



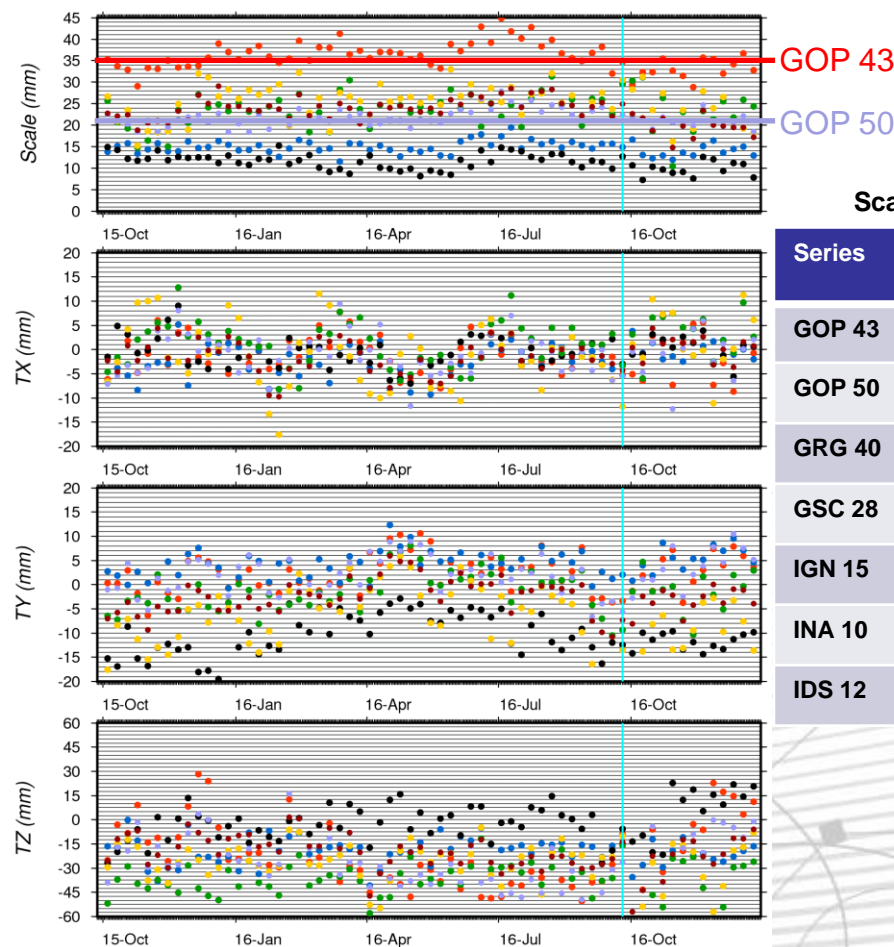
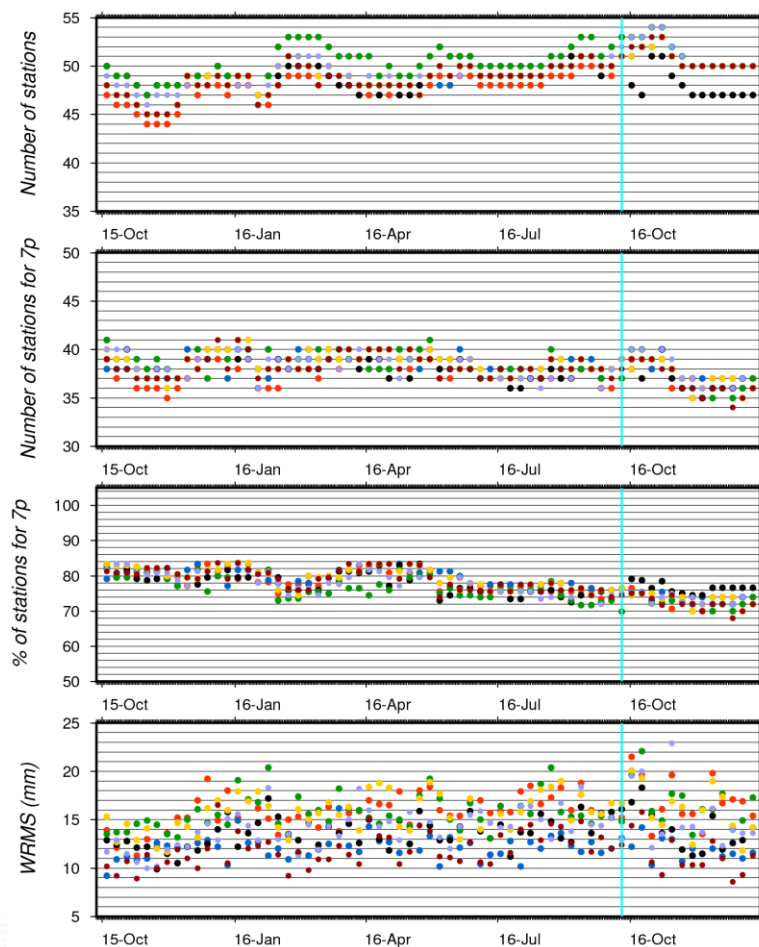
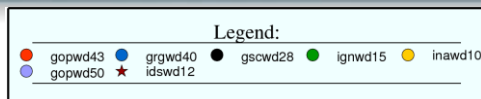
Status of the IDS Combination Center activities

