



Update of FRIDA CHORUS

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GTC Users Committee

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FRIDA

- **Final Integration Phase (Science Detector 05/2025)**
 - **Background evolution**
 - 10/2025 RON 26e⁻ Dark 5 e⁻/s
 - 12/2025 RON 25e⁻ Dark 0.7 e⁻/s
 - 02/2026 RON 25e⁻ Dark 0.5-0.7 e⁻/s
 - 04/2026 RON 26e⁻ Dark 0.4-0.7 e⁻/s
 - **Status before summer holidays**
 - Background 06/2026 Dark 0.3 e⁻/s
 - Spectral data collected in June and July 2026 for the development of the DRP
 - Data revealed a possible loss of spatial resolution in IFS mode
 - Data revealed malfunctions of the DFAgent.
 - **July-August 2026**
 - UNAM improve detector baffling -> Dark 0.2 e⁻/s (19/08/2026)
 - IAC fixed DFAgent malfunction
 - FRIDA operational and ready to carry out a proper verification



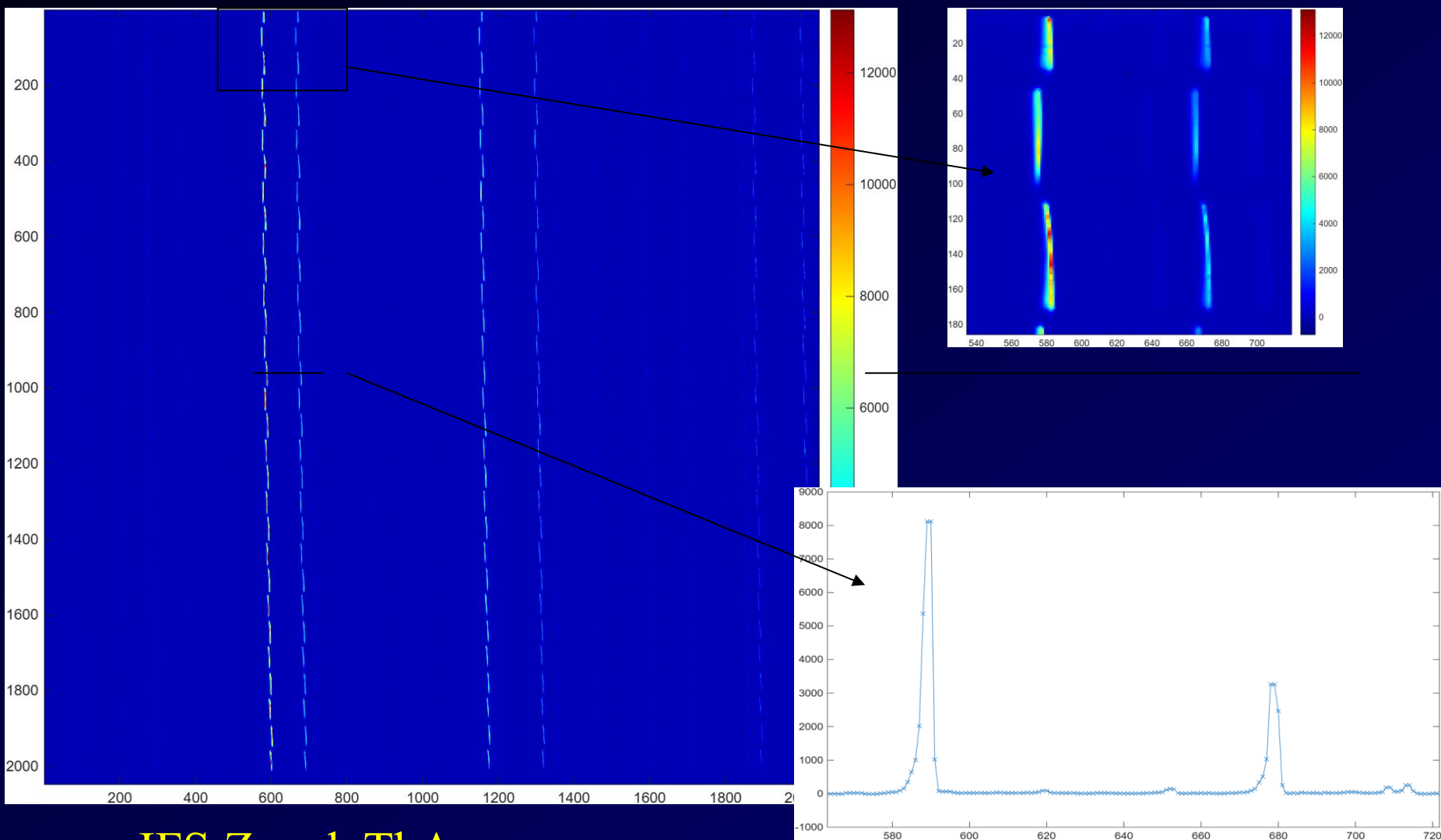
FRIDA

