Mitigation of ionospheric signatures in Swarm GPS gravity field estimation using weighting strategies. Supplement for RC1

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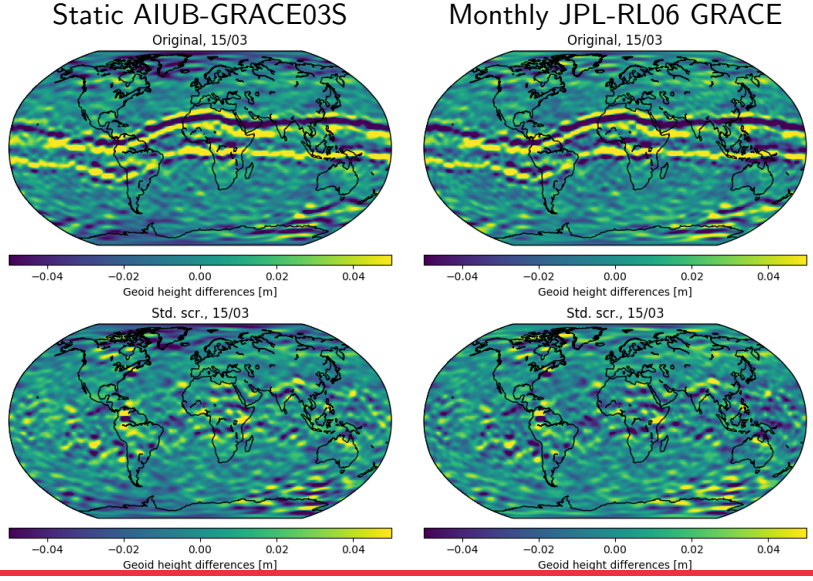
Bern, 21. Sept. 2018

Geoid hight differences wrt. to a static/monthly GRACE gravity field



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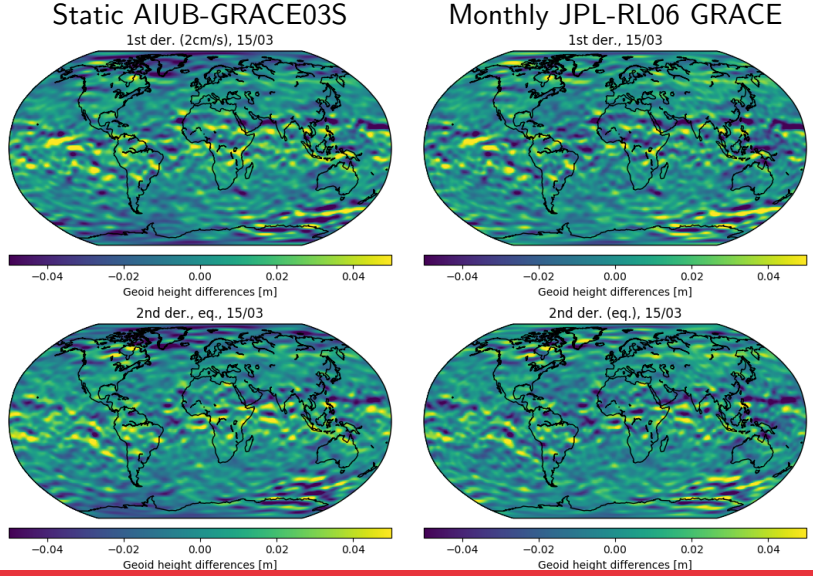

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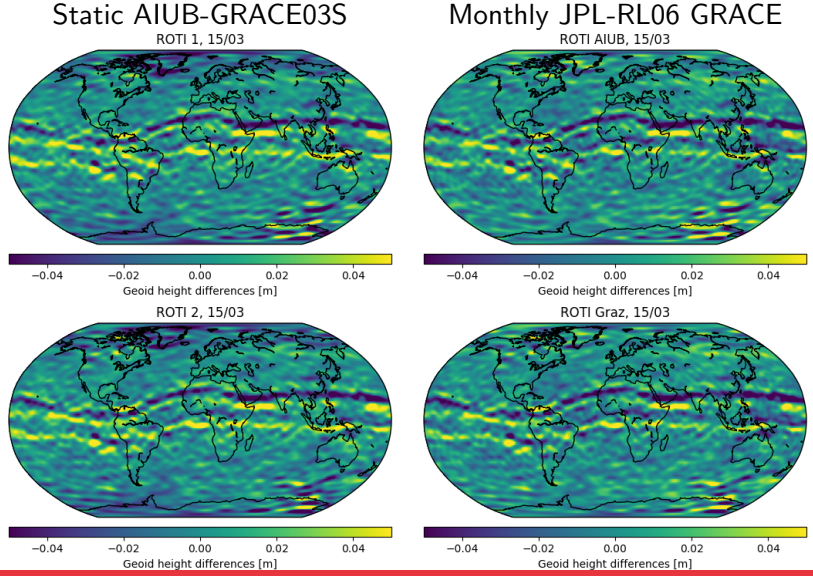

