

GOP analysis centre Activity report

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AWG meeting, Paris 23-24 March

Weekly processing at GOP

1998-2007	delivered until end of February
1995-1997	delivered last week
2008	under processing, planned delivery 1 st April
1993-1994	planned delivery 15 th April

Missing solutions

Leap second ut1-utc

Day with missing data or maneuvers for all satellites

Basic characteristics of GOP solution 31

- Loose constrained, netw. 10m, pole 500 mas
- Two steps : single-satellite daily solutions and combination on NEQ level
- GPT troposphere model with dry GMF as apriori, wet GMF for estimation
- Orbit modeling based on empirical and stochastic s(along track) estimation

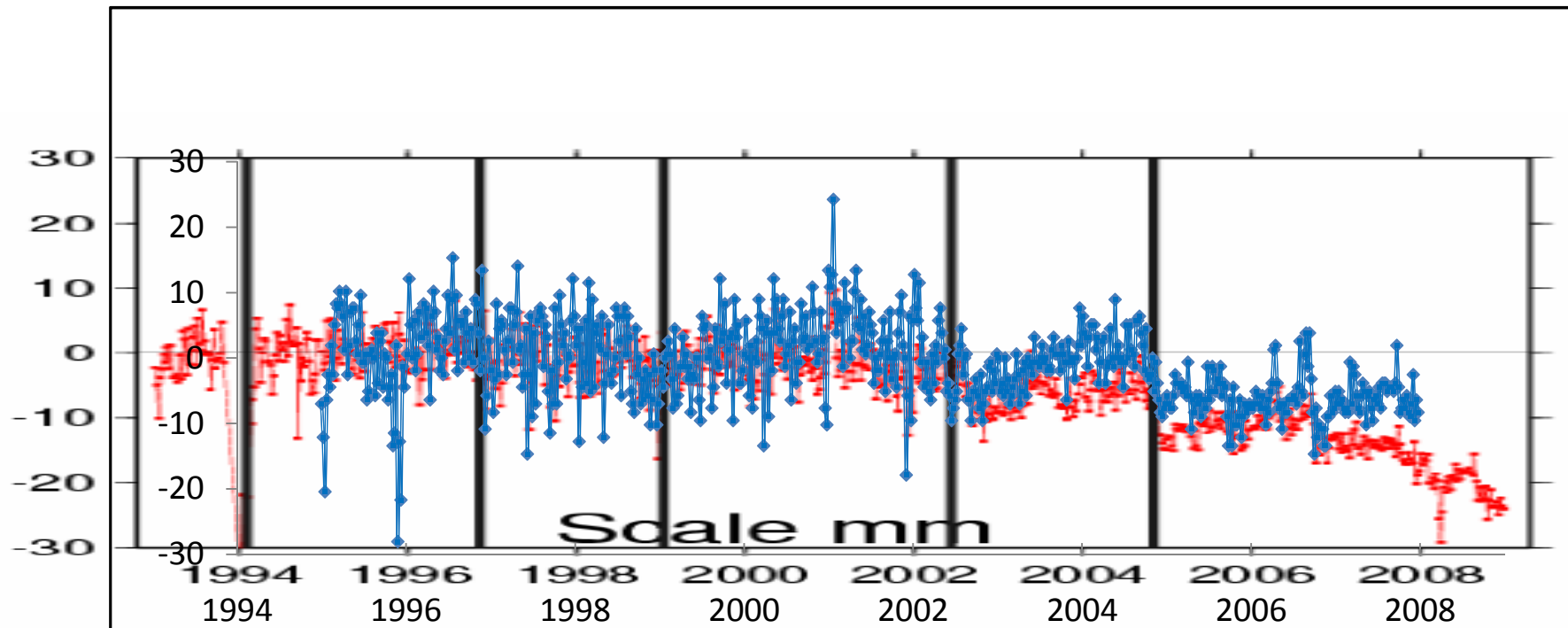
Comparison GOP vs IDS combined solution

- TRF parameters compared
- IDS comb. Plots from Zuheir Altamimi (RED) used as background
- BLUE graphs corresponds to GOP

