



EAST success story



SPOT : First user project (1997)

- OASIS version 1. Research tool full of bugs
- Description of metadata about the images
 - => GERALD format (**G**eneric **E**xchange for **R**aw **A**rchive **L**evel **D**ata)
- Had since evolved from SPOT1 to SPOT5 including all versions in a single variable description.
- Thanks to them to have insisted!!!





SSALTO



- Multi-Mission centre for altimetry
- First project to include the EAST library routines in the operational software
- Suffered initial poor performances
- Made performances increase a lot
 - the reading became 180 times faster!!!
- Telemetry and final product descriptions (ENVISAT, JASON, DORIS,...)



Centre de Données

SIPAD



de la Physique des Plasmas

- CDPP : Plasma Physics Data Centre
 - First to make EAST description mandatory to accept data in its archive
 - Generic tools (data selection and extraction) based on EAST
 - Online data description ([html](#)) produced from OASIS DEDSL output.



SIPAD (2)

- In the frame of the CDPPD the following projects are EAST “clients” :
 - ARCAD
 - VIKING
 - EISCAT
- PHOBOS delivers data through its own SIPAD :
 - EAST used for description and migration



AMS2

- Earth Observation Data Archive in ESRIN
- First user project outside CNES
- Generic tools (data selection and extraction) based on EAST



HELIOS



- Earth Observation Military project
- Intensive description usage to master all interfaces (EAST and ICDs from OASIS)
- Intensive usage in operational software
- First lesson learned : sub-system integration made easier



PHARAO

- Atomic Clock (planned 2002 on the ISS)
- Description of telemetry and telecommand
 - EAST and ICD
- Data simulation, data reading benchmarks
- More?...





Lessons learned

- PROs :
 - Easier sub-system integration
 - description accuracy
 - early data simulation
 - assisted data checking
 - Easier ICD evolutions
 - full top-down process
 - Helpful in heterogeneous platforms context
 - automatic conversions
 - Helpful in multi-missions context



Lessons learned (2)

- CONs :
 - Performances to be again improved
 - reading in time constrained context
 - writing in any case
 - Type sharing to be added
 - to facilitate evolutions
 - Documentation production to be improved
 - project customisation
 - add as much filters as possible



Current actions

- Documentation tool in progress
 - generic tool to transform XML-DED in Word or html documents
 - 2nd prototype delivered
- Main lacks taken into account by DEBAT
- Support to NASA to reach american users
 - tests on data migration - good first results



Links

- CDPP: <http://cdpp.cesr.fr>
- PHOBOS : <http://hea.cnes.fr>