

MTG IRS IDPF-S Status

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IRS MAG
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Overall MTG-S system schedule

IDPF-S Versions: content and schedule

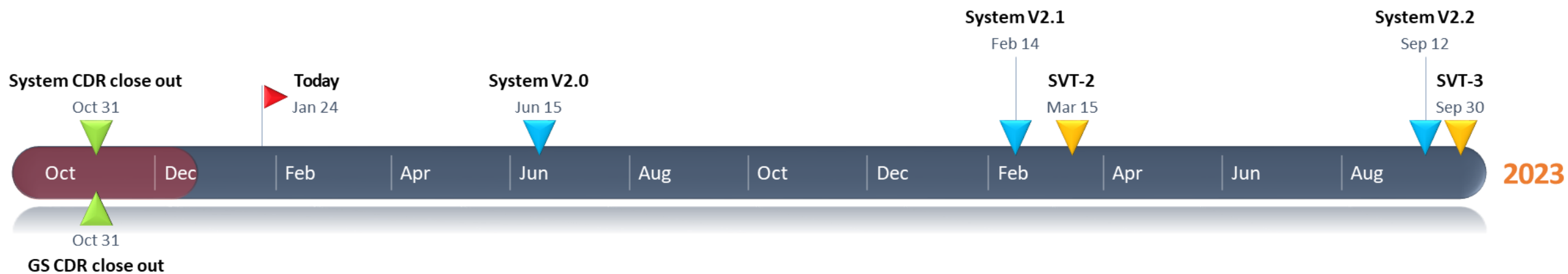


Overall MTG-S system schedule

IDPF-S Versions: content and schedule



MTG-S System Schedule





Overall MTG-S system schedule

IDPF-S Versions: content and schedule



As per statement of work the IDPF-S is delivered in different versions

In particular, V1 linked to the IDPF-S PDR and V2 linked to the CDR

The scope of each version has been discussed and agreed with the IDPF-S contractor during regularly scheduled Science Workshop meetings

The full discussion with TAS has been not straightforward and some functionalities have been de-scoped from V2, leaving space for a V3 discussion... see next slides

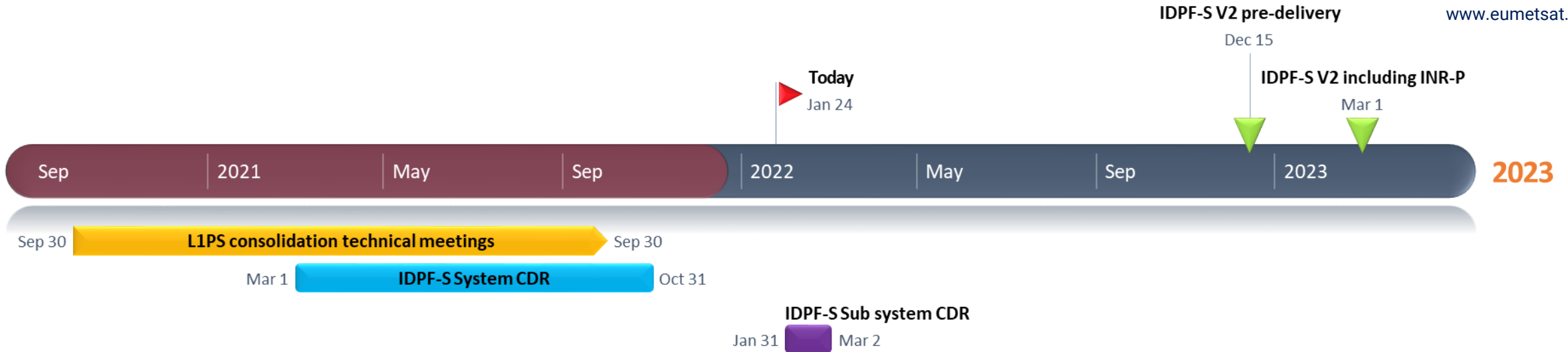


The IDPF-S V1a include the L0 for both instrument (IRS and UVN) and L1 for IRS

TRB is now successful

IRS Algo included:

- L0 acceptance and preparation
- L1B processing: interferogram generation, radiometric and spectral calibration application, SRF uniformisation, PC compression
- Spectral Calibration coefficients computation



Many meetings between EUMETSAT and TAS were necessary to converge on the IDPF-S V2 core scope definition

A task-force team was setup with combined participation of EUMETSAT and TAS for the consolidation of the level-1 algorithm definitions. The work of the task-force was completed within about one year through dedicated technical meetings

The IDPF-S CDR is not yet closed



The IDPF-S V2 core scope includes:

- L0 acceptance and preparation
- L1B: full definition including the RTF uniformisation
- Radiometric Calibration coefficient computation
- Spectral Calibration coefficient computation

Not included:

- **Monitoring and Characterization algorithms**
- **Temperature Evaluation algorithms**
- **Scene Analysis**



The IDPF-S V2.1 core scope includes the development of the Temperature Evaluation algorithms and is covered by a dedicated WP

Discussion on L1PS consolidation and schedule to start during Q1/2022



EUMETSAT defined, internally, the list of monitoring algo needed to be online and moved the rest to an off line development

Scene analysis needs also to be online

IRS L1FS have been reviewed accordingly and include the proposal of 4 top-level quality flags:

- INS/ONB flag
- Geometry flag
- Radiometric cal flag
- Spectral cal flag

IDPF-S V3 procurement approach under definition. Version not expected before end of commissioning



IDPF-S V3: list of algo

Algo	Status
A2412 IDPF-IRS-MON-PER-OPD: OPD Stability Check	Off Line
A2413 IDPF-IRS-MON-PER-OPM: On board processing Monitoring	On line
A2414 : IDPF-IRS-MON-PER-NLN : Non Linearity Check	Off Line
A2421 : IDPF-IRS-MON-PER-RAD : Radiometric Range	Off Line
A2422 : IDPF-IRS-MON-PER-DCH : Detector Characterisation	Off line
A2423 : IDPF-IRS-MON-PER-STM : Detector Short Term Monitoring	Off Lie
A2431 : IDPF-IRS-MON-PER-NCN : NEdT and Correlated Noise	On line
A2432 : IDPF-IRS-MON-PER-MRS : Medium Term Radiometric Stability	On line
A2433 : IDPF-IRS-MON-PER-ZPD: ZPD Monitoring	On line
A2434 : IDPF-IRS-MON-PER-IMP : Monitoring of the Imaginary Part of the L1A Spectrum	On line
A2411 IDPF-IRS-MON-PER-RTS: RTS Noise	On line



IDPF-S V3: list of algo

Algo	Status
A2435 : IDPF-IRS-MON-PER-LOS : Line-of-Sight Stability Monitoring	On line
A2441 : IDPF-IRS-MON-PER-GPM : Geometric Performance Monitoring	On line
4.10.7 A2337 : IDPF-IRS-L1B-SRF-SEM : RTF Uniformisation Monitoring	On line
A2451 : IDPF-IRS-MON-PER-IFS : In Field Straylight	Off line
A2452 : IDPF-IRS-MON-PER-OFS : Out-of-Field Straylight	Off line
A2461 : IDPF-IRS-MON-PER-MLM : Metrology Laser Monitoring	Off line
A2341 : IDPF-IRS-L1B-PCR-FIM: Flip-In Mirror Characterization	Off line
A2342 : IDPF-IRS-L1B-PCR-FST: Front Section Transmission Characterization	Off line
A2343 : IDPF-IRS-L1B-PCR-SRL: Scan Reflectivity Law Characterization	Off line
Scene analysis	On line



Thank you!

Questions are welcome.