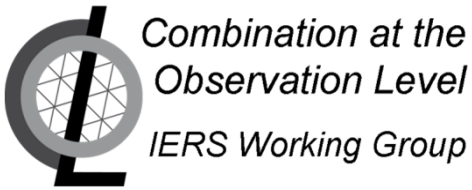

IERS COL-WG project
SINEX COMPATIBILITY
GRGS ANALYSES

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COL-WG Paris 21-22 November
2011

Analysis Centers participating

Delivered SINEX on ftp site: ftp://hpiers.obspm.fr/iers/eop/grgs/Meetings/Paris_Nov_2011/

Analysis Center	SLR	GNSS	VLBI	DORIS	Pre combined
AIUB/BKG	Delivered 04-Oct-2011 SINEX version n3 available	Delivered 14-Nov-2011 SINEX **version n3** available			
ASI	Expected				
DGFI	Delivered 11-Oct-2011 SINEX version 02 available		Delivered 07-Jun-2011 SINEX version n2 available		
ESOC	Expected				SLR-GPS expected SLR-DORIS expected
GFZ					SLR-GPS expected
GRGS	Expected	Delivered 16-11-2011 SINEX **version n7** available	Delivered 09-Nov-2011 SINEX **version n4** available	Delivered 06-Oct-2011 SINEX version n5 available	
GSFC	Expected	Expected	Excepted	Expected	
MAO		Expected	Expected		
OPA			Delivered 05-Oct-2011 SINEX version n1 available		
TUW			Delivered 23-May-2011 SINEX version n1 available		

AIUB	GNSS **daily**	SLR **weekly**
SINEX format Method 6c	+SOLUTION/STATISTICS +SITE/ID +SITE/RECEIVER +SITE/ANTENNA +SITE/GPS_PHASE_CENTER +SITE/ECCENTRICITY +SATELLITE/ID +SATELLITE/PHASE_CENTER +SOLUTION/EPOCHS +SOLUTION/**NORMAL_EQUATION_VECTOR** +SOLUTION/ESTIMATE +SOLUTION/**APRIORI** +SOLUTION/**NORMAL_EQUATION_MATRIX L**	+SOLUTION/STATISTICS +SITE/ID +SITE/ECCENTRICITY +SOLUTION/EPOCHS +BIAS/EPOCHS +SOLUTION/**NORMAL_EQUATION_VECTOR** +SOLUTION/ESTIMATE +SOLUTION/**APRIORI** +SOLUTION/**NORMAL_EQUATION_MATRIX L**
Parameters	XPO, YPO, UT, (00h, 24h) NUT_OB (delta Psi) (00h, 24h), **Initial Value Nul** NUT_LN (delta Eps) (00h, 24h), **Initial Value Nul** **Apriori : EOP initial values have not extracted from C04 series** STAX, STAY, STAZ (12h) **TGETOT** (00h 24h), troposphere gradient in east (wet + dry) m **TGNTOT** (00h, 24h), troposphere gradient in north (wet + dry) m **TROTOT** (2h) wet + dry Trop. delay, m **XGC, YGC, ZGC** at 11h59mn45s (Geocenter) **SATA_X, SATA_Y, SATA_Z** Phase center offset for satellite antenna at 11h59mn45s	XPO, YPO, UT **0h** XPOR, YPOR, LOD **12h** STAX, STAY, STAZ mid epoch 12h XGC, YGC, ZGC mid epoch 11h40 RBIAS mid epoch 11h40
GINS format	Normal Equations converted **Mix of some troposphere parameters** **Some stations without DOMES number “MNLS, CTWN”**	Normal Equations converted