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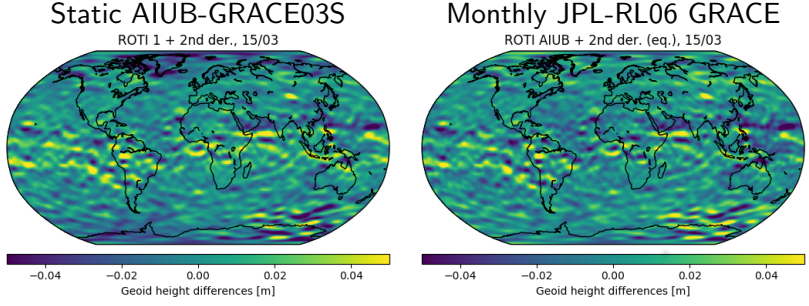
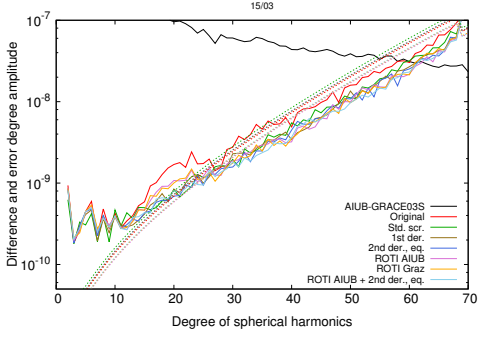
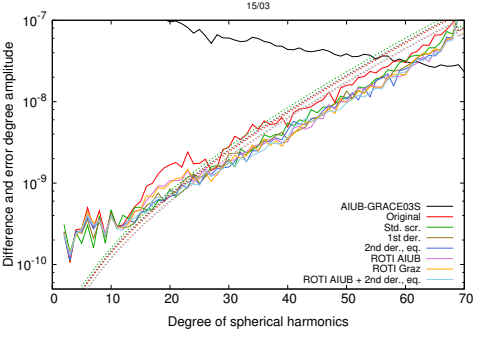


Difference Degree Amplitudes for a disturbed month(15/03)





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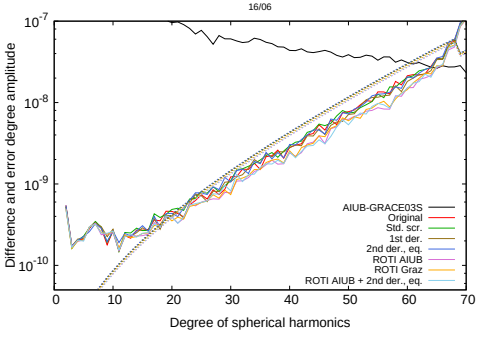
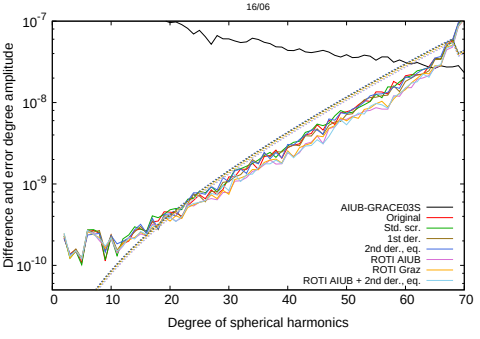
Difference Degree Amplitudes for a clan month(16/06)





wStd and geoid RMS for a disturbed month (15/03)

Test	wStd(static) $[mm]$	RMS(static) $[mm]$	wStd(monthly) $[mm]$	RMS(monthly) $[mm]$
Original	99.4637	21.9728	101.2496	21.6252
Std. Screening	60.1174	13.7982	63.7141	13.6113
D1-weighting	64.3574	13.5479	67.3917	13.1235
D2(eq.)-weighting	59.0403	12.9049	62.1005	12.4059
ROTI-AIUB	61.3036	14.2885	64.4740	13.7952
ROTI-Graz	58.4906	14.0679	61.7050	13.5869
D2(eq.) + ROTI-AIUB	51.4554	12.4784	55.3291	12.0068

wStd and geoid RMS for a clean month (16/06)

Test	wStd(static) $[mm]$	RMS(static) $[mm]$	wStd(monthly) $[mm]$	RMS(monthly) $[mm]$
Original	40.5898	8.6027	45.2672	8.2871
Std. Screening	42.2302	9.0698	46.6446	8.7910
D1-weighting	42.1095	8.5473	46.6458	8.2511
D2(eq.)-weighting	41.9492	8.9132	46.4572	8.6092
ROTI-AIUB	31.4149	7.2683	37.4209	6.9510
ROTI-Graz	33.4430	7.4151	39.1999	7.1211
D2(eq.) + ROTI-AIUB	32.5886	7.3825	38.4102	7.0956