SUMMARY

of DORIS processing at INASAN for 2011

S.Kuzin, S.Tatevian
Institute of Astronomy RAS

Currently Doris Analysis Center uses the latest version GIPSY-OASIS II software (6.1.2) developed by JPL with updated DORIS part of GIPSY developed by IGN/JPL

List of INASAN products provided to the IDS (May 2012)

Product	Latest version	Span
Sinex weekly free network	inawd07	1992.8 - 2012.0
Geocenter	Ina10wd01	1992.8 - 2012.0
EOP-series	ina10wd01	1992.8 - 2012.0
STCD-series	ina10wd01	1993.0 - 2010.8

Changes in INASAN AC models after ITRF2008

Old models:

1) elevation cutoff angle = 15 degrees
2) the gravity field is GGM01C (120x120)
3) solar radiation pressure coefficients were estimated
4) Lanyi tropospheric mapping function was used
5) atmospheric density model DTM94 as a priori
6) estimating atmospheric drag every 6 hrs for SPOT's and every 24 hrs for TOPEX

New models:

1) elevation cutoff angle = 15 degrees and data downweigthing at low elevation were applied
2) the gravity field is GGM02C (120x120)
3) fixing daily coefficients for solar radiation pressure models
4) Niell tropospheric mapping function was used
5) atmospheric density model DTM2000 as a priori
6) estimating atmospheric drag every 1 hr

Currently INASAN AC solutions for IDS include next DORIS satellites:

SPOT4, SPOT5, ENVISAT, JASON2, CRYOSAT2

Upgrades for the next ITRF:

1) atmosphere pressure loading?
2) including in processing HY-2A?
3) changing gravity field model?
4) changing tropospheric mapping function?
5) changing elevation cutoff angle?

Problems

Large opr amplitudes especially in cross-track direction