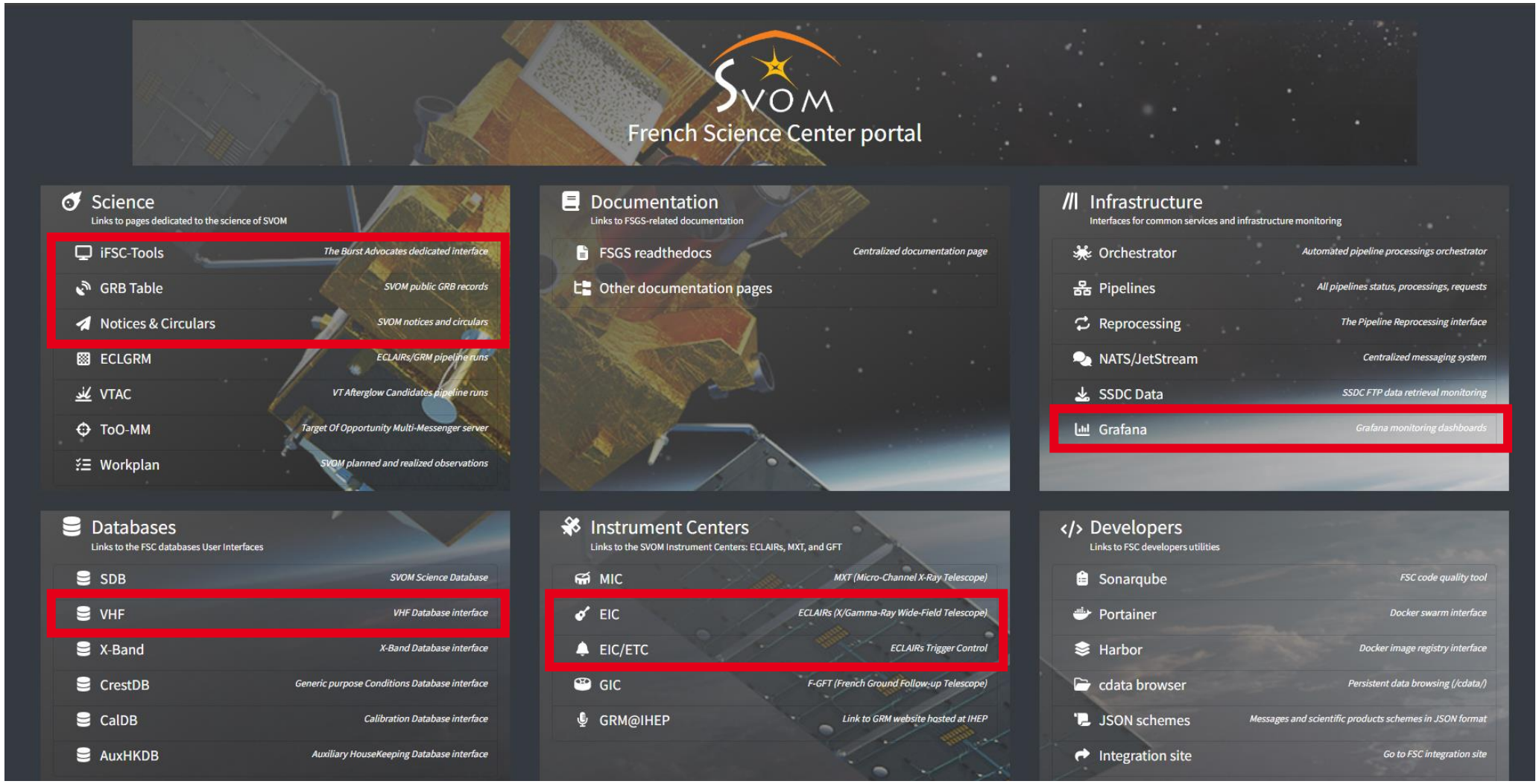


BA-T choices:

- Possible GRB
- Known X-ray source
- Unknown X-ray source
- False trigger
- *Confirmed GRB → BA-F*

