







## Latest results on the IDS contribution to ITRF2014

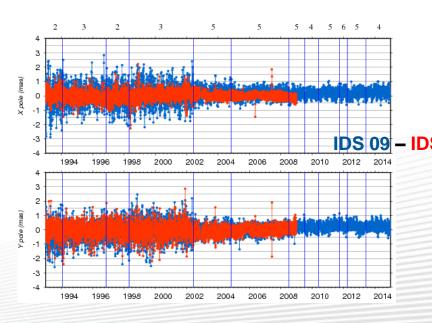
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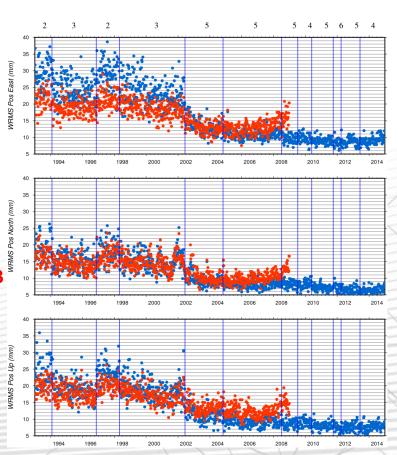


## Reminder

In comparison to the IDS contribution to ITRF2008 (ids 03), the IDS contribution to ITRF2014 (ids 09) presents 2 degradations in performances from 1993 to 2002.

- In terms of EOP differences wrt IERS C04 series (mainly in the X direction).
- In terms of station position residuals (mainly in the East direction).





## Investigations

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- What has changed for that time period since ITRF2008 ?
  - New 1998 SPOT4 data set.
  - New single AC solutions (including use of DORIS ground antenna phase laws).
  - New combination strategy.

Nb: That time period is not suppose to be impacted by beacon frequency variations and time variable gravity fields.

 New 1998 SPOT4 data set can not explain degradation for 1993-1997 and from 1999-2002.



## Investigations

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- Evaluation wrt ITRF2008 of single AC contributions to ITRF2008 and ITRF2014 showed so far no substantial degradation at the AC level for that time period.
- Tests done by Zuheir Altamimi and IDS CC from GSC series 20 and 21 (==20 + PCVs) showed no impact of phase laws in station positioning
  → PCVs is not at the origin of the degradation.
- Different strategy for the estimation of the combined EOPs and rotation constraints have been tested in vain.
- → New tests with different parameterizations for the combination of the single AC solutions have been undertaken.