Scale

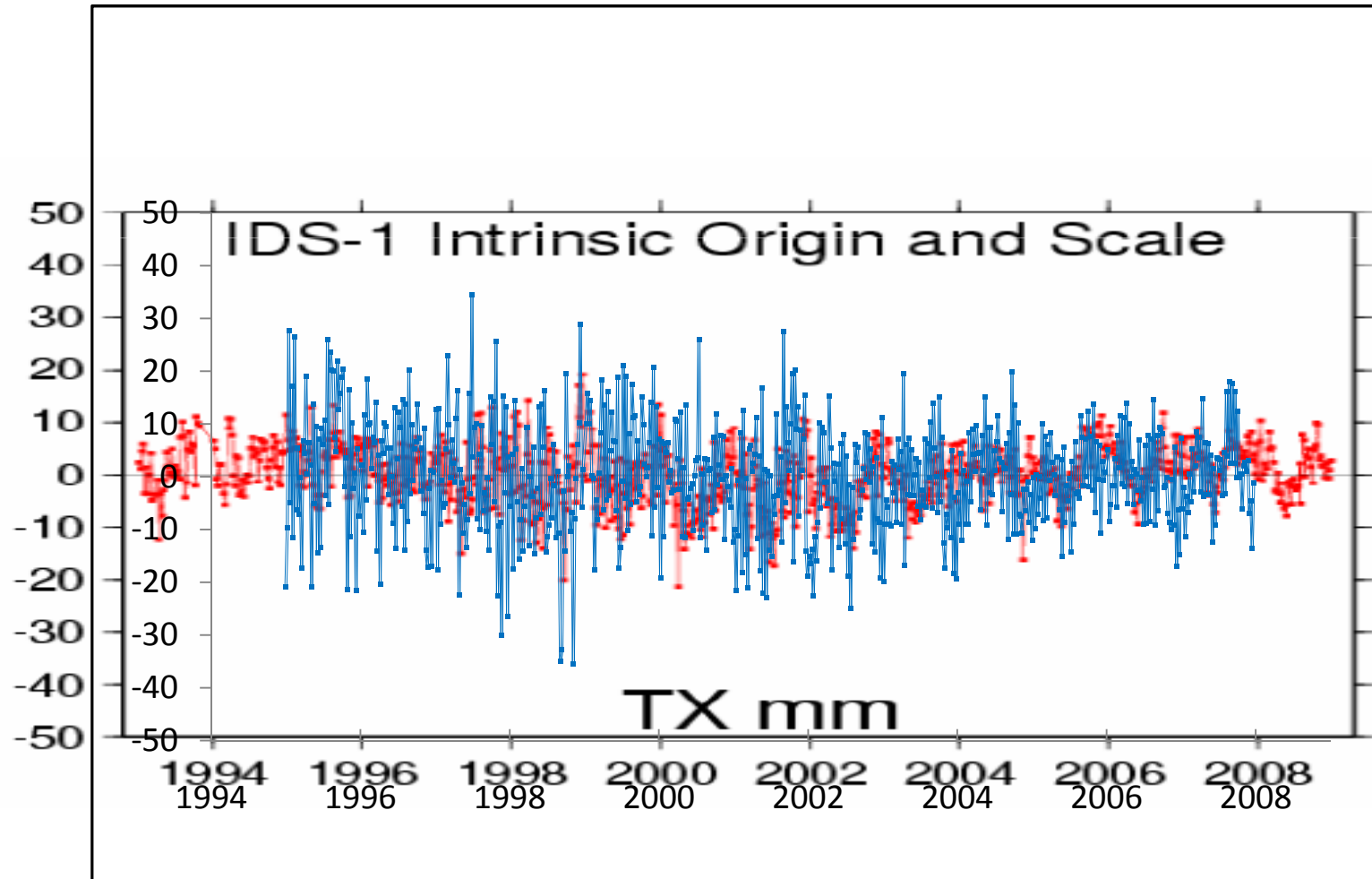
In 2001-2007 closer to 0

End of Topex – significant change



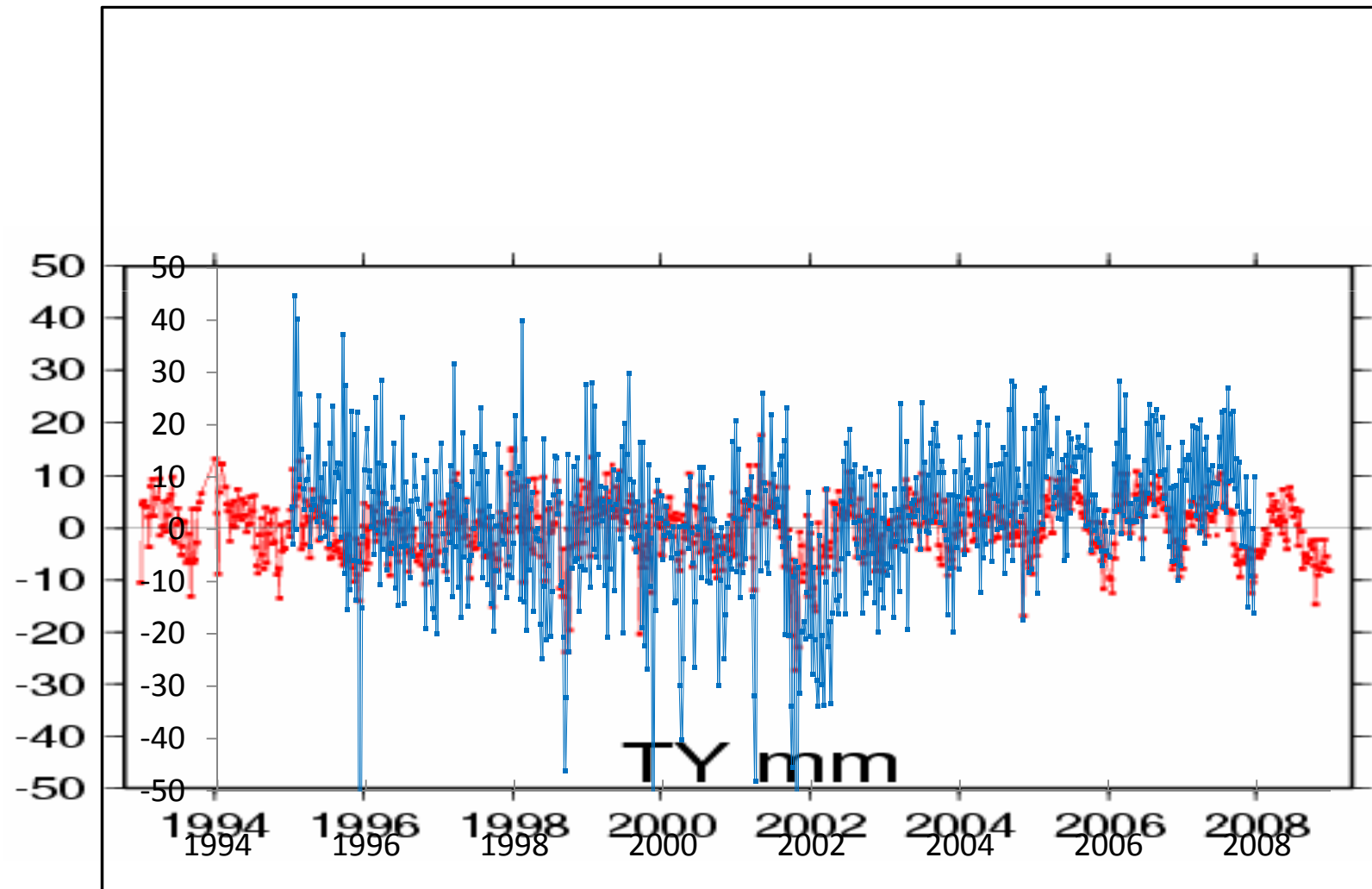
Tx

