

SUMMARY
of DORIS processing at INASAN

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I. software

GIPSY-OASIS II (developed by JPL) Linux
version 4.03 (Red Hat 2.4.20-8)

II. models for orbit comparison

a) **gravity model** - GGMO1C (120x120)
Earth GM value - GGMO1C

b) **arc length** - 30 hours

c) **satellite mass** - constant

MASS= 8078.02 (for orbit comparison)

MASS= 8005.942 (middle for 2005 envisat)

d) atmospheric drag model

ATMOS_ON_OFF='ON'

ATMOS_DENSITY_MODEL='DTM94'

DRAG_COEFF=2.5D0

e) cutoff angle - 0 (all available observations)

f) tides

SOLID_TIDE_ON_OFF='ON' (IERS2003)

POLE_TIDE_ON_OFF='ON' (IERS2003)

OCEAN_TIDE_ON_OFF='ON' (CSR3)

g) Earth radiation model

EARTH_RAD_ON_OFF='ON'

ALBEDO_SCALE=1.0

EC=102050624.4513878D0

h) spacecraft model

SC_MODEL='TOP' (for envisat)

SC_MODEL='CUSTOM' (for
SPOT2,SPOT4,SPOT5)

i) custom force model

CONSTANT_ACC_HCL_ON_OFF='ON'

ONCE_PER_REV_ACC_HCL_ON_OFF='ON'

1) **relativity**

RELATIVITY_ON_OFF='ON'

(applied)

m) **solar pressure model**

SOLAR_PRESSURE_ON_OFF='ON'

(macromodel)

SC=102050624.4513878D0

SOLAR_SCALE=0.97D0

III. ORBIT ESTIMATION STRATEGY

- 1) EOP (apriori, Bulletin B) - estimated
- 2) apriori station coordinates (IGN/JPL, continually corrected) - fixed
- 3) orbital state parameters - estimated
- 4) custom parameters - estimated
- 5) drag parameters - estimated
- 6) troposphere - updated each satellite-station pass