DGFI	VLBI **daily**	SLR **weekly**
SINEX format Method 6c	+SITE/ID +NUTATION/DATA +PRECESSION/DATA +SITE/ECCENTRICITY +SOLUTION/EPOCHS +SOLUTION/APRIORI +SOLUTION/STATISTICS +SOLUTION/NORMAL_EQUATION_MATRIX U +SOLUTION/NORMAL_EQUATION_VECTOR	+SITE/ID +SOLUTION/EPOCHS +BIAS/EPOCHS +SITE/ECCENTRICITY +SOLUTION/APRIORI +SOLUTION/STATISTICS +SOLUTION/NORMAL_EQUATION_MATRIX U +SOLUTION/NORMAL_EQUATION_VECTOR
Parameters	**EOP: OFFSET + DRIFT:** **XPO**, **YPO**, **UT**, 1pt/d at 12h01:21 ➔ to interpolate at 00h **XPOR**, **YPOR**, **LOD**, 1pt/d at 12h01:21 ➔ to interpolate at 00h **NUT_Y, NUT_X** 1pt/d at 12h01:21 ➔ **Nutation a-priori = 0** **-Some EOP parameters are not at 12h and so cannot be combined with other EOP coming from different analysis centers** **-Apriori : EOP initial values have not extracted from C04 series** **-RS-DA, RS-DE Quasar parameters ➔ Not furnished** **STAX**, **STAY**, **STAZ** 1pt/d at 12h *Code PT Domes____ T Station description___ 7213 A 10402S002 R ONSALA60 60-ft Onsala, 7224 A 14201S004 R WETTZELL Wettzell, Ger 7298 A 40424S007 R KOKEE Kokee Park, K 7209 A 40440S003 R WESTFORD Westford, MA, 7640 A 41719S001 R TIGOCONC TIGO at Conce 7331 A 10317S003 R NYALES20 Ny Alesund, S 7230 A 12711S001 R MEDICINA Medicina, Ita 7380 A 12350S001 R SVETLOE Svetloe, Russ 7381 A 12351S001 R ZELENCHK Zelenchukskay 7232 A 30302S001 R HARTRAO Hartebeesthoe 7345 A 21730S007 R TSUKUB32 32-m at Tsuku	**EOP: PIECEWISE LINEAR OFFSET** **XPO**, **YPO**, **UT**, 1DAY INTERVALS at 00h **TRO_TOT, TGE_TOT, TGN_TOT** tropospher parameters ➔ Not furnished **STAX**, **STAY**, **STAZ** 1WEEK INTERVALS MID ARC at 12h
GINS format	Normal Equations converted	Normal Equations converted

GRGS	VLBI weekly	GPS weekly
SINEX format	+SITE/ID **+NUTATION/DATA** **(a-priori nutation model, exp. IAU_2000A)** **+PRECESSION/DATA** **(a-priori precession model, exp. IAU_2000A)** **+SOURCE/ID necessary to identify the sources** +SOLUTION/STATISTICS +SOLUTION/EPOCHS +SOLUTION/APRIORI +SOLUTION/NORMAL_EQUATION_VECTOR +SOLUTION/NORMAL_EQUATION_MATRIX L	+SITE/ID +SITE/RECEIVER +SITE/ANTENNA +SITE/GPS_PHASE_CENTER +SITE/ECCENTRICITY +SOLUTION/STATISTICS +SOLUTION/EPOCHS +SOLUTION/APRIORI +SOLUTION/NORMAL_EQUATION_VECTOR +SOLUTION/NORMAL_EQUATION_MATRIX L
Parameters	**EOP PWL offset** **XPO, YPO, UT-TAI** 1 pt/d, 00h **NUT_OB, NUT_LN** 2 pt/d 00h,12h **STAX, STAY, STAZ** 1 pt/d 12h *Code Pt __Domes__ T _Station Description__ 7331 A 10317S003 V Ny Alesund 7213 A 10402S002 V Onsala, Sweden 7380 A 12350S001 C SVETLOE Svetloe,Russ 7381 A 12351S001 V Zelenchukskaya, Russia 7230 A 12711S001 V Bologna, Italy 7224 A 14201S004 V Wettzell, FRG 7345 A 21730S007 V Tsukuba, Japan (32 m) 7232 A 30302S001 V Hartebeesthoek S Afr. 7298 A 40424S007 V Kokee Park Kauai, HI 7209 A 40440S003 V Westford, MA 7640 A 41719S001 V TIGOCONC **RS_DA**, **RS_DE** 1pt/d 00h **now sources are identified** **TBIAS**, **ZBIAS** intervalle **1h ➔2h & lack of station's numbers**	**EOP Offset + Drift** XPO, XPOR, YPO, YPOR, 12h 1Day intervalle UT, LOD, 12h 1Day intervalle NUT_LN, NUTRLN, 12h 1Day intervalle NUT_OB, NUTROB, 12h 1Day intervalle STAX, STAY, STAZ (121 stations) 1 pt/w mid epoch 12h TROTOT 01h 03h 05h … 23h troposphere TGE, TGN (à 03h et 21h) un reduced for: NyAlsesund 10317 NYA1, NYAL Hartbeetsthoek 30302 HRAO Kokee Park 40424 KOKB Washington 40451 GODE and USN3 TIGO Concepcion 41719 CONZ Mount Stromlo 50119 STR1 Papeete Tahiti 92201 THTI