Higher variations



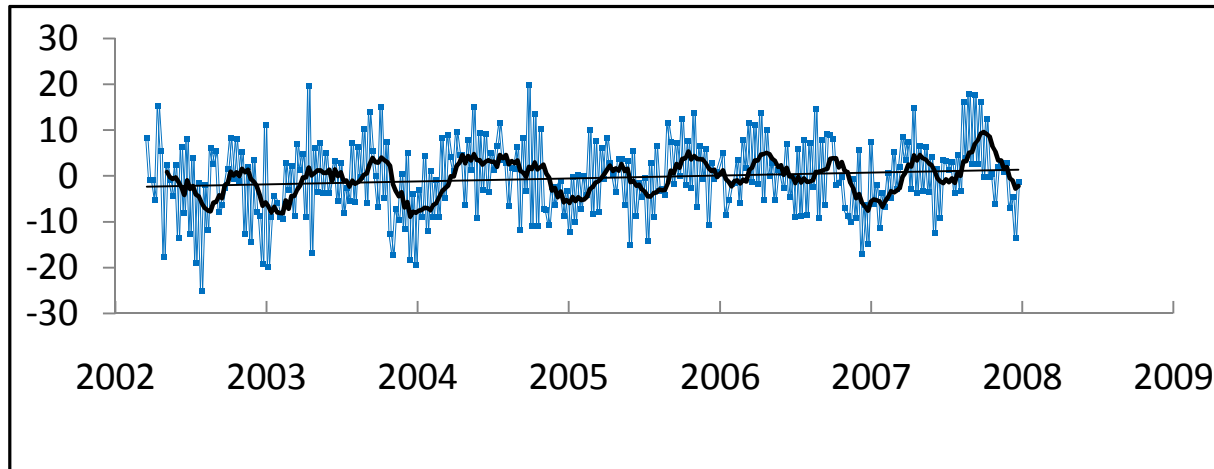
Ty

Higher variations
Down and up behaviour

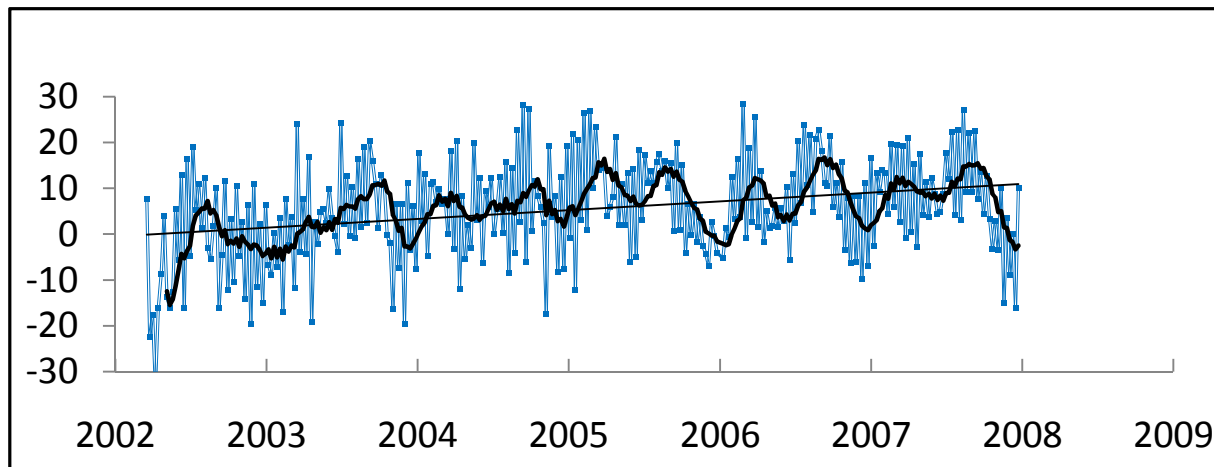


Tx, Ty periodicity

Significant semiannual periodicity at least from 2005
IDS combination and the other AC`s solutions - annual
Visible on 8 weeks averages (black line)



