

EUREF Densification on the Faroe Islands 2011

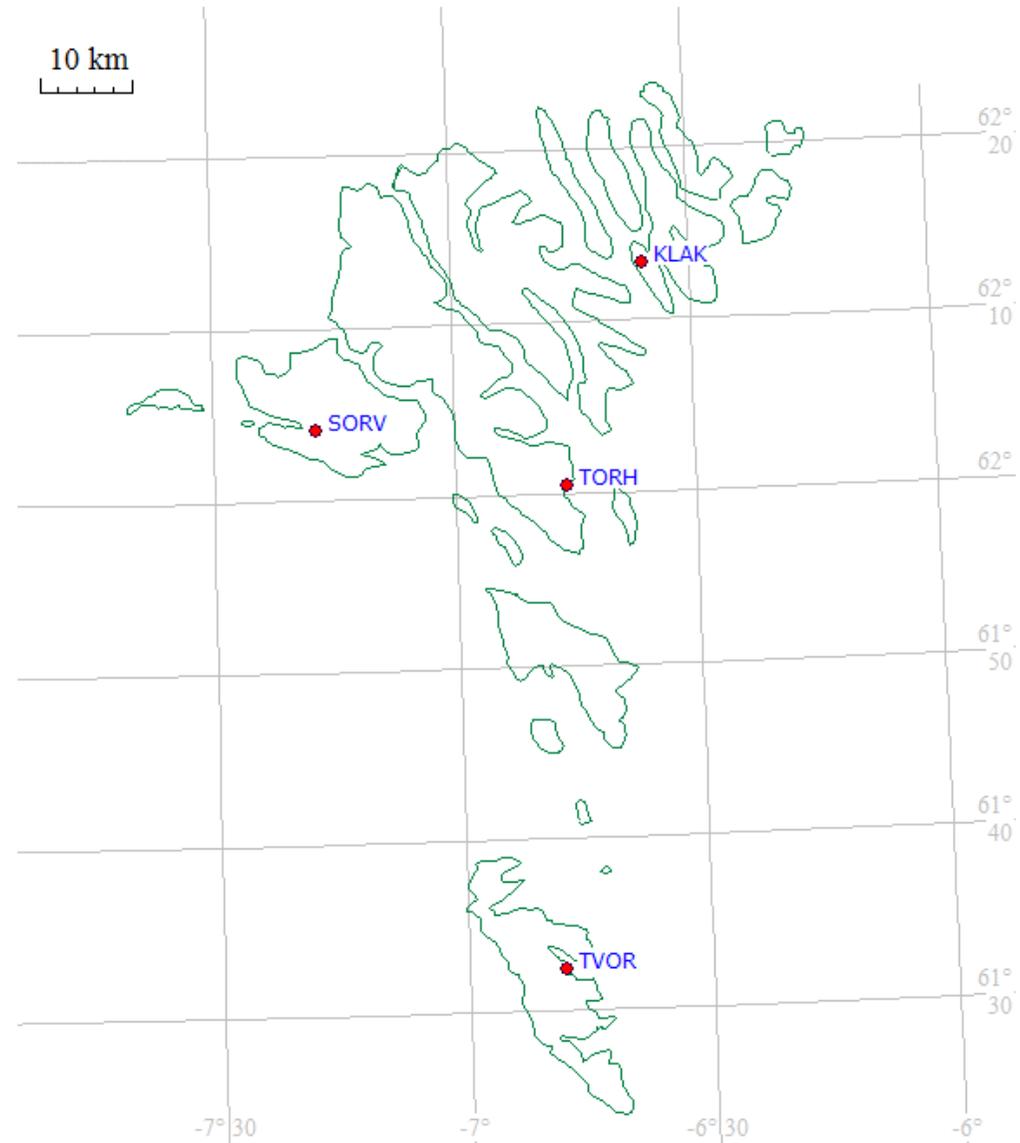
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Engsager¹**

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2) National Survey and Cadastre (KMS), Denmark

