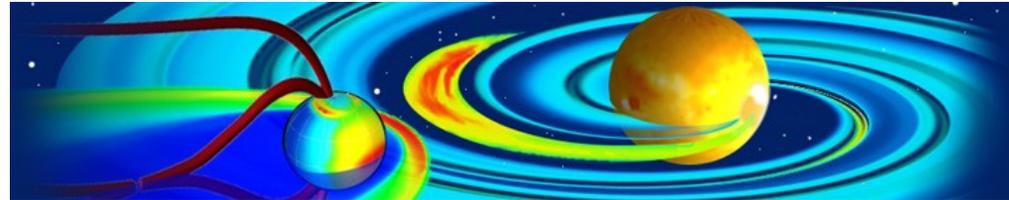


IMPEX data model: a demonstrator to access magnetospheric simulations from CCMC

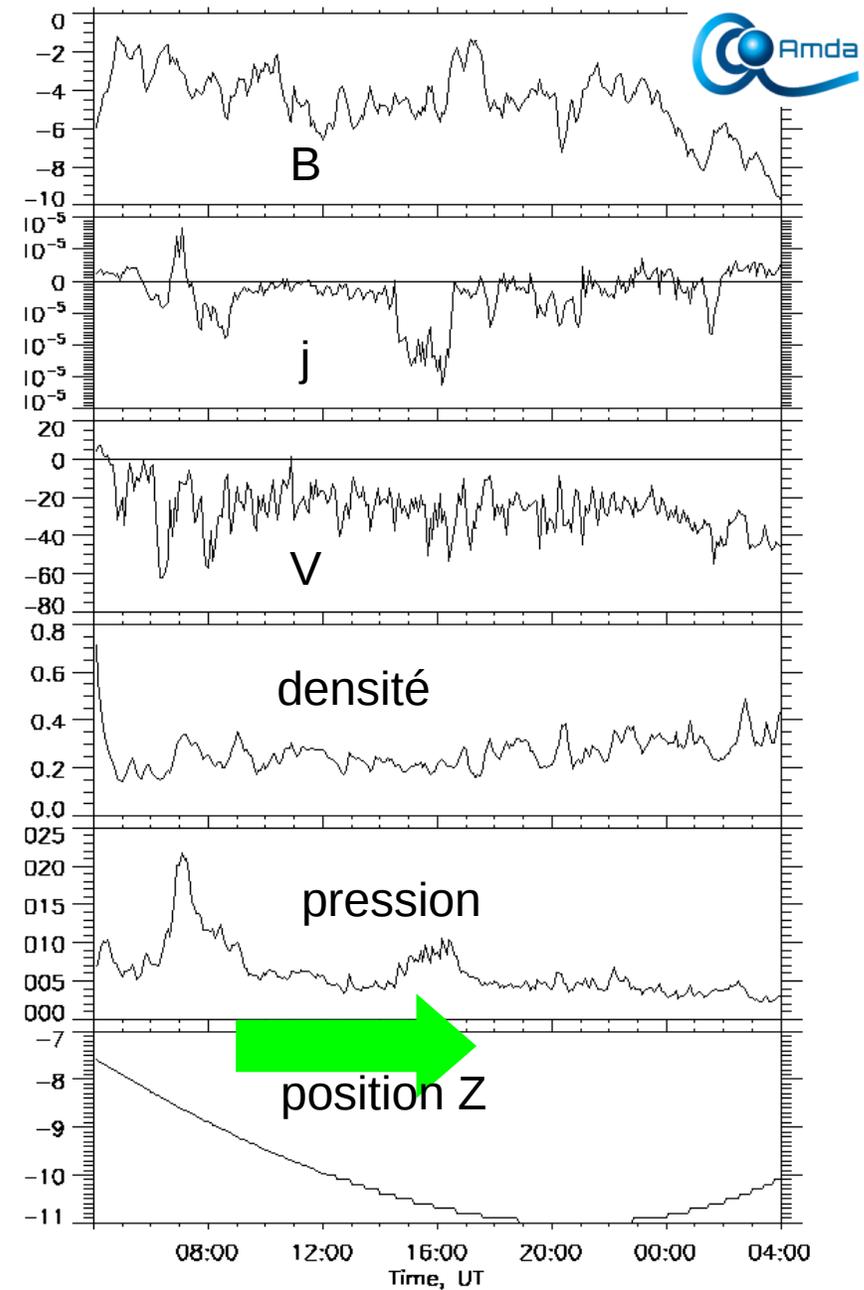
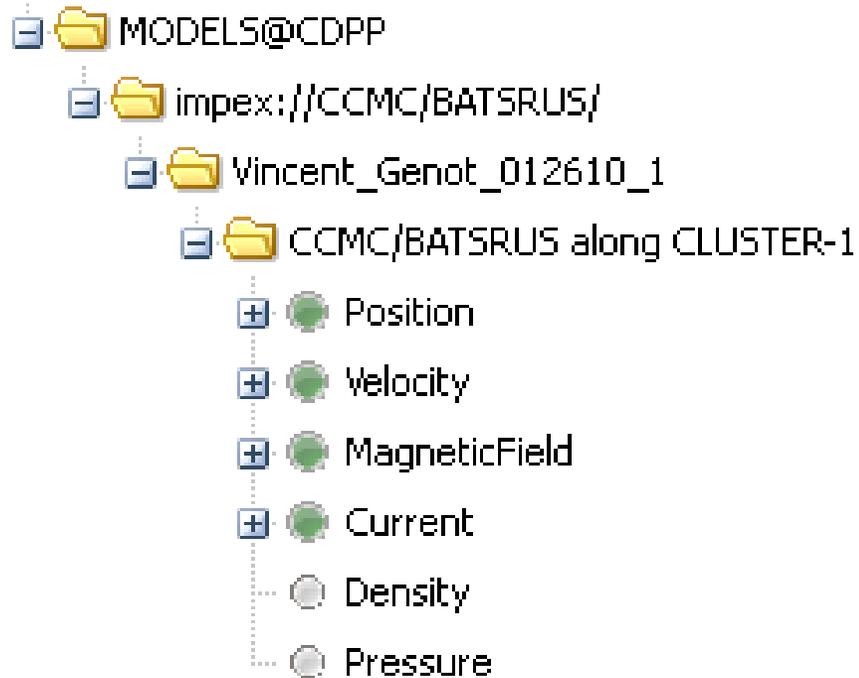
goal: have CCMC simulations visible in the Virtual Observatory context