Guilhem Moreaux

Latest Series Available

AC	Series Nb	Time period	Comments
ESA	10	1993:003 – 2015:179	2014:166 – 2014:362 missing Not available at IDS Data Centers Nothing new → no evaluation
GOP	50	1993:003 – 2016:360	Differences wrt GOP 43: no more use of CNES preprocessing indicators and downweighting of the observations
GRG	40	1993:003 – 2016:360	
GSC	28	2008:195 – 2016:360	Modeling improvements on Jason-2 solar array (quaternions)
IGN	15	1993:003 – 2016:360	New delivery since 2008:188 without CADB, SANB et KRUB for Jason-2
INA	10	1992:292 – 2016:360	
IDS	12	1993:003 – 2016:360	ESA10 + GOP43 /50+ GRG40 + GSC26/28 + IGN 15 + INA10 All the ACs contribute to the combined scale Include all the stations treated by at least 2 ACs

Helmert parameters wrt ITRF2014

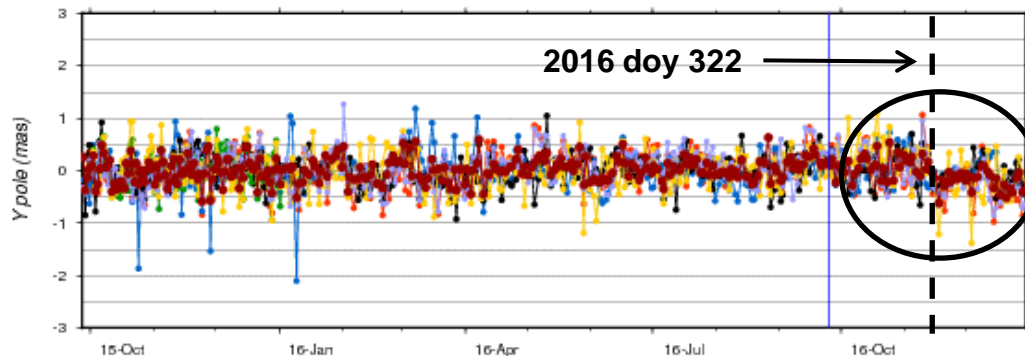
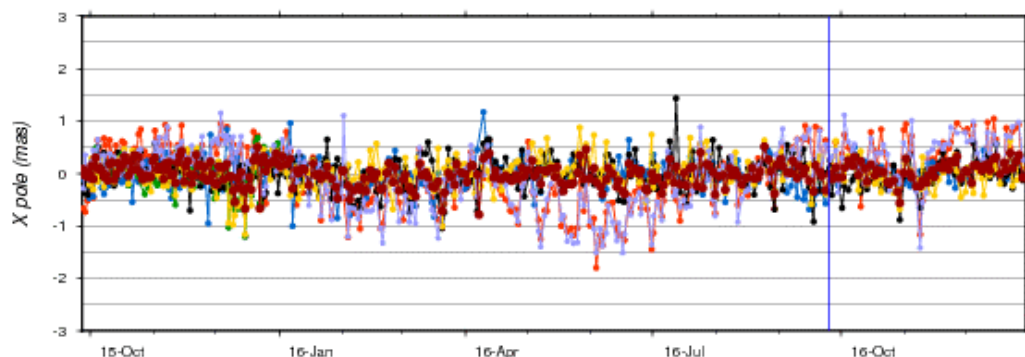
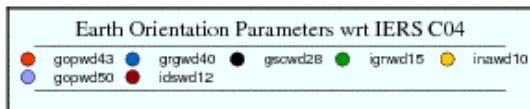