Data: 2008, day 272-278

ARGI removed: only 2 days of data

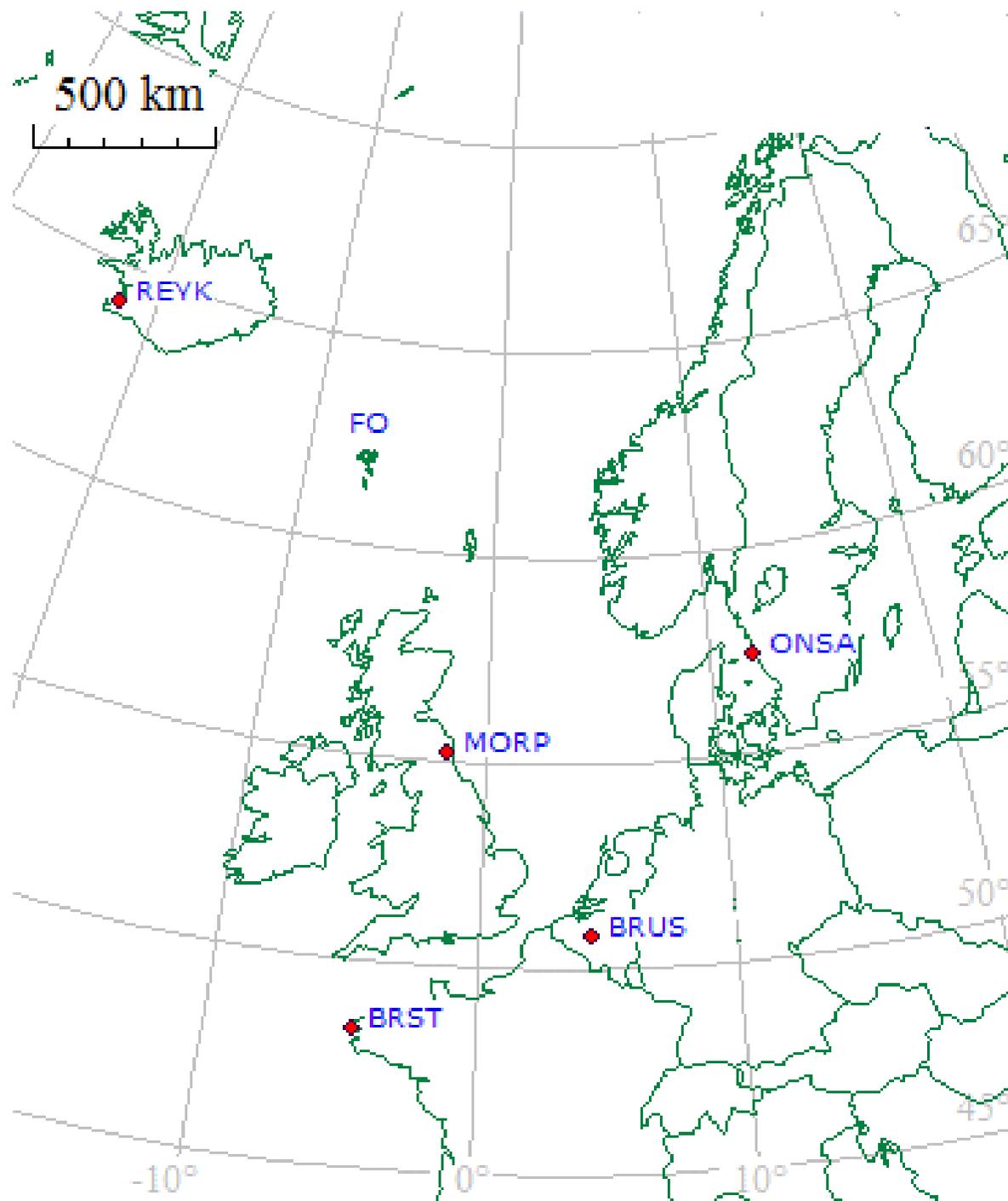


KLAK

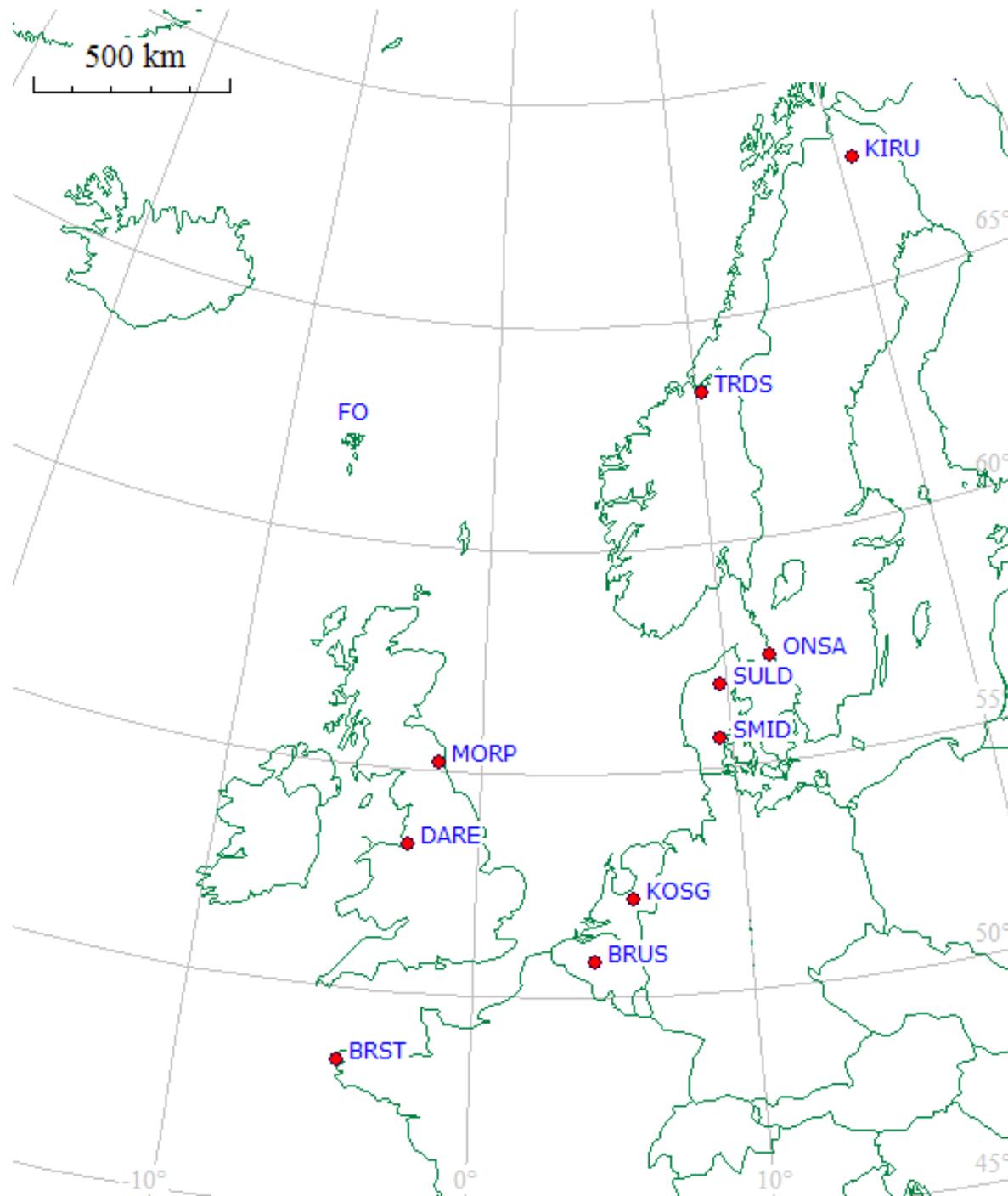


SORV

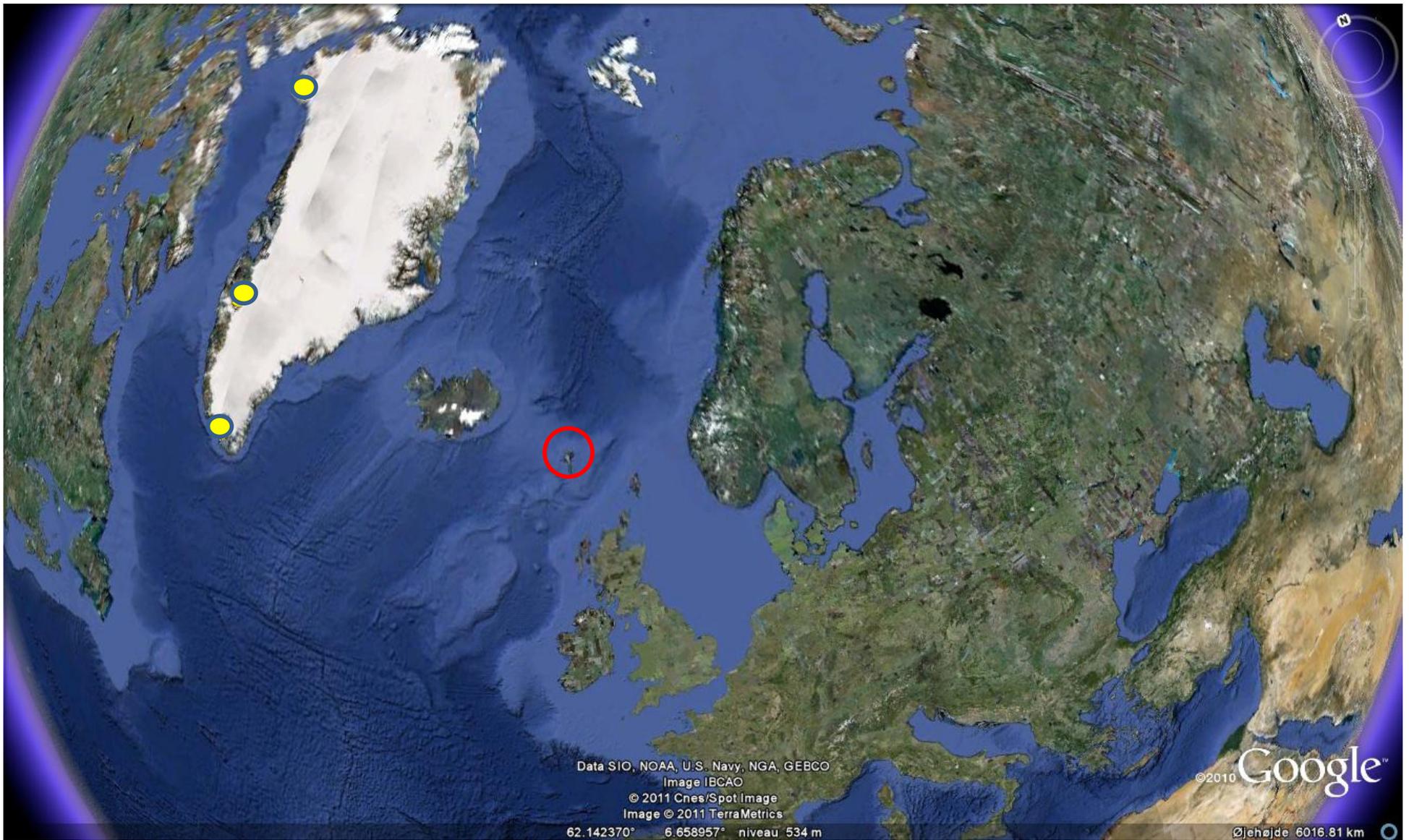


