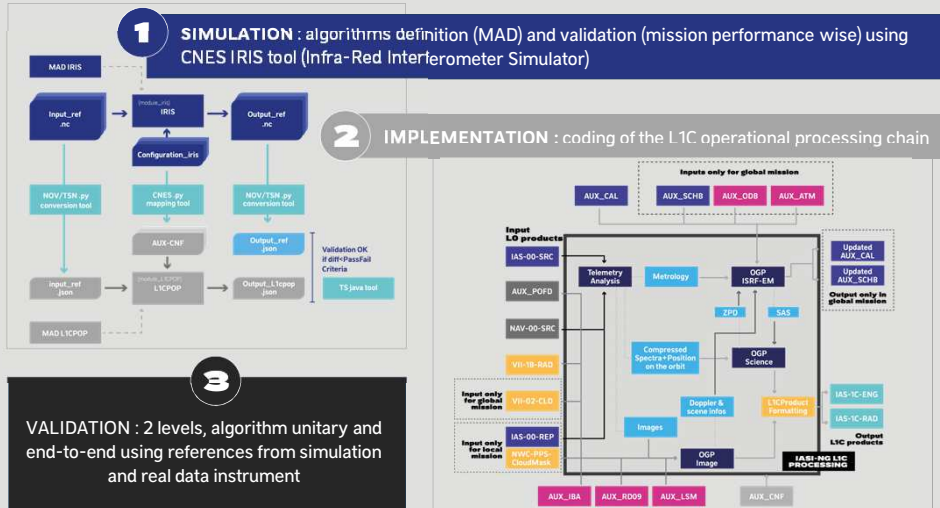




IASI-NG L1C PROCESSING: DEVELOPMENT, VALIDATION AND PRODUCTS

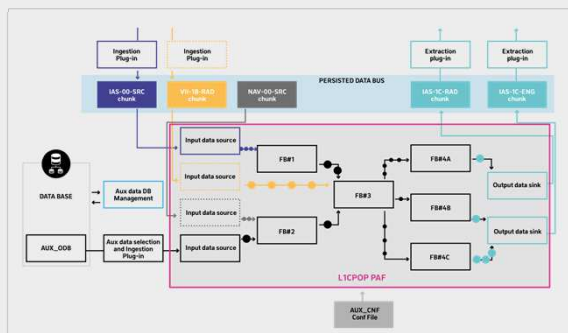
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IASI-NG L1C PROCESSING DEFINITION, DEVELOPMENT AND VALIDATION



L1CPOP

L1C **operational** processing chain to be integrated in EUMETSAT Ground segment Payload Data Acquisition and Processing (PDAP) based on a **streaming engine** with **in-memory technologies** to ensure **global and regional missions**.



TOPOLOGY SET UP

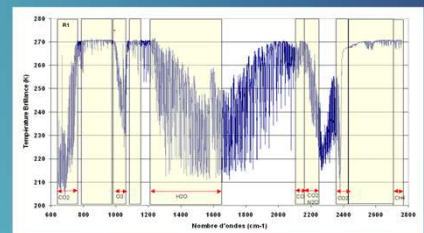
Data can be seen as drops in a big complex pipe line. Input drops size and rate are **finely tuned** throughout the pipeline to generate L1C products without overflow and as efficiently as possible. Algorithms are spread in virtual servers allowing a **high level of parallelization**.

IASI-NG L1C PRODUCTS

All IASI-NG L1C Processor generate L1C products in **NetCDF** format

IAS-1C-RAD product is for users and contains:

- The **real spectrum**



- Field of View Geolocation
- Radiances classification
- Geophysical description of the observed scene (Cloud coverage, Soil classification)
- Ancillary data as apodization function and information to coregistrate with VII products
- The **general_quality_flags**



IAS-1C-ENG product is sent to IASTEC for CNES analysis of IASI-NG performances.

Data and flags are monitored in IASTEC (instrument behavior, algorithms performance) and corrections or improvements can be performed if needed

L1CLOP and L1CTOP

L1CLOP is the L1C operational processing chain to be delivered to EUMETSAT for local users (same algorithmic core) based on simple **file interfaces** to ensure the **local mission**



In order to replace L1CPOP/PDAP solution during Cal/Val activities, **L1CTOP** has been developed from L1CLOP to handle back the global mission. L1CTOP will be integrated in EUMETSAT Temporary Ground Segment (**T-GPS**) and in CNES **IASTEC** for expertise activities.

Cross-comparison activities ensure that L1CPOP, L1CLOP and L1CTOP generate consistent L1C products