GRGS	DORIS weekly	SLR weekly
SINEX format	+SITE/ID +SOLUTION/STATISTICS +SOLUTION/EPOCHS +SOLUTION/APRIORI +SOLUTION/NORMAL_EQUATION_VECTOR +SOLUTION/NORMAL_EQUATION_MATRIX L	+SITE/ID +SOLUTION/STATISTICS +SOLUTION/EPOCHS +SOLUTION/APRIORI +SOLUTION/NORMAL_EQUATION_VECTOR +SOLUTION/NORMAL_EQUATION_MATRIX L
Parameters	**EOP PWL offset** XPO, YPO, **UT** 1 pt/d, 00h NUT_OB, NUT_LN 2 pt/d 00h,12h STAX, STAY, STAZ 1 pt/w mid epoch 12h TROTOT for stations (1h) ➔ **(2h)** NyAlesund SPJB 10317S005 Hartebeesthoek HBMB 30302S008 Kokee Park KOLB 40424S009 Greenbelt (Washington) GREB 40451S176 Mount Stromlo MSPB 50119S004 Papeete (Tahiti) PATB 92201S010	**EOP PWL offset** XPO, YPO, **UT** 1 pt/d, 00h NUT_OB, NUT_LN 2 pt/d 00h,12h STAX, STAY, STAZ 1 pt/w mid epoch 12h Selected Statin 7501 A 30302M003 L HARTEBEESTHOEK 7105 A 40451M105 L GREENBELT 7405 A 41719M001 L CONCEPCION 7825 A 50119S003 L Mount Stromlo 7124 A 92201M007 L TAHITI

TUW VLBI daily

SINEX structure	Parameters in SINEX format	GINS format
+NUTATION/DATA +PRECESSION/DATA +SOURCE/ID +SITE/ID +SITE/ECCENTRICITY +SOLUTION/EPOCHS +SOLUTION/STATISTICS +SOLUTION/APRIORI +SOLUTION/NORMAL_EQUATION_VECTOR +SOLUTION/NORMAL_EQUATION_MATRIX L	**EOP PWL offset** XPO, YPO, UT 1 pt/d at 00h NUT_X, NUT_Y 1 pt/d at 00h **model IAU 2000A** RS_DA, RS_DE 1 pt/d at 12h TROWET, TGETOT, TGNTOT intervals 2h STAX, STAY, STAZ 1 pt/d at 12h *CODE PT DOMES____ T STATION_DESCRIPTION___ 7331 A 10317S003 R Ny Alesund, Svalbard, 7224 A 14201S004 R Wettzell, Germany 7213 A 10402S002 R 60-ft Onsala, Sweden 7640 A 41719S001 R TIGO at Concepcion, Ch 7345 A 21730S007 R 32-m at Tsukuba, Japan 7209 A 40440S003 R Westford, MA, USA 7380 A 12350S001 R Svetloe, Russia 7230 A 12711S001 R Medicina, Italy 7232 A 30302S001 R Hartebeesthoek, South 7298 A 40424S007 R Kokee Park, Kauai, HI,	SX, SY, SZ with DOMES number PX, PY, PT, NE, NP 1pt/d at 00h QRA, QDE with source identifier and date year/month MZW, MGN, MGE with DOMES number intervals 2h