

# **Report of the EUREF analysis centre OLG**

## **Problems and Questions**

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# Networks monitored

- **EPN subnetwork 33 stations**
- **ARE/CERGOP 42 stations**
- **DGPS-A 16 stations**
- **EPN region VI 12 stations**

# General problems

- **Station exclusions (<12h or <1 MB)**
- **- no full constellation**
- **- too few satellites**
- **L5/L3 - QIF fixing**
- **- polar regions QIF better**
- **- overall repeatability L5/L3 better**
- **Outliers, jumps, drift handling ?**

# Types of deviations

- **Isolated outliers (random)**
- **“phase“ noise (sharp time limits within one day)**
- **Z18 channel (?) noise**
- **frequent daily jumps**
- **gliding lateral changes (days to weeks)**
- **sudden persistent jumps (configuration)**

# Examples noise

- **Phase noise in DRAG, DRES, (old) DUBR, (old) GRAA, UZHL**
- **- sometimes periodic (10 days)**
- **Z18 noise in GOPE, GRAB, RTMN, WROC**
- **- almost everyday 1-4 SVs**
- **- classified as ionospheric cycle slips by teqc**
- **- eliminated by preprocessing**

# Examples coordinate changes

- **Persistent jumps already monitored by EUREF, e.g. PFAN, VENE**
- **jumps within weeks smoothed out, e.g. MOPI, NICO, SOFI**
- **- not seen in EUREF time series**
- **gliding changes CAME, (old) DUBR, (old) MEDI, RAMO**
- **- not always seen in EUREF time series**

# **Questions** (instead of Conclusions)

- **Which deviations should be corrected ?**
- **Which deviations should be reported? (and when?)**
- **Feedback to reports?**
- **Feedback to users and firms?**