This prototype:

- is limited to only one type of code
 - BATSRUS (MHD)
 - Only one run with interpolations along S/C trajectories in the magnetosphere (accessible at VMR)
- enables access by the following tool
 - AMDA
 - 3DView
- The simulation is described in an XML file following prescriptions from the IMPEX data model
- The data tree is hosted at CDPP
- CCMC data are transformed on the fly from ASCII to VOTable with a web-service (see tree for detail)

CCMC data in AMDA



CCMC / IMPEx demonstrator

- This 'manual' prototype was done in 2014 (it uses https://ccmc.gsfc.nasa.gov/RoR_WWW/VMR/ which seems unactive now ? But it still works ...)
- No difficulty to describe individual CCMC simulation
- But there are a lot of them ! Manual editing is *not* realistic
 - Thousands of runs, satellites, several coordinate systems
 - Each combinaison [run+S/C+coord.syst.] corresponds to one file
- Some steps could be simplified by CCMC if
 - Data export in VOTable is made possible
 - Metadata are generated automatically (when the run is launched)

Access the tree at http://apus.irap.omp.eu/AMDA-IMPEX/public/trees/Tree_CCMC_chablon5.xml

The web-service is <http://apus.irap.omp.eu/AMDA-WS/php/rest/getVotableFromASCII.php?url=...>

The simulation is CCMC/BATSRUS/Vincent_Genot_012610_1

AMDA plot

Black : CCMC simulation

Colour : Cluster observations

