

# Exercise

## Superstation file in VieVS



### 1. Problem description

A VLBI experiment (NGS file: 12OCT11XX\_N004) includes a new station, i.e. the station (HART15X) does not have coordinates or any other information in the superstation file. Therefore the processing will crash due to lack of a priori station coordinates.

### 2. Goal

Update superstation file to be able to analyze the VLBI session using VieVS.

### 3. Steps

- (a) **Coordinates.** Add station name and coordinates to viewsTrf (textfile viewsTrf in VieVS/TRF/create/superstation/neededFiles/) and to ns\_codes (which is the 'main-loop' file).  
HART15X 5085490.7720 2668161.4630 -2768692.6040
- (b) **Start GUI.** Open the graphical user interface for creating the superstation file: 'Parameters - Reference frames. Create file.'
- (c) Click 'Search for files' button to automatically select proper files
- (d) **Prepare ocean loading.** In order to get ocean tide loading corrections, click on 'Create' button. The desired line of station HART15X appears in the MATLAB command window under '4.1 Writing stations for ocean tide loading'.
- (e) **Ocean tide loading data.** Ocean tide loading coefficients can be determined using the 'ocean tide loading provider' from Chalmers Onsala Space Observatory (<http://holt.oso.chalmers.se/loading/>)
- (f) Select model, vertical and horizontal displacements, no correction, no plot, BLQ format and add the station line to the textbox. There must be one empty line before the first station.
- (g) *The data file you should receive per e-mail is provided in /VieVS/: Textfile 'oceanLoading\_HART15X'.*  
Add those data to the desired file (ocean\_loading\_FES2004.TXT in 'VieVS/TRF/ create/ superstation/ neededFiles/')
- (h) **Update superstation file.** Click the 'Create' button to create the final superstation file.