# Breakout Session Notes: Satellite Swath Data in CF

Attendees: Jim Biard (NCEI), Jessica Hausman (PO.DAAC), Charlie Zender (UC Irvine), Shannon Leslie (NSIDC), Dave Santek (UWisc), Aleksandar Jelenak (HDF Group), Steve Hankin, Dave Hassel, Kent Yang (HDF Group), Maarten Sneep (KNMI), Kelsey Druken (ANU/NCI).

- Consider also airplane and UAV swath-like data.
- Optical, microwave, multiband, hyperspectral, imager, sounder, … everything is welcome.
- Collect swath file samples in the CDL format.
- Store collected file samples in the NASA DIWG's GitHub repository.
- It's not about data collection method (instrument type) but file content structure.
- Use CF's featureType attribute and develop a set of swath-related feature types.
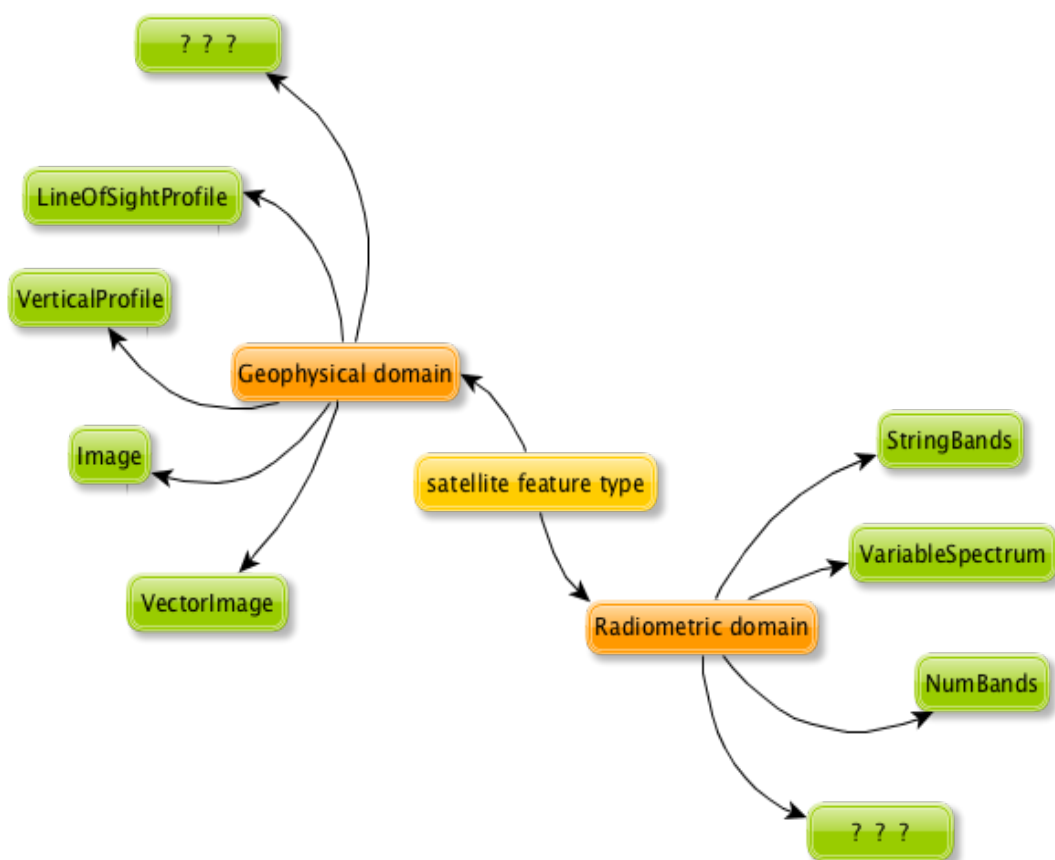
- Make featureType a variable attribute?
- Latitude/longitude at reduced (sampled) resolution; can interpolate to full resolution for each FOV.
- Polynomial formulas for computing wavelengths, non-linear scaling,...
- Use CF-satellite or NASA DIWG mailing list for discussions?
- Notes from the past related discussions on the CF-satellite list.
- Use Google doc or GitHub/AsciiDoc for draft report editing
- Make swath netCDF-CF files more friendly to GIS software. As useful as GeoTIFF?
- Specify a CRS for swath lat/lon/alt coordinates?

- One variable for all radiance data or split per channel? Both ok? Or split only when forced by other constraints.

Work Timeline:
- Hold monthly web meetings with interested parties.
- File sample collection campaign from now till ~end of September 2016.
- Sample analysis starts ~August 2016.
- Work on the draft report begins ~October 2016.
- Draft report prepared by the end of 2016.
- Engage community in the review process, respond to comments, suggestions, etc.
- Final proposal finished ~May 2017.
- Coordinate with other task groups in the project while drafting the report on overlapping issues.

Relevant documents & links:
- https://drive.google.com/file/d/0B5oJYRnehK-1RDNKN0FQR0Jfa28/view?usp=sharing
- https://drive.google.com/open?id=1tHVdpo0mpa-hJfRWo1JTc1ZwRzh3sbRfb2R3jhSSbco
- https://github.com/diwg/diwg
- http://www.unidata.ucar.edu/mailing_lists/archives/cf-satellite