- **GRANTECAN began a deep review of the instrument in end-August**
 - Lack of spatial resolution in IFS mode confirmed. Bad focusing of the focal plane masks on the IFU.
 - Non-confocality of the three cameras measured
 - Correction under discussion
 - Issues about spectral performances
 - In-situ inspection scheduled on September 23-29th

- **Software**
 - Operation SW delayed (IAC)
 - Instrument Layer 03/2027
 - Sequencer 06/2027
 - GUI Panel 07/2027
 - DRP (UCM)
 - ?



FRIDA



IFS Zmed ThAr



CHORUS

○ Progress

○ UVS FDR closed on 03/08/2026

- VIS FDR is not closed

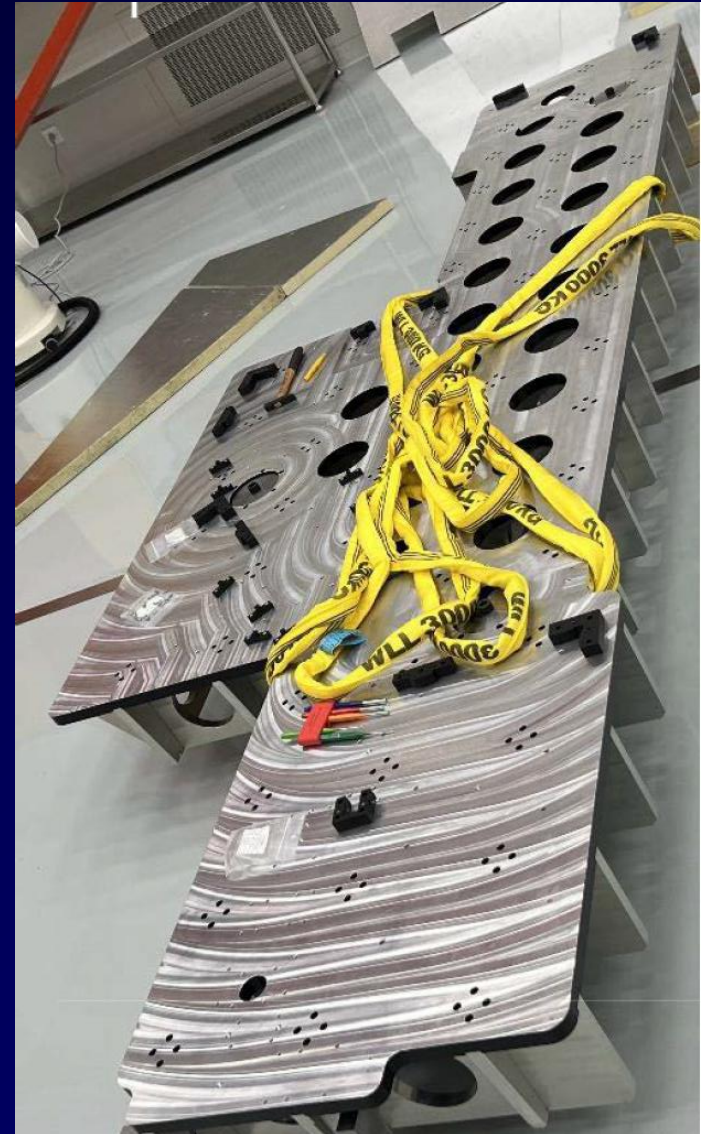
○ UVS construction ongoing

○ Critical item procurements

- UVS cross-dispersers
 - Laboratory assembly and verification will do with USTC (China) gratings
 - Substitution on site with Fraunhofer IOF gratings being studied by GRANTECAN
- VIS CCDs
 - Delivery to China stopped in UK custom