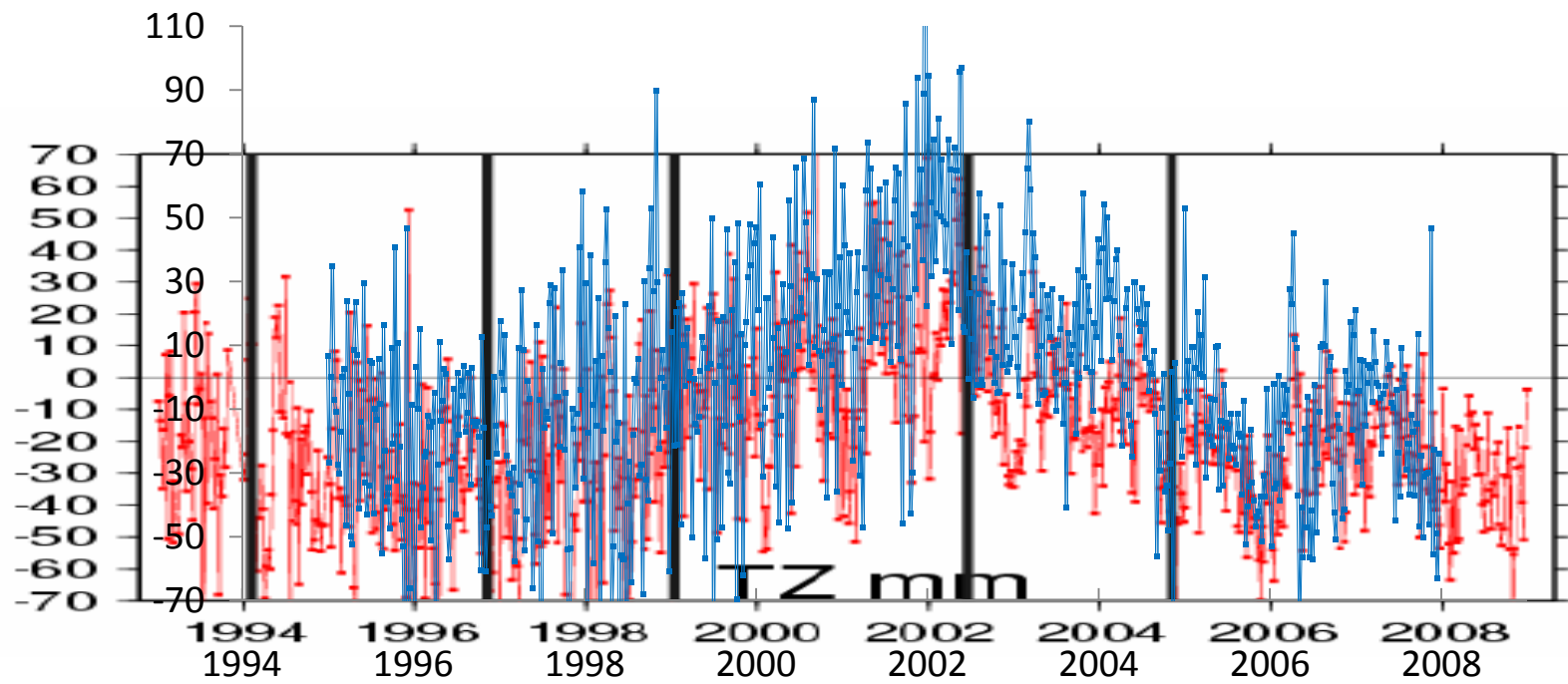
Tx(mm)



Ty(mm)

