



3D visualization of the DORIS satellites



Context



Past discussions within IDS about attitude laws, solar panel orientation and rotation, and more generally about the motion of the DORIS satellites

Need to visualize the satellites on their orbits for a better understanding

→ Contact CNES team developing VTS software (Visualization Tool for Space data) to propose 3D models of the DORIS missions

VTS is used to animate satellites in 2D or 3D environments (recently it helped choosing a good landing site for Philae)

VTS is a free software from CNES.

<https://logiciels.cnes.fr/content/vts?language=en>



Need and plan for IDS



Propose to users pedagogic materials to visualize the DORIS satellites in orbit

Soon on the IDS website:

- 1. short movies showing satellite in situation
- 2. inputs files for VTS: 3D models, POE, bus quaternions, solar array angles

3D models for Spot-2-3-4-5, Topex, Envisat, Jasons, Cryosat-2, HY-2A, Saral; validation in progress

Draft versions of movies including 4-5 significant sequences

VTS demo (done in session)

