



IDS News

Paris, CNES, 2014/03/27



IDS Calendar for 2014



- **IDS contribution to ITRF2013**
- **IDS activity report 2013 (1st quarter)**
- **IERS, IAG reports (1st quarter)**
- **New DORIS special issue**
- **IDS Workshop, Konstanz, Germany, 27-31 October 2014**
- **organisation GB elections : Analysis Coordinator and 1 Member-at-Large for 2015-2018 (2e semester)**
- **IDS/DORIS presentations at main meetings: EGU, AGU, COSPAR, AOGS?, REFAG?**



Activity Reports 2013



Preparation of:

- **IDS annual activity report**
- **Contribution to IERS annual report**
- **Contribution to IAG annual report**

Still missing reports:

- **Introduction (P. Willis) +conclusion for the IERS reports**
- **Network (J. Saunier) +summary**
- **Analysis Coordination (F. Lemoine) + summary**
- **IGN Data Center (B. Garayt)**

Analysis Centers:

- **ESA/ESOC (M. Otten)**
- **NASA/GSFC (F. Lemoine)**



IDS workshop, October 27-28 2014, Konstanz



3 events representing "New Frontiers of Altimetry":

OSTST meeting

SARAL/Altika workshop

IDS workshop

Venue: Steigenberger Inselhotel situated on Lake Constance, Germany,

The websites for registration and abstract submission are now open

Abstract submission:

<http://www.ostst-altimetry-2014.com/authors/>

Deadline: June 23

Registration:

<http://www.ostst-altimetry-2014.com/registration/>

Deadline: October 4 (before increase of registration fees).

Links soon on the IDS web site:

<http://ids-doris.org/report/meeting-presentations/ids-workshop-2014.html>



IDS workshop, October 27-28 2014, Konstanz



	Sunday 26th October	Monday 27th October	Tuesday 28th October	Wednesday 29th October	Thursday 30th October	Friday 31st October			
8am		Registration and Presentation upload	Registration and Presentation upload	Registration and Presentation upload	Registration and Presentation upload	Registration and Presentation upload			
9am		Project overview	OSTST Plenary session	Precision Orbit Determination (part I)	Near Real Time Products and Applications and Multi-Mission, Multi-Sensor Observations	The Geoid, Mean Sea Surfaces and Mean Dynamic Topography	Quantifying Errors and Uncertainties in Altimetry data	OSTST Plenary closing session	
10am		Global and local calval							IDS workshop 1
11am		Coffee break (10:30-11:00)	Coffee break (10:30-11:00)	Coffee break (10:30-11:00)	Coffee break (10:30-11:00)	Coffee break (10:30-11:00)	Coffee break (10:30-11:00)	Coffee break (10:30-11:00)	
12.30am		Instrument processing	OSTST Plenary session	Precision Orbit Determination (part II)	Tides, internal tides and high-frequency processes	Poster session	OSTST Plenary closing session		
		Poster session							
		Lunch	Lunch	Lunch	Lunch	Lunch			
2pm		Poster session (cont')	IDS work. 3	Science I: Inland waters (multi-mission and long-term monitoring)	Instrument Processing (part I): Corrections	IDS Governing Board	Regional and Global CAL/VAL for Assembling a Climate Data Record (part I)	Science II: Finer scale ocean processes (mesoscale and coastal)	Splinters Round Tables
3pm		Oceanography							
4pm		Land/sea ice	Coffee break (15:45-16:15)	Coffee break (15:45-16:15)	Coffee break (15:45-16:15)	Coffee break (15:45-16:15)	Coffee break (15:45-16:15)	Coffee break (15:45-16:15)	
5pm	Welcome cocktail and Registration	Inland waters and Ka band	Outreach, Education & Altimetric Data Serv.	Instrument Processing (part II): Measurement, retracking (SAR/LRM)	Regional & Global CAL/VAL for Assembling a Climate Data Record (part II)	Science III: Regional and basin-scale processes and sea level rise	Poster session		
6pm									
7pm		Ice breaker cocktail							
8pm					Gala Dinner (Boat Cruise on Bodensee)				
9pm									
10pm									

Legend:

SARAL/AltiKa workshop
IDS workshop
OSTST



Elections for 2 positions for 2015- 2018 by the IDS Associates:

■ Analysis Coordinator

Frank Lemoine has been Analysis Coordinator since 2005:

2005-2008 (replacing Martine Feissel-Vernier during the term 2003-2008) + 2009-2012 + 2013-2014 (*)

■ Member at Large

John Ries has been one of the two Members at Large since 2003:

