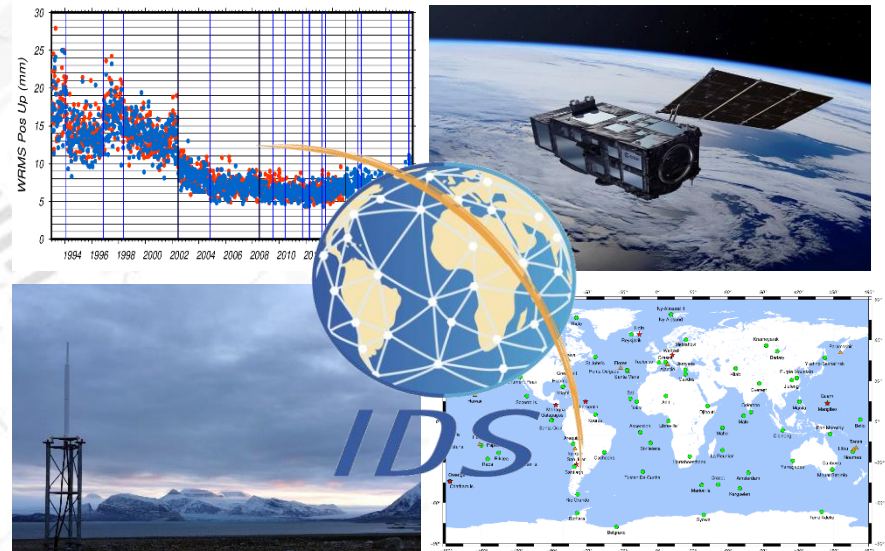


DPOD2020 Version 5.0

Guilhem Moreaux

Collecte Localisation Satellites

2025/11/25





DPOD2020 Version 5.0

- **Is based on the DORIS position and velocity cumulative solution ids25d02**

(stacking of the IDS combined series ids 19/26 from 1993 doy 003 to 2025 doy 173). More details on that cumulative solution can be found on <https://ids-doris.org/user-corner/combination/cumulative-solution.html>

- **As version 4.0, this new release includes:**

- Annual and semi-annual corrections.
- Periodic terms are only estimated for sites with observations after mid-2002.
- Post-Seismic Deformation corrections from DORIS observations only.
Concerns only SODA (Socorro Island) and GONC (Goldstone) stations.

- **Is available in SINEX and text formats.**

- **SINEX solution contains two additional (and unofficial) blocks:**

- **SOLUTION/DISCONTINUITY:** origin (ex: earthquake, beacon change, antenna problem...) of the position discontinuities.
- **SOLUTION/DATA_REJECT:** periods of time not included in the combination.

- **To facilitate the identification of stations which were active mid-2025, for these stations their ending time in the SOLUTION/EPOCHS were set to 49:365:86399.**

DPOD2020 Version 5.0

| | DPOD2020 v4.0 | DPOD2020 v5.0 |
|-------------------------|---------------|---------------|
| Observations time span | 1993.0-2025.0 | 1993.0-2025.5 |
| Nb of stations | 225 | 226 |
| Nb of sites | 90 | 90 |
| Discontinuities | | |
| Overall number | 135 | 135 |
| Nb of affected sites | 50 | 50 |
| Nb of affected stations | 68 | 68 |
| With geophysical origin | 60 | 60 |
| With technical origin | 25 | 25 |
| With unknown origin | 50 | 50 |

One more station: KEZC (Kerguelen).

No more discontinuity over the new 6 months of observations.

