

GGOS Unified Analysis Workshop

Session 5 New Products Based on Inter-technique Combinations

The role of DORIS and mutual benefit with other techniques

December, 5-7 2007

Monterey, California, USA

Mutual benefits

- ◆ More information
 - ◆ Technique specific stations
 - ◆ Technique specific satellites

- ◆ Links between different techniques
 - ◆ Stations collocation
 - ◆ Satellites collocation

Co-locations

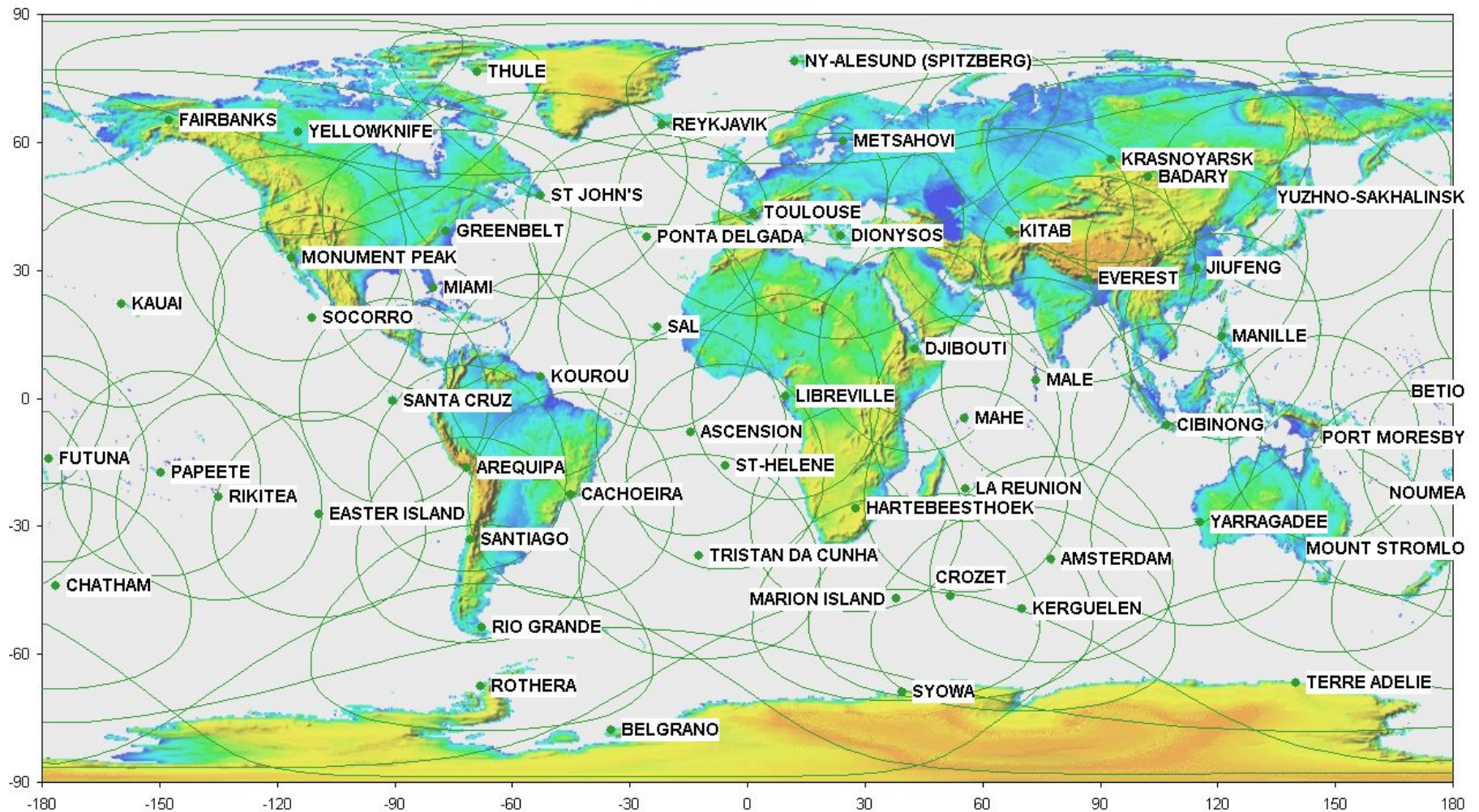
◆ Stations: DORIS network

- ◆ 57 stations (49 3rd generation beacons): homogenous global coverage
- ◆ long time series with few discontinuities: few equipment changes (beacon & antenna)
- ◆ Improved long term stability of the antenna reference point
- ◆ Co-location with other IERS techniques
 - GPS: 37
 - SLR: 9
 - VLBI: 7
- ◆ Co-location with tide gauges (sea level monitoring)
 - 23 stations

DORIS Network

Jason-1 DORIS stations visibilities

Elevation 12°



Co-locations

◆ Satellites co-location

- ◆ Past: TOPEX/POSEIDON (SLR, GPS)
- ◆ Current: Jason-1 (SLR, GPS), ENVISAT(SLR)
- ◆ Future: Jason-2 (SLR, GPS), CryoSat-2 (SLR), SARAL (SLR)
- ◆ Possible: Jason-3 (SLR, GPS), HY-2A (SLR , GPS), Sentinel-3 (SLR), GRASP (SLR, GPS, VLBI)