Scale statistics

Series	Mean [mm]	STD [mm]
GOP 43	35.9	3.2
GOP 50	21.8	2.0
GRG 40	14.9	1.5
GSC 28	11.3	1.8
IGN 15	23.4	3.9
INA 10	25.2	4.2
IDS 12	23.2	2.8

- GOP 50: scale offset of nearly 14 mm / GOP 43.

EOP differences wrt IERS C04



False jump – differences less scattered
No event in 2016 day 322

AC	serie	# days	X pole (mas)			Y pole (mas)		
			trend	mean	std	trend	mean	std
gop	43	325	0.015	-0.004	0.566	0.340	-0.001	0.345
grg	40	326	-0.002	-0.000	0.287	0.070	-0.003	0.361
gsc	28	328	-0.066	-0.002	0.312	0.090	-0.000	0.309
ign	15	32	0.033	0.011	0.344	0.728	-0.001	0.332
ina	10	320	-0.030	-0.003	0.304	0.240	-0.001	0.391
gop	50	321	0.014	-0.007	0.569	0.270	0.002	0.344
ids	12	328	0.028	-0.003	0.214	0.200	0.000	0.227

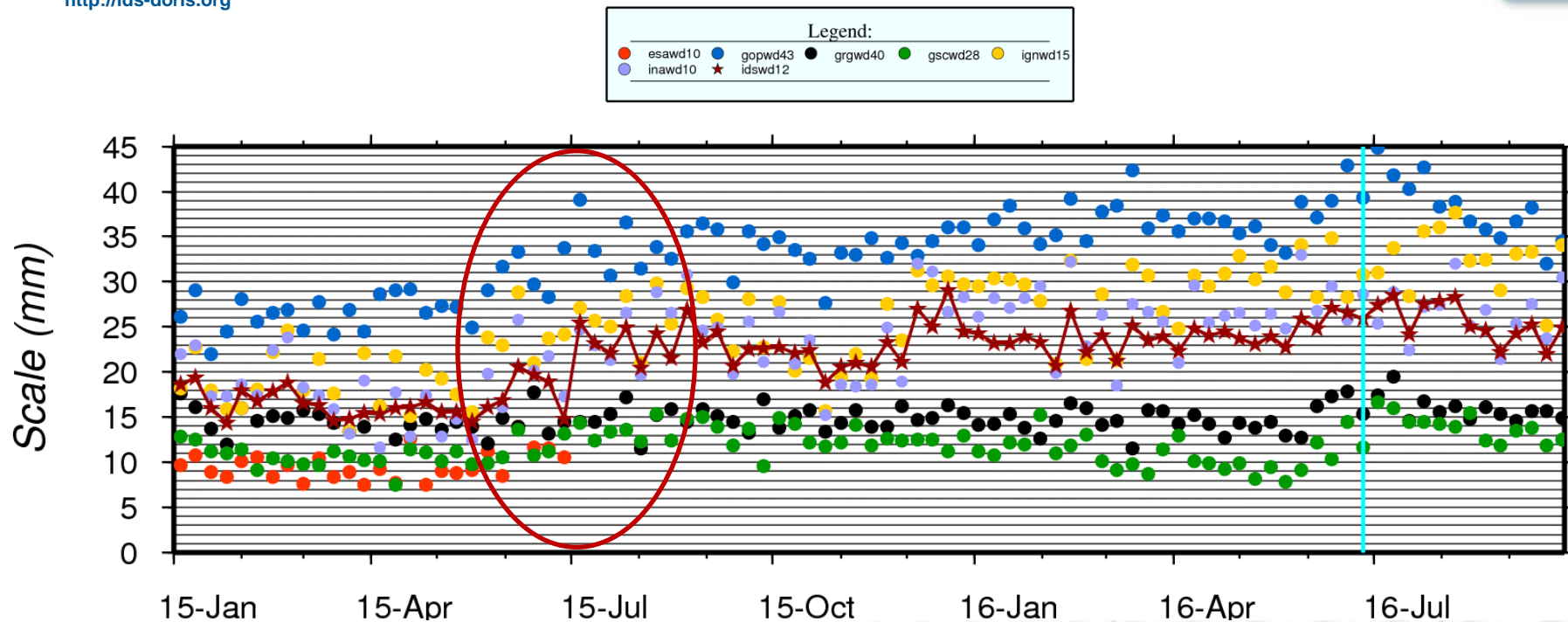
Time span: 2015:267-2016:321

AC	serie	# days	X pole (mas)			Y pole (mas)		
			trend	mean	std	trend	mean	std
gop	43	45	-3.408	-0.011	0.453	2.210	0.003	0.434
grg	40	46	-1.629	0.001	0.189	0.270	0.005	0.320
gsc	28	46	-0.863	-0.002	0.299	2.040	0.000	0.317
ign	15	45	-2.634	0.001	0.257	0.960	-0.001	0.321
ina	10	45	-1.761	0.004	0.280	-4.860	-0.006	0.360