2003-2008 + 2009-2012 + 2013-2014 (*)

() term extension for two years, due to set-up of elections every two years to renew elected members (3 = ACs' rep., DCs' rep., 1 MatL, then 2 = ACoord. , 1 MatL) according to the new 2011 ToR*



IDS GB elections 2014



Planning will be discuss today during GB meeting

CB proposal:

■ ~~September~~ **May: call for Nomination**

■ **October: call for Vote**

■ ~~December~~ **October: GB meeting at AGU IDS Workshop with current and elected members**

■ **January 2015 : start of 4-yr term for the two new elected members**

- ◆ An overlap period of a few months for the new Analysis Coordinator should be considered



Future DORIS presentations and sessions proposals at main meetings



■ 2014: EGU – Vienne

Oral: - IDS contribution to ITRF2013 (Moreaux, Lemoine, Willis, Capdeville, Otten, Stepanek, Kuzin, Ferrage)

Posters: - Precipitable water trends and variability investigated from homogenized global, long-term, GPS and DORIS datasets (Bock, Willis, Collilieux)

- A high-quality, homogenized, global, long-term (1993-2008) DORIS precipitable water dataset for climate monitoring and model verification (Bock, Willis, Wang, Mears)
- Time-variable Gravity Solutions from 1993 to 2013 from SLR and DORIS data (Lemoine, Chinn, Zelensky, Beall, Melachroinos)
- DORIS and GNSS processing at CNES/CLS for the contribution to the next ITRF2013 (Loyer, Capdeville, Soudarin, Mezerette, Lemoine, Mercier, Perosanz)
- Using DORIS for modeling the Vertical Total Electron Content of the Earth's Ionosphere (Dettmering, Limberger, Schmidt)
- Combination at the Observation Level: contribution to ITRF2013 (Richard, Bellanger, Biancale, Bizouard, Bourda, Bouquillon, Coulot, Deleflie, Francou, Gambis, Lemoine, Loyer, Pollet, Soudarin)
- Terrestrial and celestial reference frame realization with highly elliptical orbit, the ESA Spate-Time Explorer mission (Svehla, Rothacher, Hugentobler, Nothnagel, Willis, Biancale, Ziebart, Appleby, Schuh, Adam, Iess, Cacciapuoti)



Future DORIS presentations and sessions proposals at main meetings



■ 2014:

◆ COSPAR – Moscou (2 - 10 Aug.)

PSD.1 Satellite Dynamics for Earth and Solar System Sciences and Applications (P. Willis, H. Bock)

◆ REFAG – Luxembourg (13 – 17 Oct.)

◆ AGU – San Francisco (15 – 19 Dec.)

No DORIS session is proposed

■ 2015:

◆ IAG General Assembly – Prague (22 June – 2 July)

■ 2016:

◆ COSPAR – Istanbul (30 July – 7 Aug.)



DORIS special issue



- **A new DORIS special issue is planned this year in Advances in Space Research**
- **Guest editor: Frank Lemoine**

<http://ids-doris.org/report/meeting-presentations/ids-awg-03-2014.html>

informations about AWG meeting in Paris;

<http://ids-doris.org/report/meeting-presentations/ids-workshop-2014.html>

informations about IDS Workshop in Konstanz;

<http://ids-doris.org/system/earthquakes-close-to-doris-sites.html>

table with list of Earthquakes with magnitude larger than 6 in the vicinity of DORIS sites (less than 500 km) since Dec. 2008 based on USGS Earthquake notifications.

<http://ids-doris.org/system/compilation-of-the-events.html>

table with chronology of the main events that occurred on the DORIS space segment and ground segment (events impacting data, station events, system events, earthquakes). Not automatically updated for now.

<http://ids-doris.org/contribution-itr2013.html>

data analysis summary of the DORIS weekly SINEX series used in the IDS combination for the realization of ITRF2013



Plans for 2014



■ tutorial for RINEX/DORIS data

A new page to gather the documents and the presentations about the RINEX/DORIS data already on line on the IDS web site, eventually with some routines of writing/handling the data files.

Objective: to help Analysis Centers to use this format that will be the only one from the next DORIS mission.

Description

Station position

Orbit residuals

Combination parameters

Network viewer

The IDS Web Service

The IDS Web service provides tools to browse **time series** of DORIS-related products.

Besides products provided by the CNES Orbitography Team and the IDS components (Analysis Centers and Combination Center), this service allows comparing time evolutions of coordinates for DORIS and GNSS stations in co-location, thanks to a collaboration with the IGS [Terrestrial Frame Combination Center](#).