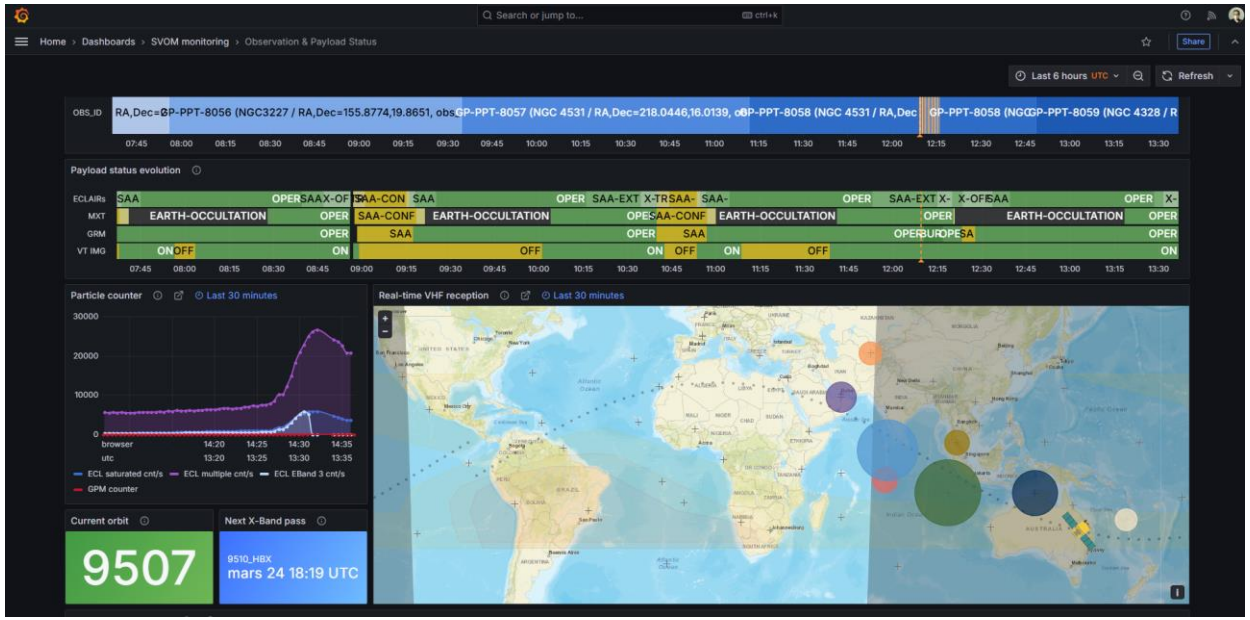


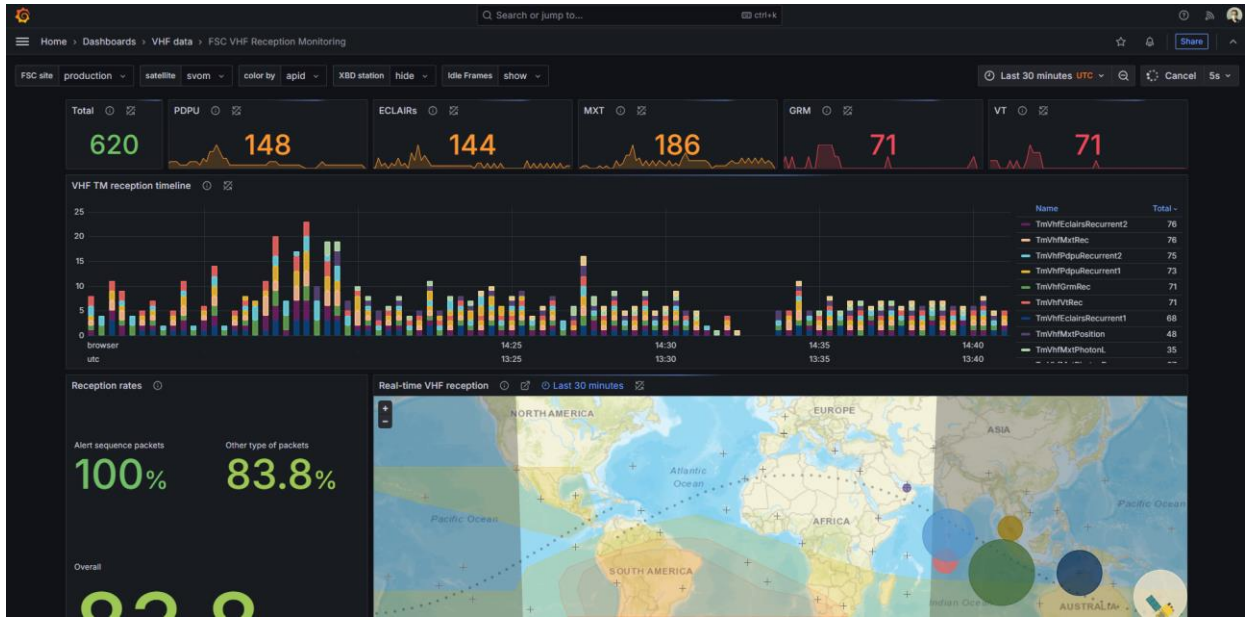
FSC interfaces



Satellite position / packets reception (live)