gop	50	43	-5.335	-0.006	0.473	1.160	0.006	0.382
ids	12	46	-2.512	-0.000	0.192	-0.090	0.001	0.203

Time span: 2016:322:-2016:366

AC	serie	# days	X pole (mas)			Y pole (mas)		
			trend	mean	std	trend	mean	std
gop	43	42	1.260	-0.001	0.362	-2.990	0.004	0.339
grg	40	45	1.360	-0.001	0.188	-0.480	-0.000	0.249
gsc	28	45	-0.748	-0.003	0.269	-0.670	0.002	0.258
ign	15	43	2.862	-0.006	0.301	-1.930	0.002	0.441
ina	10	44	1.673	-0.006	0.283	0.650	-0.006	0.426
gop	50	38	0.478	-0.002	0.305	-2.940	0.004	0.265
ids	12	45	1.118	-0.005	0.175	-1.370	-0.003	0.161

Scale increase mid 2015



- IDS 12 scale increase by around 5 mm.
- No more ESA contribution since 2015 day 179.
- Scale increase of GOP 43, IGN 15 and INA 10.
- Link to upgrade from GDR-D to GDR-E ?
 - Jason-2 in 2015/05/25
 - Cryosat-2 in 2015/06/18
 - Saral in 2015/07/02



- IDS Workshop – London – May 22
- nd
- 2017

Conclusions

- **Points to investigate: scale increase mid 2015.**
- **Scale increases in 2012 and 2015 may have the same origin so may be solved by the ACs by implementing its own data preprocessing/editing.**