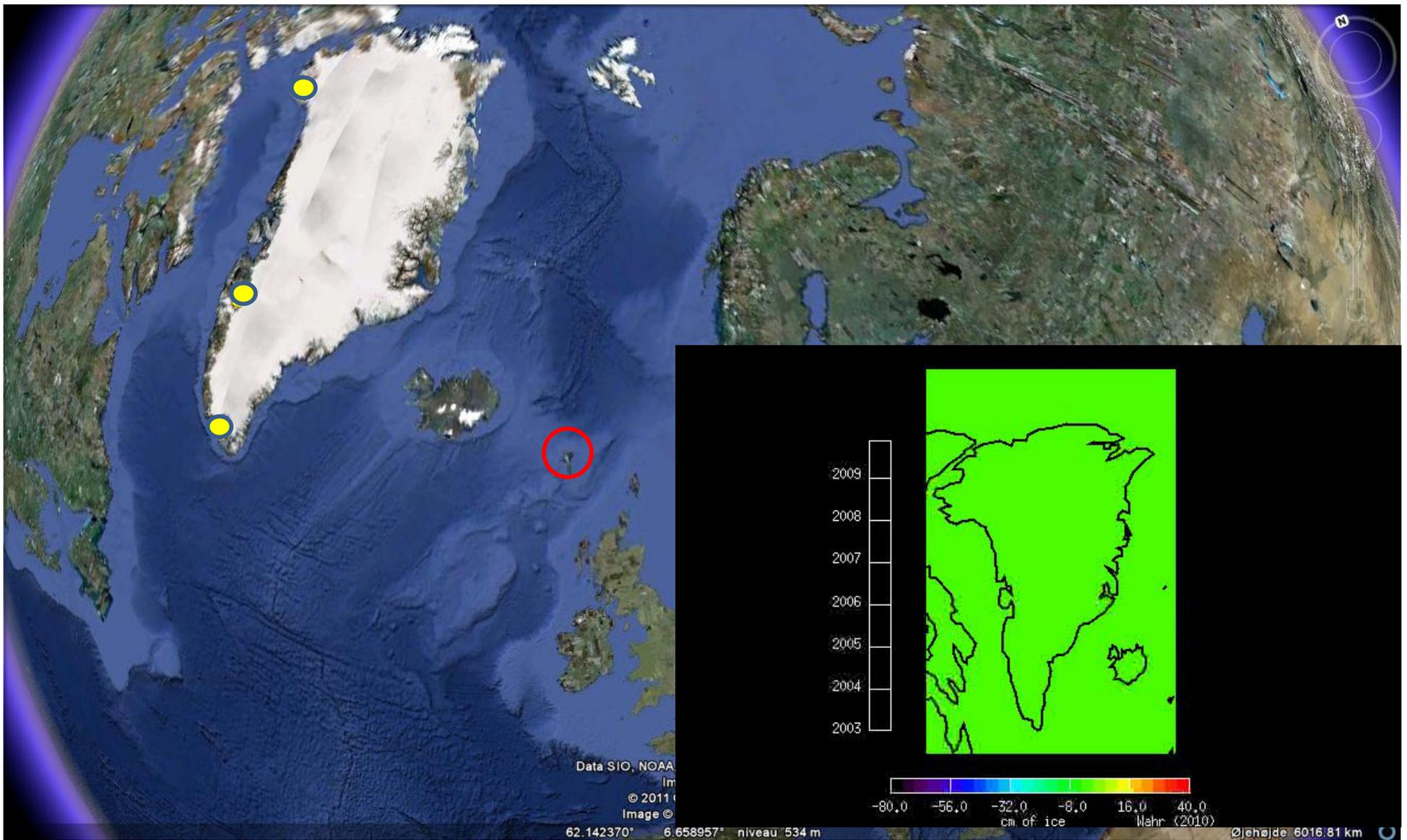


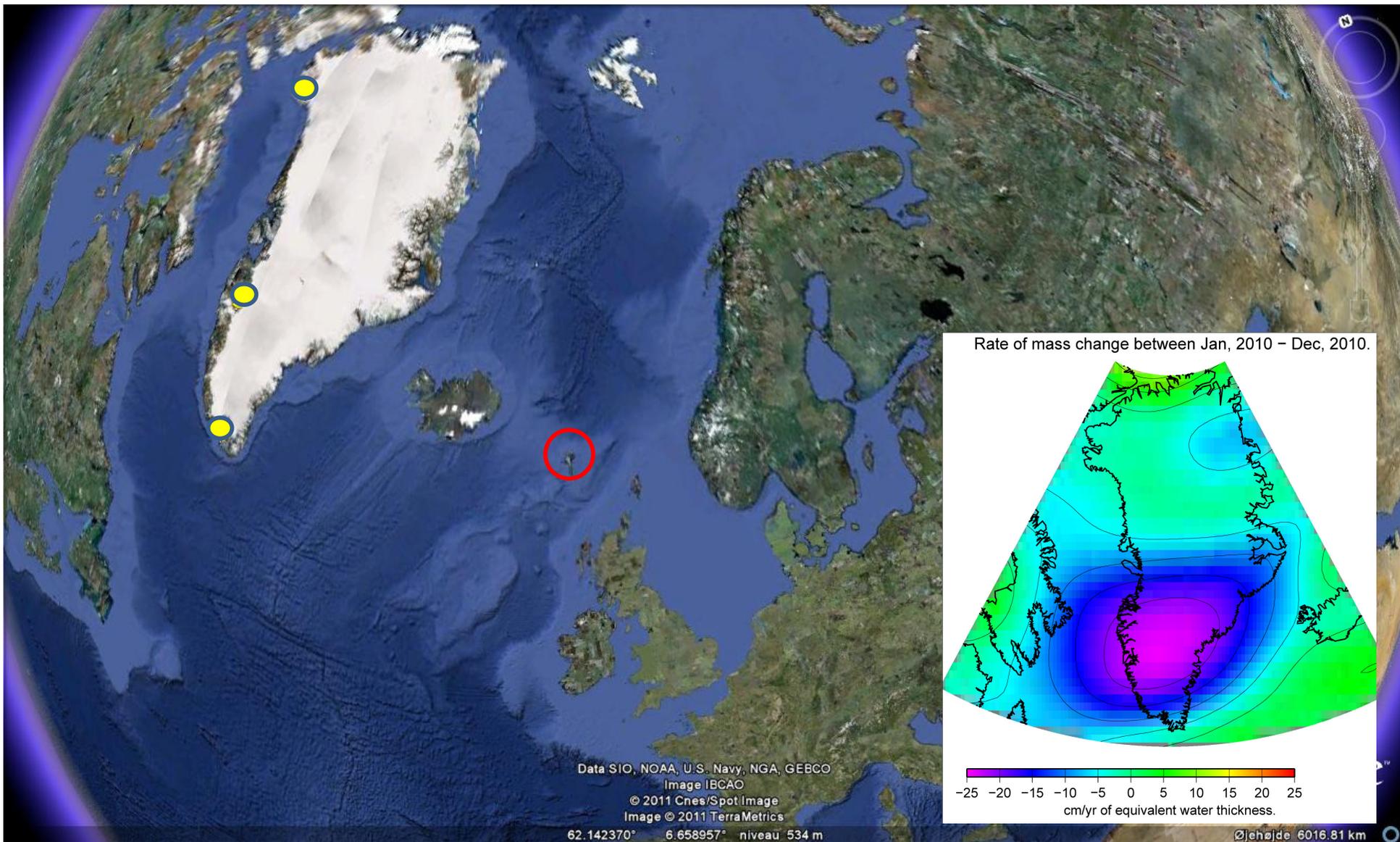
Test 1:
5 fiducial sites

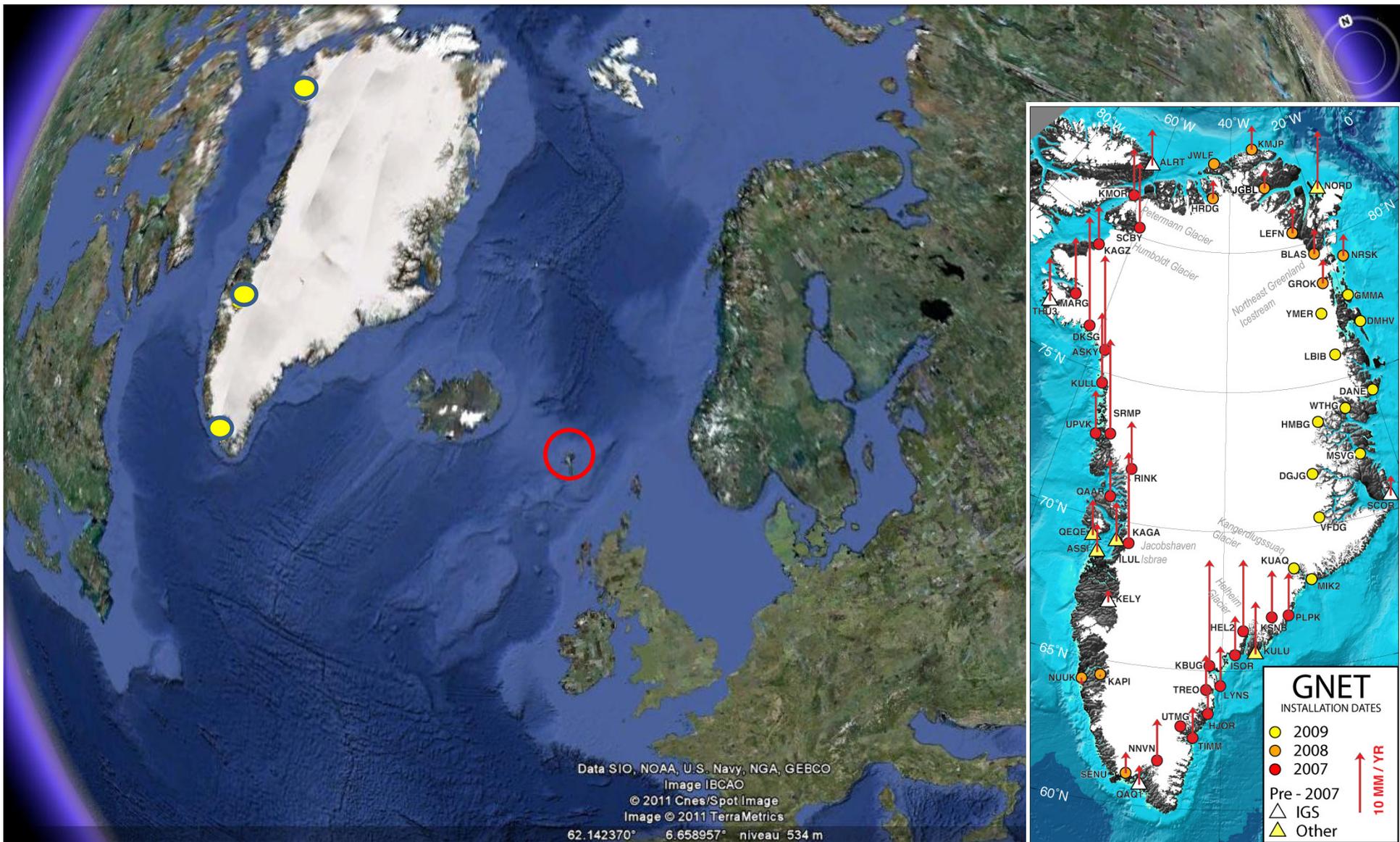


Test 2:
5 fiducial sites









1.External data

Products	Source
ITRF2005 coordinates	ftp://ftp.epncb.oma.be/pub/station/coord/EPN/
Ocean tide loading parameters	http://www.oso.chalmers.se/~loading/ , model FES2004, no correction for the motion of the centre of mass of the solid Earth.
Antenna phase centre offsets	ftp://ftp.epncb.oma.be/pub/station/general/epn_05.atx
Differential clock biases	ftp://ftp.unibe.ch/aiub/CODE/yyyy/ , P1C1yymm.DCB & P1P2yymm.DCB files.
Ionosphere maps	ftp://ftp.unibe.ch/aiub/CODE/yyyy/ , CODwwwwd.ION files
Final, precise GPS orbits	ftp://cddis.gsfc.nasa.gov/gps/product/www/ , igswwwwd.sp3 files
Satellite clocks	ftp://cddis.gsfc.nasa.gov/gps/product/www/ , igswwwwd.clk_30s files
Earth rotation parameters	ftp://cddis.gsfc.nasa.gov/gps/product/www/ , igswwwwd.erp files

Table 9. Coordinate repeatabilities from combination of daily solutions.