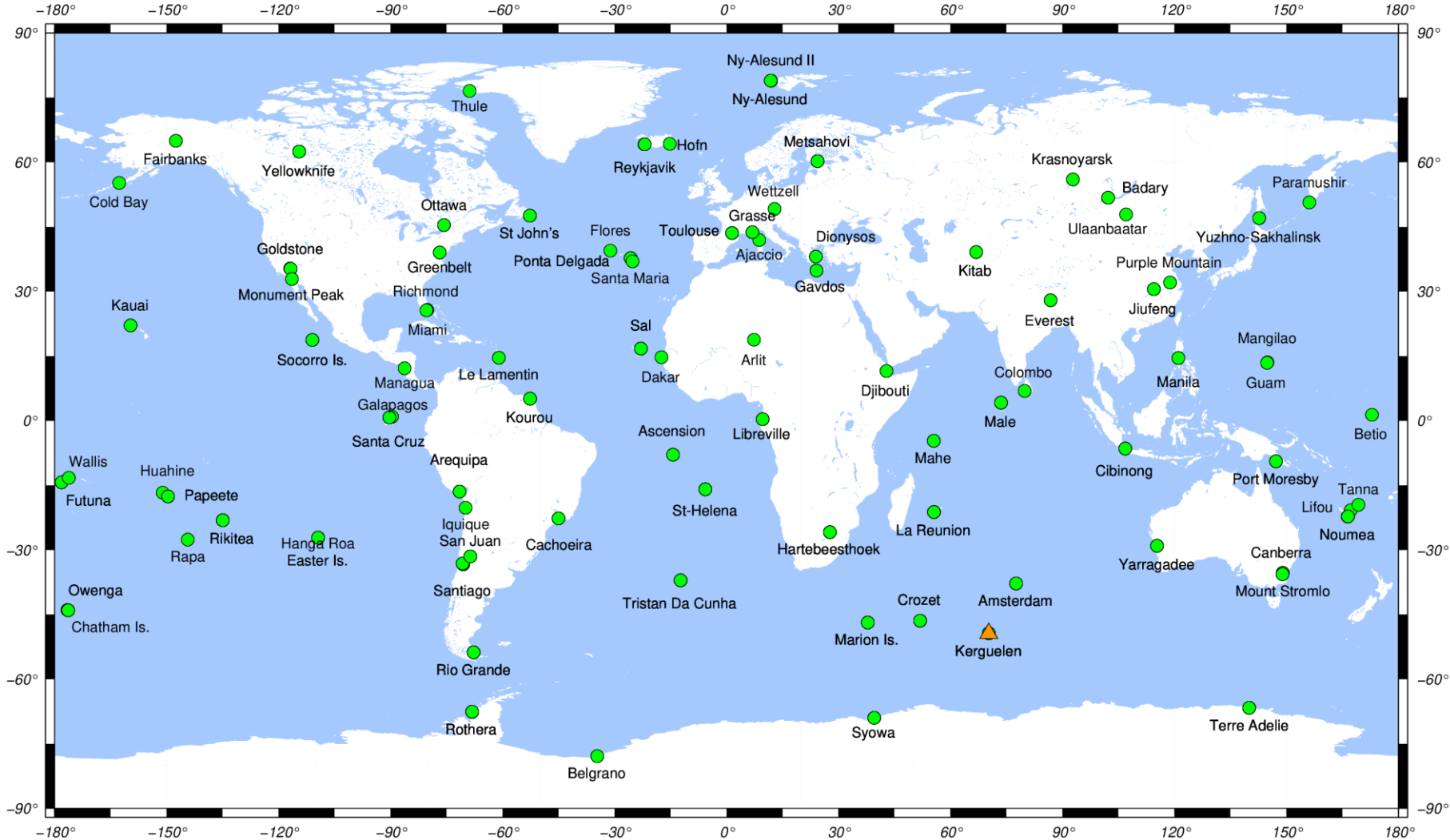


DORIS Station Network

DORIS station network from DPOD2020v50

(226 stations at 90 sites)

One more station since DPOD2020 v4.0: KEZC (Kerguelen)