The tools

The tools proposed by this web service are:

- a [network viewer](#) to select sites
- a family of **plot tools** to visualize time series

The time series

The time series that can be visualized with the plot tools are:

- [Station position](#) differences at observation epochs relative to a reference position (North, East and Up trended time series).
- [Orbit residuals](#) and amount of station measurements from CNES Precise Orbit Ephemeris processing (RMS of post-fit orbit residuals, total and validated number of DORIS measurements per arc).
- [Combination parameters](#) i.e. outputs of the IDS Combination Center analysis (WRMS of station position residuals, scale and translation parameters, number of stations used in the analysis).

The station position time series

The station position time series are:

- **for DORIS sites** series from the IDS Analysis Centers and combined series from the IDS Combination Center.
- **for GNSS sites colocated with DORIS** combined series from the IGS TRF Combination Center.

Following the tab [Station position](#), you can access to **all the time series**.

Following the tab [Network viewer](#), you can access to the **DORIS combined time series** and the **GNSS combined time series at colocated sites only**.

Series selection



You can choose here the data to plot :

1. Select a station from the list or the map.
2. Select data series from the station tables.
3. If desired, complete your selection with additional data.
4. Click on "Plot new graphs" when ready.

Select a station from list...

KA



DORIS

DAKAR : *DAKA*

HARTEBEESTHOEK : *HBKA, HBKB, HBLA, HBMB, HBLB*

KAUAI : *KOKA, KOLB*

YUZHNO-SAKHALINSK : *SAKA, SAKB*

GNSS

KAUAI : *KOKB*




Choose on a map















Series selection


You can choose here the data to plot :

1. Select a station from the list or the map.
2. Select data series from the station tables.
3. If desired, complete your selection with additional data.
4. Click on "Plot new graphs" when ready.

KAUAI : KOKB

 Choose on a map

DORIS stations		Series					
Name	Code	ids12wd01	esa13wd01	gsc14wd23	ign11wd01	ina12wd01	lca11wd02
KAUAI  	KOKA	<input checked="" type="checkbox"/> 	<input type="checkbox"/> 	<input type="checkbox"/> 	<input type="checkbox"/> 	<input type="checkbox"/> 	<input type="checkbox"/> 
	KOLB	<input checked="" type="checkbox"/> 	<input type="checkbox"/> 	<input type="checkbox"/> 	<input type="checkbox"/> 	<input type="checkbox"/> 	<input type="checkbox"/> 


GNSS stations		Series
Name	Code	igs14wp01
KAUAI  	KOKB	<input checked="" type="checkbox"/> 

