

## 8th VieVS User Workshop

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# EOP and baseline length repeatability output

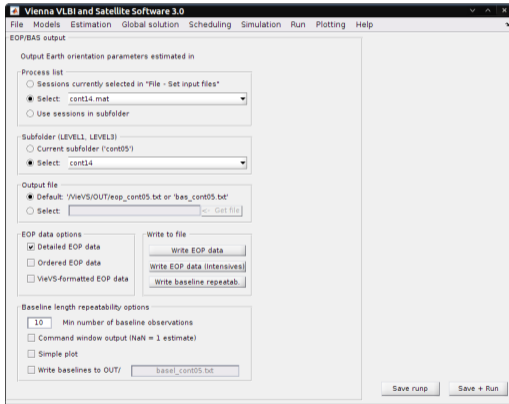
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# Plotting: EOP/BAS out

- Process\_list
- Subfolder  
Loaded data:  
LEVEL3/subfolder/x\_, opt\_  
LEVEL1/subfolder/\_parameter
- Write EOP data  
/OUT/eop\_out.m
- Write EOP data (Intensive)  
/OUT/eop\_out\_int.m
- Write baseline repeatability  
/OUT/repeatab.m, bas\_out.m



## EOP data saved in /OUT/

Detailed EOP file (by default): **filename\_detailed.txt**;

Note, total = a priori + estimated

```
1  %*****
2  % Columns:
3  %      1      .... mjd
4  %      2-6    .... total values(x,y,ut,dX,dY)
5  %      7-11   .... a priori EOP (input in vie_mod)
6  %      11-16  .... estimated values
7  %      17-21  .... error of estimation
8  %      22-24  .... high frequency (subdaily) ERP corrections
9  %
10 % all units in mas resp. ms (dut1)
11 %*****
```

## EOP data saved in /OUT/

### Sorted EOP file

(sorted by date, multiple entries are weighted):

**filename\_ordered;**

```
1  %*****
2  % Columns:
3  %      1      .... mjd
4  %      2-6    .... total values(x,y,ut,dX,dY)
5  % all units in mas resp. ms (dut1)
6  %*****
7  % MJD  xpol  ypol  dut1  dX  dY
```

## EOP data saved in /OUT/

### VieVS specific format

(beginning and ending of time series are expanded for certain number of days using EOP finals):

#### **filename\_views-format;**

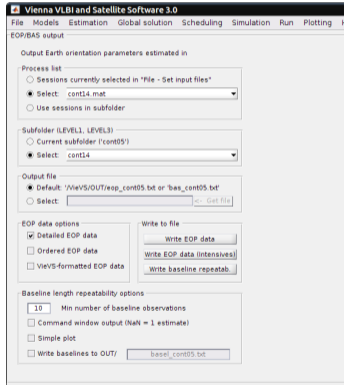
```
1  %*****
2  % Columns:
3  %      1      .... mjd
4  %      2-6    .... total values(x,y,ut,dX,dY)
5  % all units in mas resp. ms (dut1)
6  %*****
7  % MJD  xpol  ypol  dut1  dX  dY
```

# Write EOP data: Intensives

- Write EOP data (intensives)

\* mjd is the middle of a session

```
1 %*****
2 % Columns:
3 %      1      .... mjd
4 %      2      .... total values
5 %      3      .... a priori EOP (input in vie_mod)
6 %      4      .... estimated values
7 %      5      .... error of estimation
8 %      6      .... high frequency (subdaily) ERP corrections
9 %
10 % all units in mas resp. ms (dut1)
11 %*****
12 %      MJD      dut1      ut_apr      dut1_est      ut_err      ut_hf
13 %
```

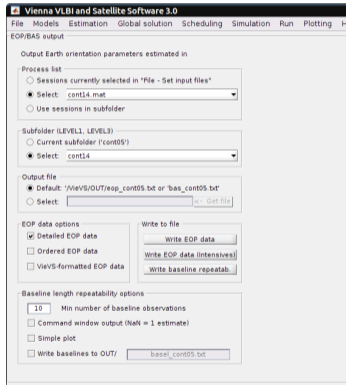


# Write base length repeatability

- Write baselinerepeatab.

/OUT/repeatab.m generates basRep\_\*.txt

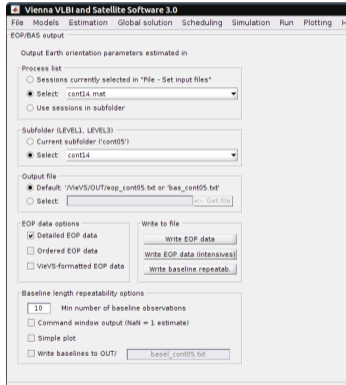
```
1 # Baseline length repeatability from Vienna VLBI Software
2 # Mean values over all break-time-spans
3 # Linear fit removed before calculation of standard deviation
4 #
5 # Breaks (Earthquakes) are taken from the vievsTrf
6 #
7 # Created on dd.mm.yyyy hh:mm:ss
8 # by function repeatab.m
9 #
10 # Min number of observations of baseline (in every break-time-span): 10
11 # Number of baselines: N
12 #
13 # col1 (cols 01-17) baseline name
14 # col2 (cols 19-28) mean epoch (mjd)
15 # col3 (cols 30-42) mean baseline length in meters
16 # col4 (cols 44-49) baseline length repeatability in cm
17 # col4 (cols 51-56) weighted baseline length repeatability in cm
18 #
19
```



# Write baselines

- Write baselinerepeatab.  
/OUT/bas\_out.m writes baselines to OUT

```
1 %*****  
2 % Columns:  
3 %      1      .... session  
4 %      2      .... reference time  
5 %      3      .... baselines  
6 %      4      .... a priori baseline lengths  
7 %      5      .... estimated baseline lengths  
8 %      6      .... formal errors  
9 % all units are in meters  
10 %*****  
11 %
```





Thank you for your attention!