

"Recent and future improvements in the BA/IS organisation"

ARNAUD CLARET (CEA)



Workshop Enjoy the Universe with COLIBRÍ!
December 1-4, 2025
Observatoire de Haute-Provence, France

OUTLINE

1. BURST ADVOCATES and INSTRUMENT SCIENTISTS

- How were the initial difficulties encountered after launch overcome
- After one year of experience, what optimisations are proposed

2. COMMUNICATION on MATTERMOST

- Current limitation and proposed solution

SITUATION BEFORE LAUNCH

- 1 BA performing all actions
 - Validate the trigger + write the HE circular
 - Supervise the follow-up + write the visible circular
- Several ISs
 - ECLAIRs-IS, MXT-IS, GRM-IS, VT-IS, robotics-IS provide assistance to the BA
 - Write final circulars on the basis of X-band data

Difficulties overcome

- Trigger validations appeared more difficult than expected due to bugs, bad background subtraction, or residual artefacts in image
- Handling transient sources in the field of view
- High impact of solar activity, which required an adaptation period
- No clear/efficient organisation for the validation of GRM triggers
- Some (but not all) recurrent problems were identified and solved

DURING FIRST YEAR

- 1 TA (trigger advocate) for validating the trigger
The BA deals only with the simplest cases
- 1 BA for writing the HE circular + managing the follow-up

Difficulties overcome

- Less likely to encounter a new type of problem
- Ergonomics of diagnostic tools improved
- GRM triggers are validated by GRM-IS (or by the French ECLGRM-IS during the night in China)
- TA team is too small
 - Fr: 8 people (5 Irap + 3 Cea) having long shifts (8:00-1:00 am)
 - Ch: only 2 people having shorter shifts (7:00-14:00) but everyday
- The first circular took too long to be published

NEW PROPOSITION FOR 2026

- Each alert is handled by two BAs simultaneously, each with a distinct role
 - BA-T (previously TA) responsible for validating the trigger and also publishing the first HE circular
 - BA-F (follow-up)
 - No change for the ISs (ECLAIRs, MXT, GRM, VT, robotics, ...) publishing refined circulars using X-band data
- Need for an increased number of BA-T well trained for trigger validation, including (mainly) on Chinese side
- More generally, obtaining BA-T/F status will require official training