Station	N(mm)	E(mm)	U(mm)									
	272			273			274			275		
BRST	-1.9	-0.1	-4.2	-0.8	2.1	-2.2	-2.9	-0.1	-1.9	-0.3	-0.1	2.6
BRUS	-1.2	-0.2	-9.6	2.0	-2.6	0.4	-0.6	-1.2	8.7	-0.5	-0.5	4.6
DARE	2.8	-3.9	1.7	1.6	2.2	-2.7	2.7	1.2	-2.8	1.6	-3.0	1.4
KIRU	1.4	0.8	15.3	-2.5	0.5	-4.1	-1.5	-1.9	-17.0	-0.3	-3.4	-18.5
KOSG	-0.4	-0.6	-1.9	-0.1	-2.8	-0.2	0.6	-1.4	6.5	0.2	-1.4	6.9
MORP	-2.6	3.6	-0.6	-0.3	3.7	7.2	0.8	6.8	5.6	-1.9	7.6	4.2
ONSA	-1.1	-1.6	-7.9	1.1	-1.4	-4.4	-0.1	-2.8	3.5	0.6	-1.0	-2.1
SMID	0.3	-1.0	-4.4	-0.2	-3.9	1.1	0.6	-0.2	3.9	-0.0	-0.7	1.0
SULD	-0.5	3.3	-7.7	-0.7	-0.1	3.3	1.3	1.1	0.9	0.5	2.4	0.0
TRDS	3.1	-0.3	19.3	-0.2	2.2	1.8	-1.0	-1.4	-7.4	na	na	na
KLAK	1.1	2.8	5.8	0.0	1.6	1.1	-2.4	-1.0	-5.7	-0.8	-3.6	-10.1
SORV	1.1	-1.9	5.9	-0.4	2.2	0.3	-2.7	-1.7	-4.7	-0.2	-3.8	-6.4
TORH	1.0	1.0	6.0	-0.6	1.1	2.8	-1.5	-1.2	-6.4	0.9	-2.9	-8.5
TVOR	2.5	6.0	11.8	0.3	3.6	4.6	-2.4	0.5	-6.4	0.3	-1.5	-5.2

	N(mm)	E(mm)	U(mm)	N(mm)	E(mm)	U(mm)	N(mm)	E(mm)	U(mm)
	276			277			278		
BRST	0.3	3.1	1.4	-1.3	2.8	-0.8	-1.8	0.9	-3.0
BRUS	2.3	0.3	2.8	0.8	-0.8	1.1	-0.3	0.3	-2.0
DARE	-0.1	-2.0	5.5	0.6	0.5	-0.8	0.5	-2.3	2.0
KIRU	-2.0	-1.7	-6.3	-0.3	-1.6	-3.5	0.4	-0.8	-5.0
KOSG	0.0	-0.2	1.6	0.1	-1.5	1.6	-2.2	0.1	11.2
MORP	-2.6	-0.9	3.9	-1.1	2.7	6.9	-0.6	1.0	0.7
ONSA	-0.2	-0.3	-1.6	0.5	-2.1	-2.5	1.1	-0.3	-4.0
SMID	0.8	-0.3	-2.8	1.4	-0.8	-1.5	0.9	-1.5	-0.6
SULD	1.5	2.0	-4.6	-0.1	1.2	0.6	1.9	2.5	-0.7
TRDS	na	na	na	-0.6	-0.3	-1.1	0.1	0.0	1.3
KLAK	-2.5	-3.2	-3.6	2.4	-2.1	-1.3	-1.8	1.7	2.8
SORV	-3.1	-2.7	3.1	2.5	1.9	-2.1	-0.9	0.9	1.9
TORH	0.2	-1.7	0.7	2.3	1.5	0.0	0.4	2.8	0.7
TVOR	-2.5	1.6	2.8	1.9	1.5	3.4	-0.1	1.6	3.2

Station	X	Y	Z
KLAK	2960778.0906 m	-342299.7948 m	5620225.3667 m
SORV	2971445.1860 m	-379959.4104 m	5612155.8024 m
TORH	2980573.6460 m	-353744.5037 m	5608956.9047 m
TVOR	3026017.3745 m	-360952.0545 m	5584332.1737 m

10 fiducial sites

Table 11. ETRF2000 epoch 2008.7514 coordinates for the stations on the Faroe Islands

Station	X	Y	Z
KLAK	2960778.0871 m	-342299.7933 m	5620225.3598 m
SORV	2971445.1815 m	-379959.4077 m	5612155.7989 m
TORH	2980573.6424 m	-353744.5006 m	5608956.9021 m
TVOR	3026017.3727 m	-360952.0512 m	5584332.1751 m

5 fiducial sites

Table 17. ETRF2000 epoch 2008.7514 coordinates for the stations on the Faroe Islands

Table 19. Difference in NEU between using 5 and 10 stations.

Station	N	E	U
KLAK	0.0000 m	0.0011 m	-0.0078 m
SORV	0.0026 m	0.0022 m	-0.0053 m
TORH	0.0023 m	0.0026 m	-0.0042 m
TVOR	0.0026 m	0.0031 m	0.0002 m



Coseismic displacement
Provided by
Alessandro Caporali