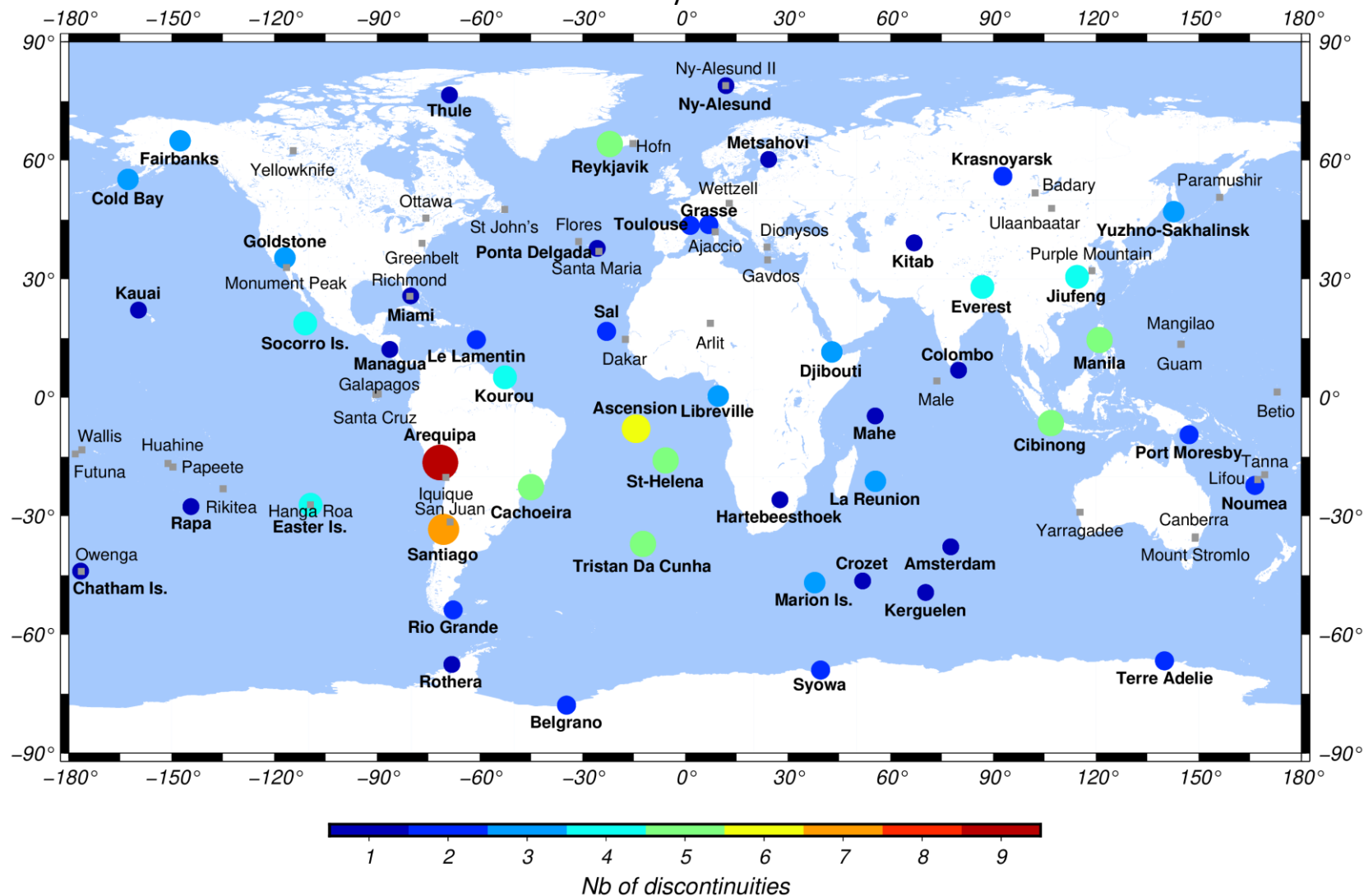


Site Discontinuities

Number of discontinuities by DORIS site. Sites with discontinuities are in boldface.

Sites with no discontinuity are indicated with grey squares.

No more discontinuity since DPOD2020 v4.0.



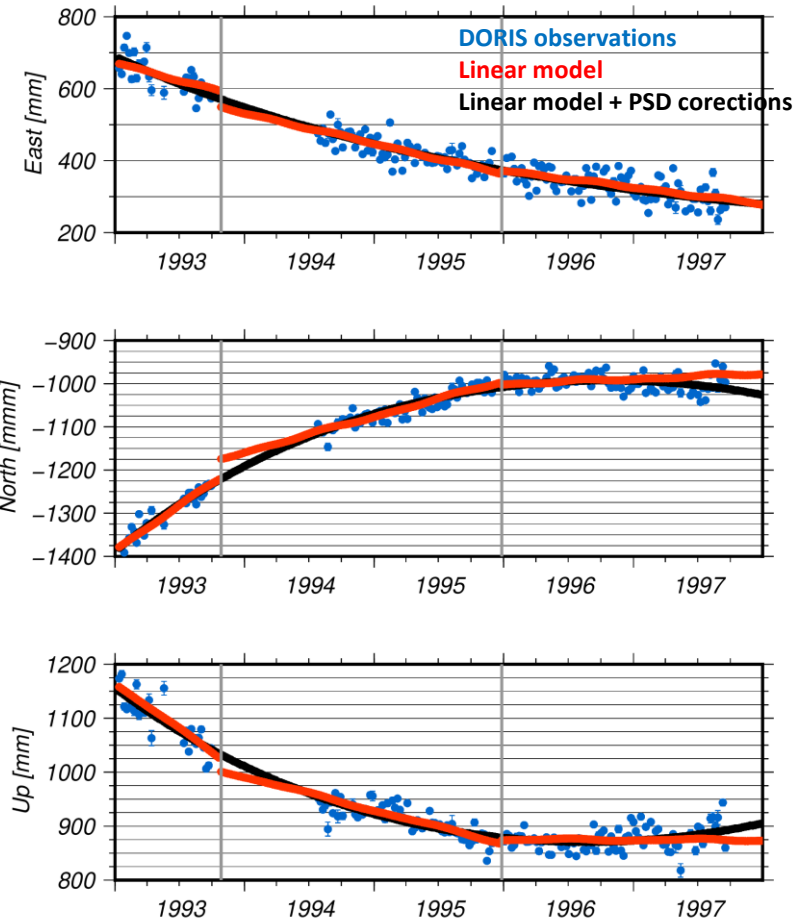
Post-Seismic Deformation Corrections

SODA – Socorro Island



DORIS is at Socorro since 1991/02/08.
Host agency: INEGI & Armada de Mexico.
Tide gauge (Gloss nb 162) @ 370m.
No GNSS, no SLR, no VLBI.