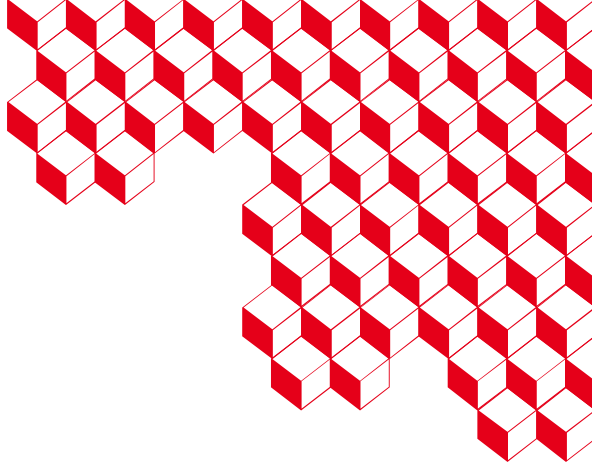
https://admin.svom.eu/grafana





BA-T wiki (https://forge.in2p3.fr/projects/etog-validation)

- Procedure: https://forge.in2p3.fr/projects/etog-validation/wiki/Trigger_Advocate_procedure
- Summary reports: https://forge.in2p3.fr/projects/etog-validation/wiki/Onboard_summary
- Verdict tables: https://forge.in2p3.fr/projects/etog-validation/wiki/Basic_TriggerVerdict
- F.A.Q.: https://forge.in2p3.fr/projects/etog-validation/wiki/Faq



ETC - Trigger User Interface

Nicolas Dagoneau (IRFU/DEDIP)

BA-T Workshop

March 2026

Context

- User interface developed to provide displays for ECLAIRs triggers outputs (VHF, X-band: RawData, engineering housekeeping, scientific housekeeping).
- Performs data requests to FSC VHF and X-band databases.
- Designed to be used online at FSC or locally (in particular to be able to analyse trigger test benches outputs).
- Intensively used during the commissioning phase to validate the alert sequences.
- Complementary to the EIC website.
- *Experimental* interface for future implementations on iFSC-Tools.

Development

- Pure python package (called *usspytools*)
- Includes etc-trigger-ui as well as other tools
- Depends on *ssbpy* → requires Ubuntu 22.04 for a local usage (otherwise, docker is recommended)
- User interface based on plotly-dash
- Code hosted in GitLab instance @ IRFU : https://drf-gitlab.cea.fr/svom/etc/etc-trigger-ui
- Follows FSC development workflow and guidelines (validation, quality, continuous integration, deployment)

UIs at FSC (requires FSC account: register)

On production server, deployed by FSC's admins

- https://fsc.svom.org/etc-trigger/ (requires FSC role *etc_expert*)
- https://fsc.svom.org/etc-trigger/ext/
- Documentation : https://fsc.svom.org/documentation/usspytools-package/ui.html

On integration server (for tests purposes), deployed by continuous integration

- https://fsc-integration.svom.org/etc-trigger/ (requires FSC role *etc_expert*)
- https://fsc-integration.svom.org/etc-trigger/ext/
- Documentation : https://fsc-integration.svom.org/documentation/usspytools-package/ui.html

(No service deployed on pre-production server)

Support

If you need assistance, there is several way:

- Questions: use Mattermost channel etc-ext-tools or ugts-CEA-softUSSground

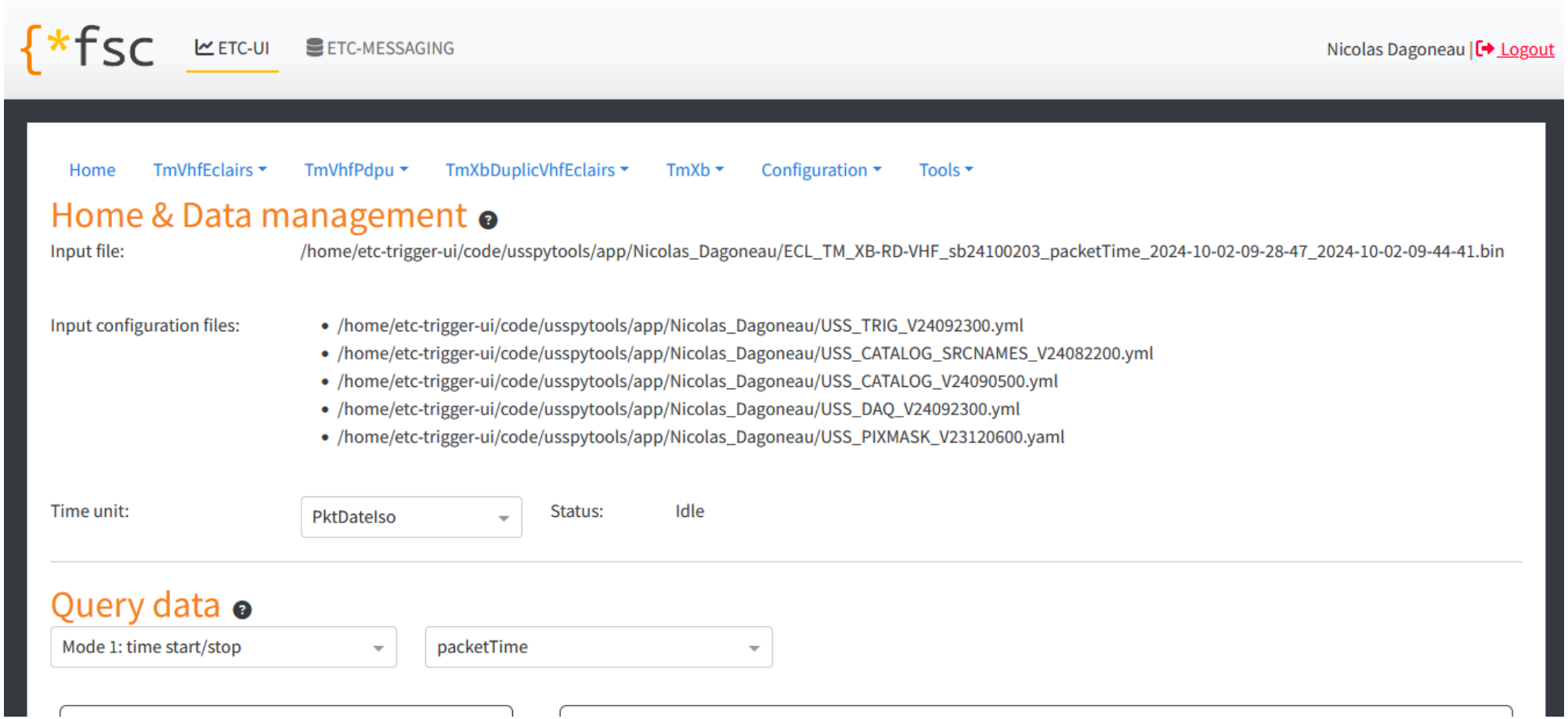
- Report bug (when you are sure it's a bug, *maybe after asking on Mattermost*): open an issue on GitLab : https://drf-gitlab.cea.fr/svom/etc/etc-trigger-ui/-/issues. **Please explain how to reproduce the bug** (what data did you query, which buttons did you click…).