FLOWCHART FOR ECLAIRS TRIGGERS

Instrument Centers

BA FSC/CSC

VT IS

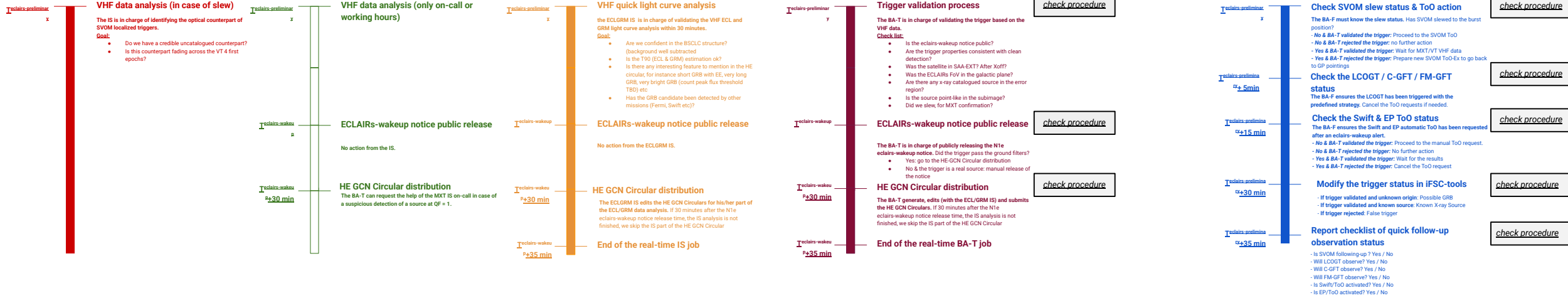
MXT IS

ECLGRM/ECL/GRM IS

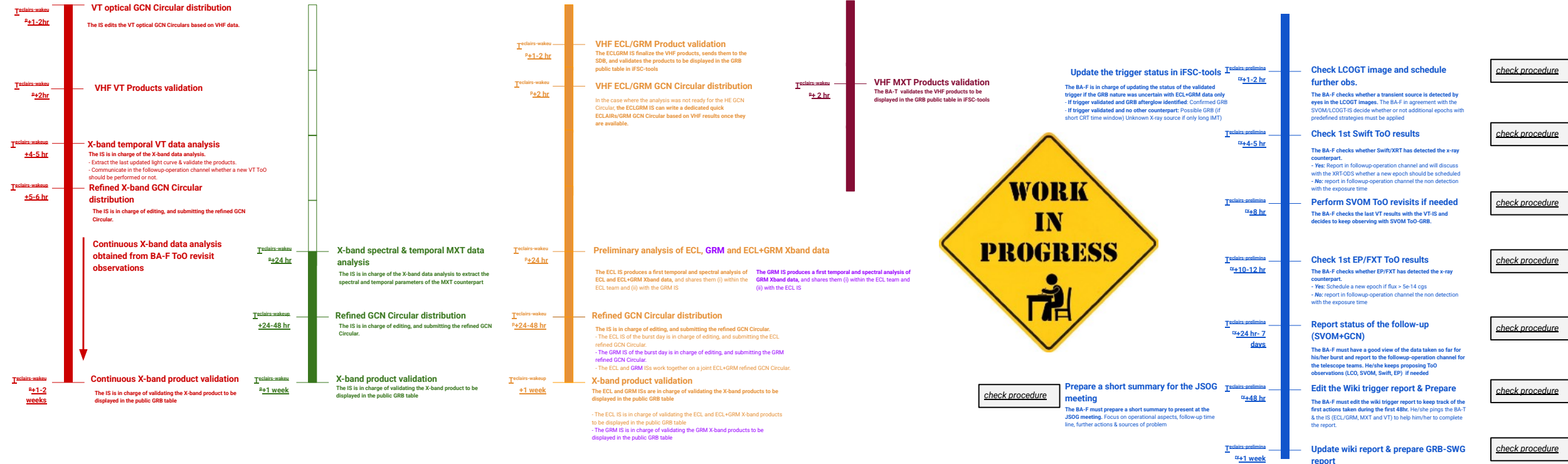
BA-T

BA-F

Real-time (Urgent actions)



short/mid term actions



legend

useful links

BA doc.: <https://forge.in2p3.fr/projects/burst-advocates/wiki/Wiki>

Shifter only on-call

Shifter only on duty
24h/7d

FSC: <https://fsc.svom.org/home/>
ifSC-tools: <https://fsc.svom.org/ifsc-tools/home>
Notices & HE GCN: <https://fsc.svom.org/alerts/>
SUSS CSC: <https://www.svom.cn/BA/#/svomPage>

SSTOMP: <https://sstomp.cnes.fr/sstomp/observation>
Swift/SVOM: <https://www.swift.ac.uk/SVOM/>
EP/SVOM: https://ep.bao.ac.cn/ep/proposal_submit/user_proposal_list
LCO/SVOM: <https://observe.lco.global/proposals/CON2025B-010?role=CI&proposal=CON2025B-010&limit=25>

Credit: Damien Turpin

COLIBRÍ ON MATTERMOST

CURRENT SITUATION

- There are two distinct channels opened for different groups (SVOM group and COLIBRÍ group), and in case of a GRB, the COLIBRI-IS has to report on both channels
- When the COLIBRI-IS is French (Benjamin, Francis, Jean-Luc), the report is posted on both channels because they belong to both groups
- When the COLIBRI-IS is Mexican, the report is not posted on the SVOM group channel (except when Alan is the COLIBRI-IS)

PROPOSED SOLUTION (B.CORDIER)

- There are 3 SVOM Co-I on Mexican side
- Each Co-I can have 2 affiliate scientists, leading to 9 persons in total who have access to the channel of the SVOM group
- Could one of these 9 persons report also on the SVOM channel when the COLIBRI-IS is Mexican?



THANK YOU FOR LISTENING TO ME

QUESTIONS?