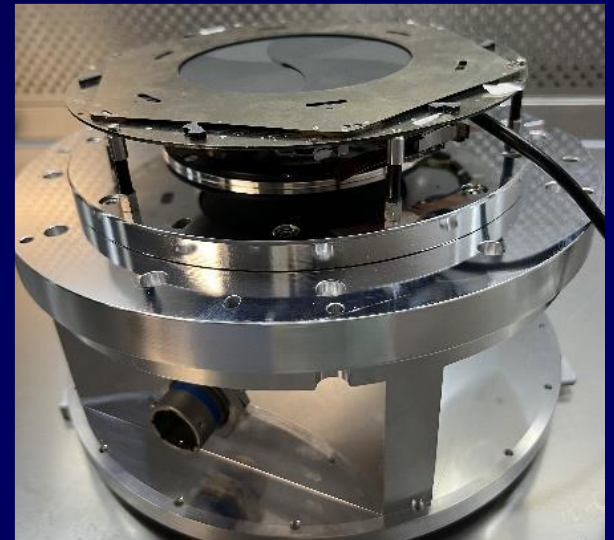
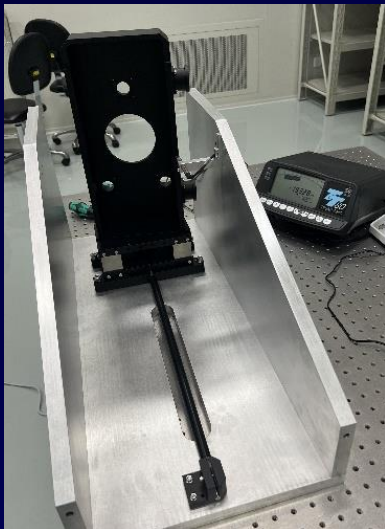
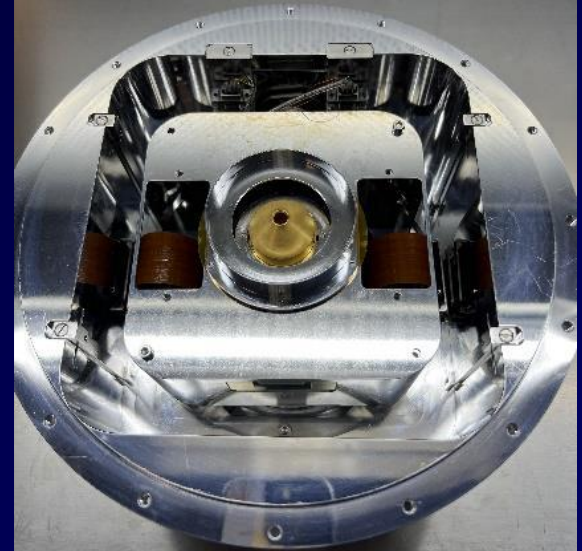


CHORUS UVS Manufacturing





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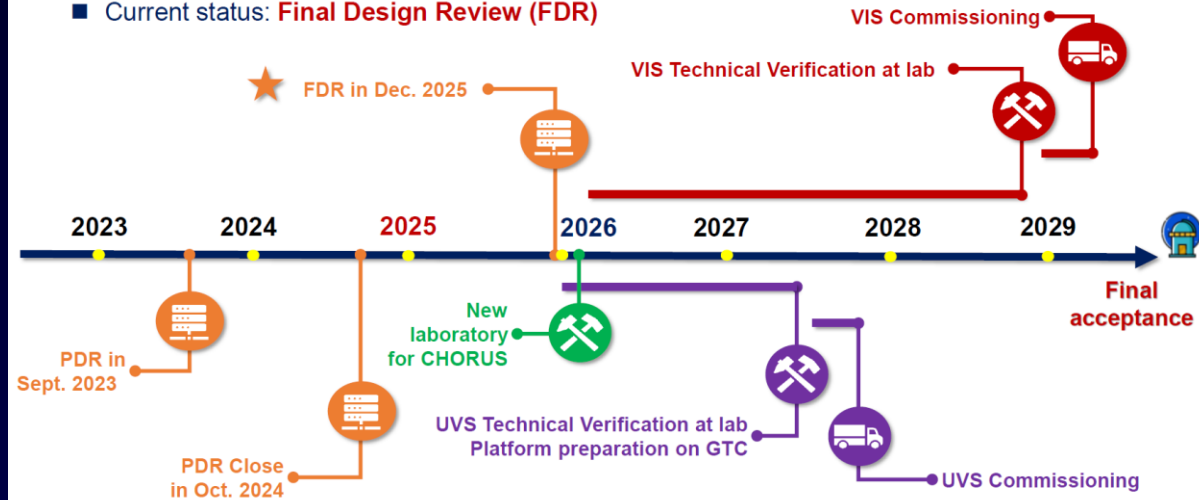




o Schedule

CHORUS

- The instrument is developed according to the **Statement of Work by GTC**
- Work Packages (WP) +dynamic Gantt charts + Quarterly Technical Reports (QTR)
- Current status: **Final Design Review (FDR)**



- Current status: **Construction phase**