Known issues

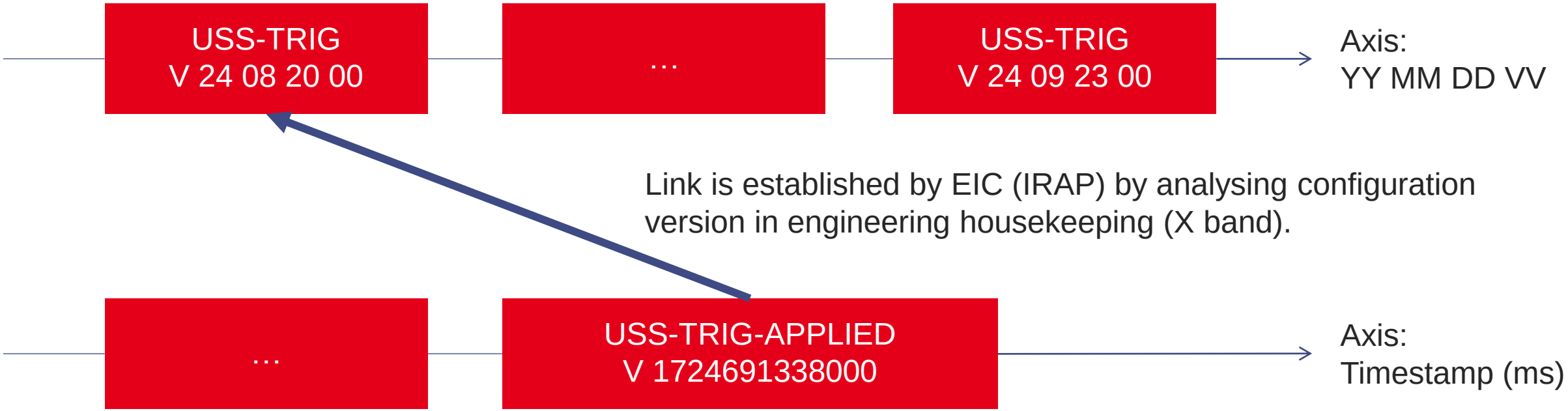
- ~~Data conflicts when used simultaneously by several users (*etc-trigger* and *etc-trigger/ext* do not communicate with each other: separated containers)~~: **should be solved now**
- Possible high memory usage at FSC: be careful and query only data on the time window you need (especially when querying X band data).

Tutorial

With shadowgram: sb25122206, sb25120305
With sub-image: sb25032706

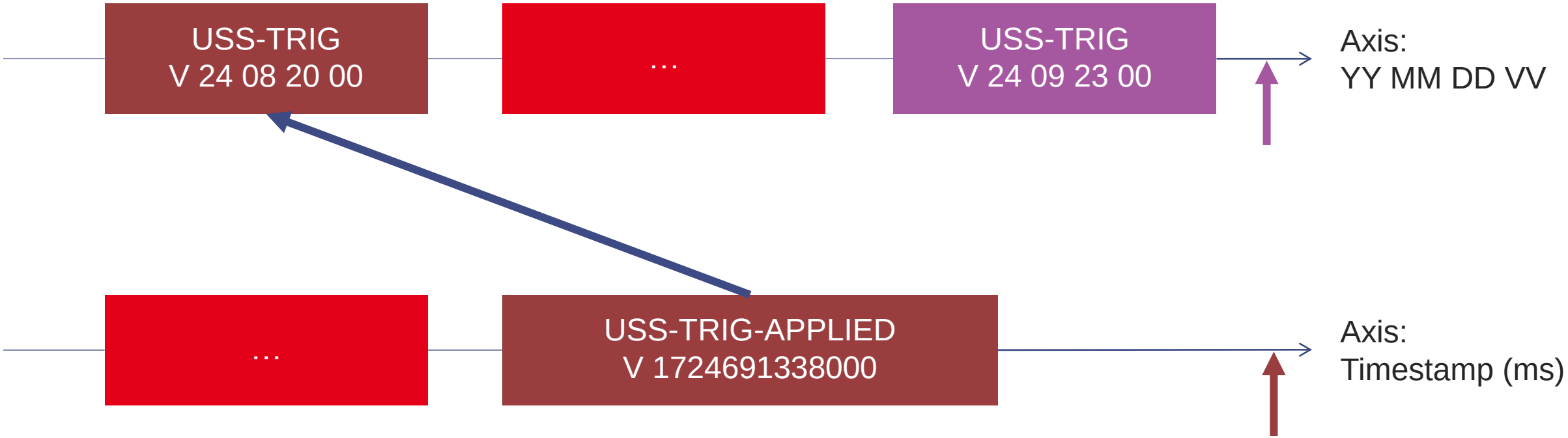


Configuration



Configuration:

example for today (24 10 07 00, timestamp = 1728259200000)



Applied

The configuration has been prepared, possibly sent to the satellite, possibly applied, but not confirmed.

Applied

The configuration has been applied at the label timestamp, possibly not applied anymore if a new one was sent. Confirmation come by X band after real application can be seen in VHF.