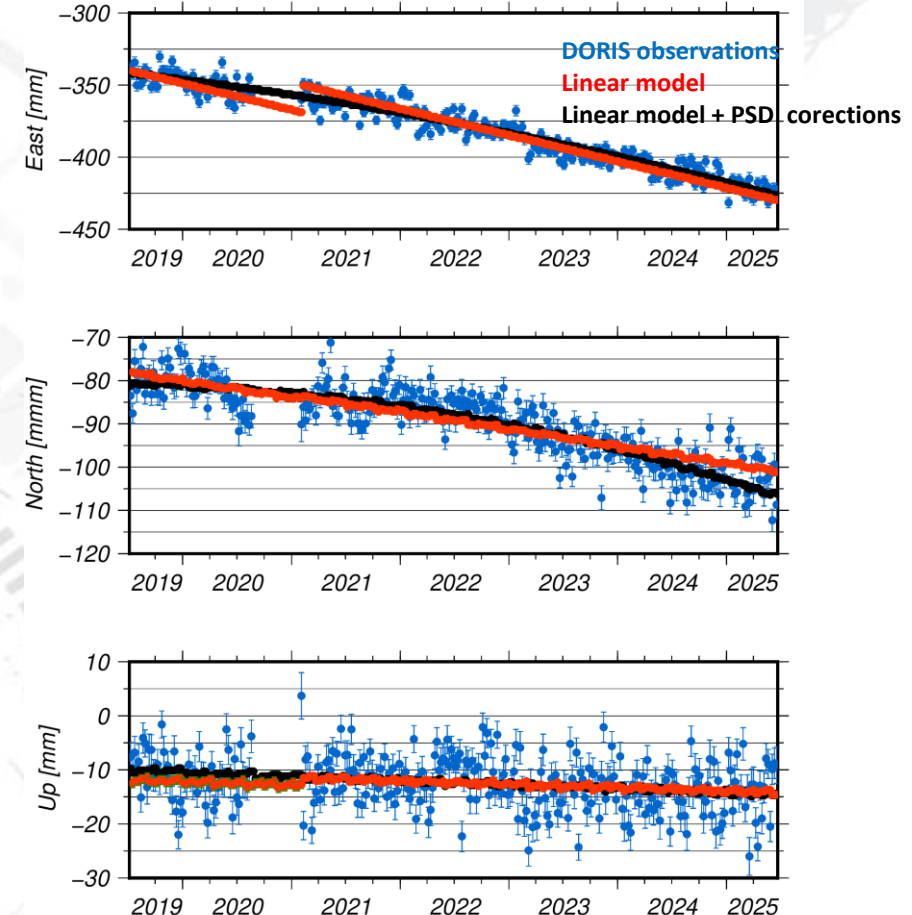
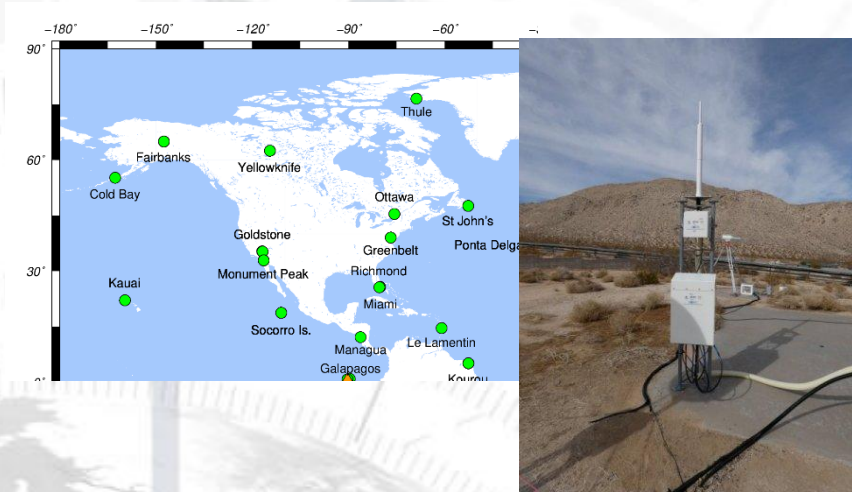
Submarine eruption on 1993/01/29 @ 4km.



PSD weekly corrections from 1993/01/13 to 1998/05/13.
PSD corrections are given in ASCII text file *dpod2020_050_psd_corr.txt*.

Post-Seismic Deformation Corrections

GONC – Goldstone



DORIS is at Socorro since 1988/01/21.
Host agency: NASA.
No colocation.

M7.1 Earthquake on 2019/07/06 @ 93km.

PSD weekly corrections from 2019/07/10 to 2026/12/31.
PSD corrections are given in ASCII text file *dpod2020_050_psd_corr.txt*.