Sea Level CCI project

Phase II

1st annual review
Evaluation of CCI data against TG data in some coastal regions (North Sea + Arctic)

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Global Sea level variations

Slope: 2.76 [mm/y]

Sea Level CCI – Phase II 1st annual review – Jan. 29th – 30th 2015
Regional sea level variations

North Sea
Slope: 2.40 [mm/y]

Baltic Sea
Slope: 3.82 [mm/y]

Sea Level CCI – Phase II 1st annual review – Jan. 29th – 30th 2015
Stockholm –
(PGR = 3 mm/year)
Lerwick
(PGR = 0.05 mm/y)
Ny Alllesund

PGR = 0.1 mm/year, GIA=?
Vise (Russia).
GIA is 2.4 mm – wrong direction
Prudhoe Bay Alaska
GIA is 0.2 mm/year
However CLS01 is used as reference

PDF movie.....
Spatial coverage of CCI is exactly that of AVISO/DUACS

100%
Agreement in CCI - Mean Sea Surfaces:

Both MSS (DTU10 and CNES/CLS 2011) are complementary since at very high latitudes the DTU10 MSS provides better SLA performances whereas elsewhere (in open ocean) the CNES/CLS11 MSS is better.

Recommendation:

We recommend to use the DTU10 MSS in order to favour the Arctic Ocean which is an area of main interest for climate studies. On the other hand, the use of the DTU10 MSS instead of CNES/CLS 2011 MSS reduce the SLA performances in open ocean which could have an impact on mesoscale applications. However, as the Sea-Level CCI products (ECV) are monthly products dedicated to climate studies, this impact will be very low.