Tz

'up and down' behavior stronger than in IDS combination

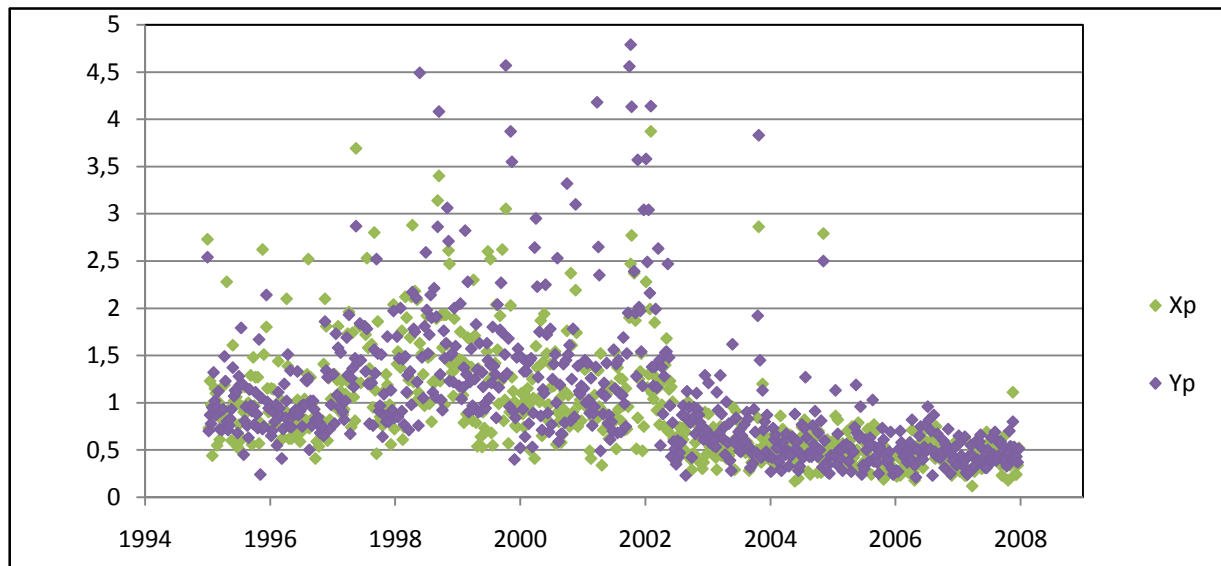


Pole comparison

IERS C04 as reference

RMS strongly decreased after Envisat and Spot-5 launch

RMS around 0.5 mas after 2002

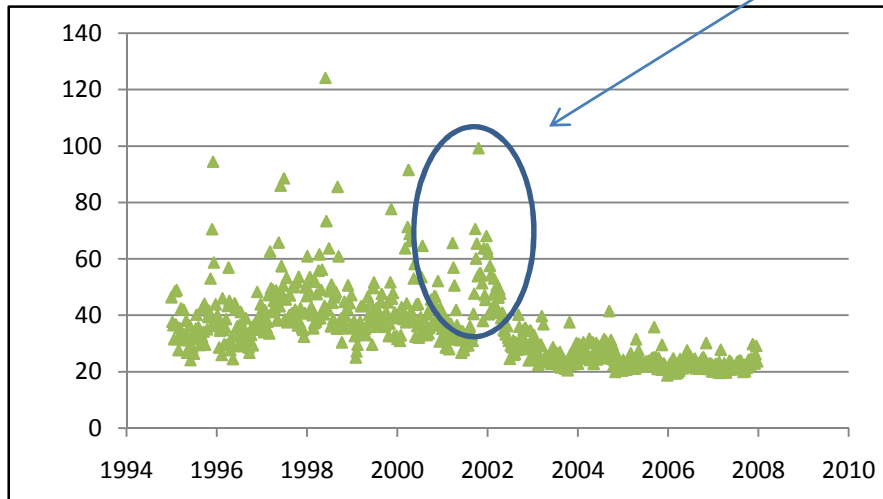


Xp, Yp
RMS(mas)

Period September 2001-May 2002

Significantly lower quality of results
GOP solution as well as IDS combination
Reason of this effect?

RMS GOP vs DPOD05 (mm)



DORIS - IDS-1 Weekly WRMS (mm)