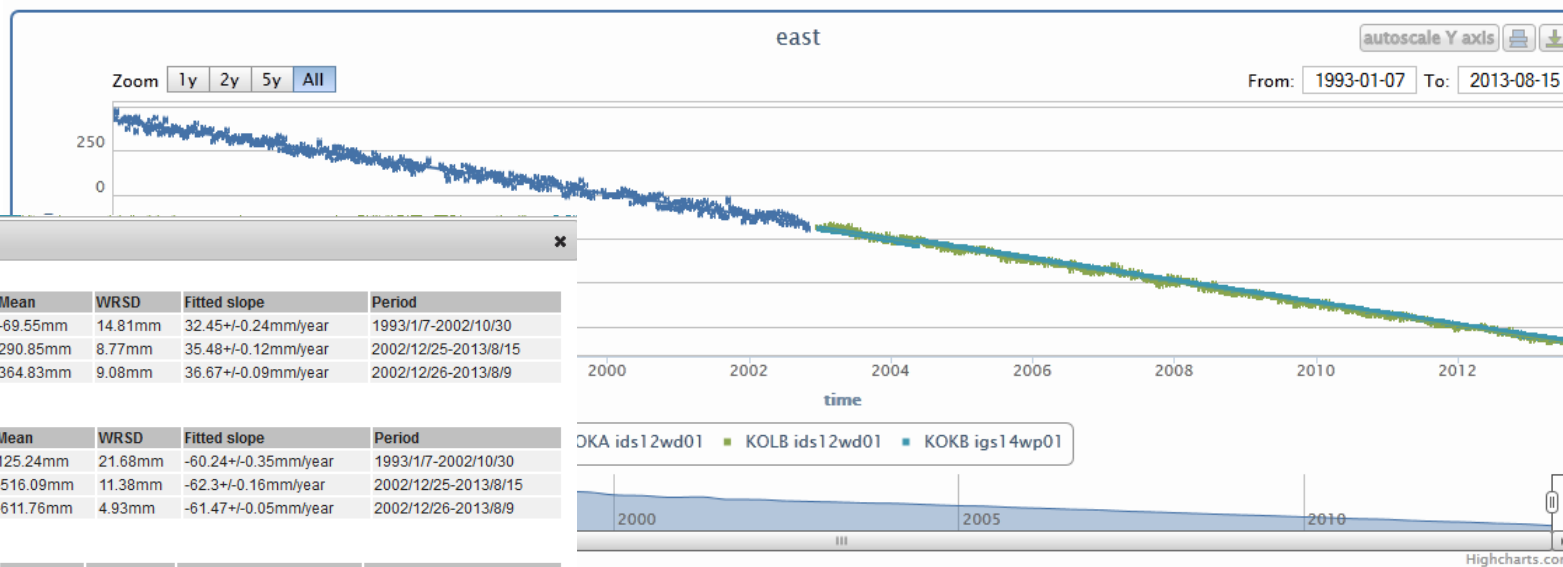
Additional data

None

Unselect all series

Reset all selections

 Plot new graphs


Statistics
north

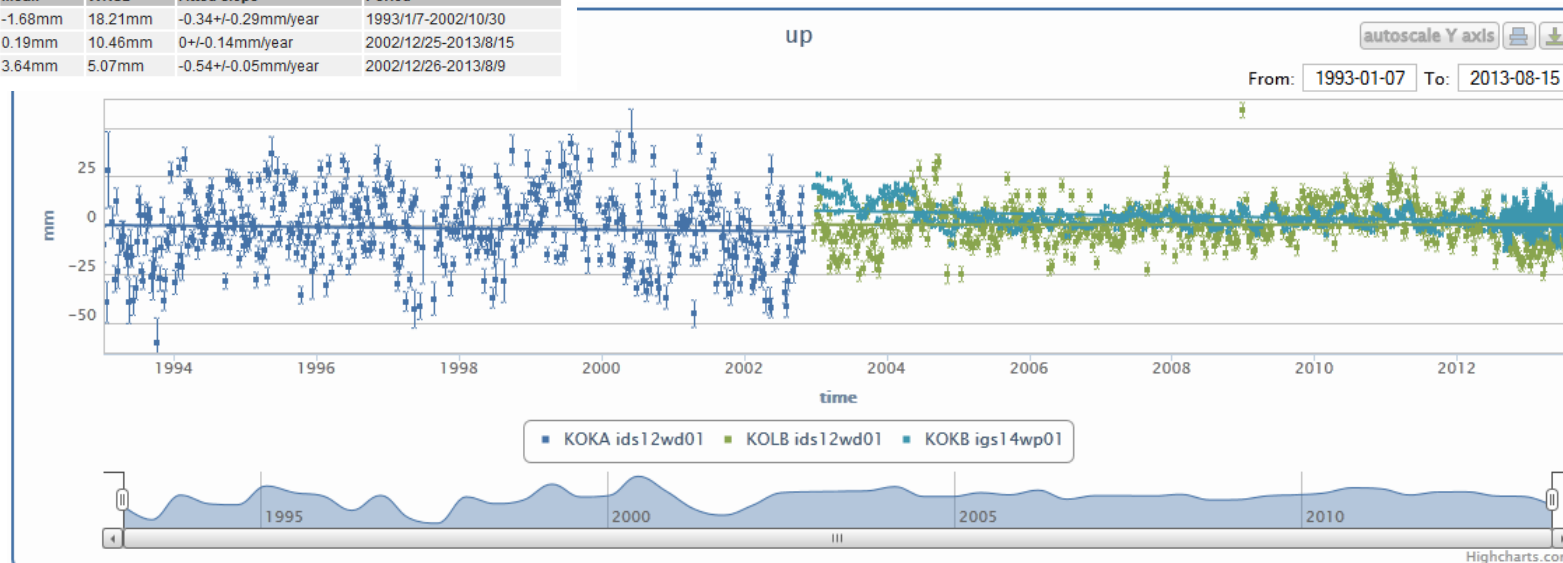
Series	Mean	WRSD	Fitted slope	Period
KOKA ids12wd01	-69.55mm	14.81mm	32.45+/-0.24mm/year	1993/1/7-2002/10/30
KOLB ids12wd01	290.85mm	8.77mm	35.48+/-0.12mm/year	2002/12/25-2013/8/15
KOKB igs14wp01	364.83mm	9.08mm	36.67+/-0.09mm/year	2002/12/26-2013/8/9

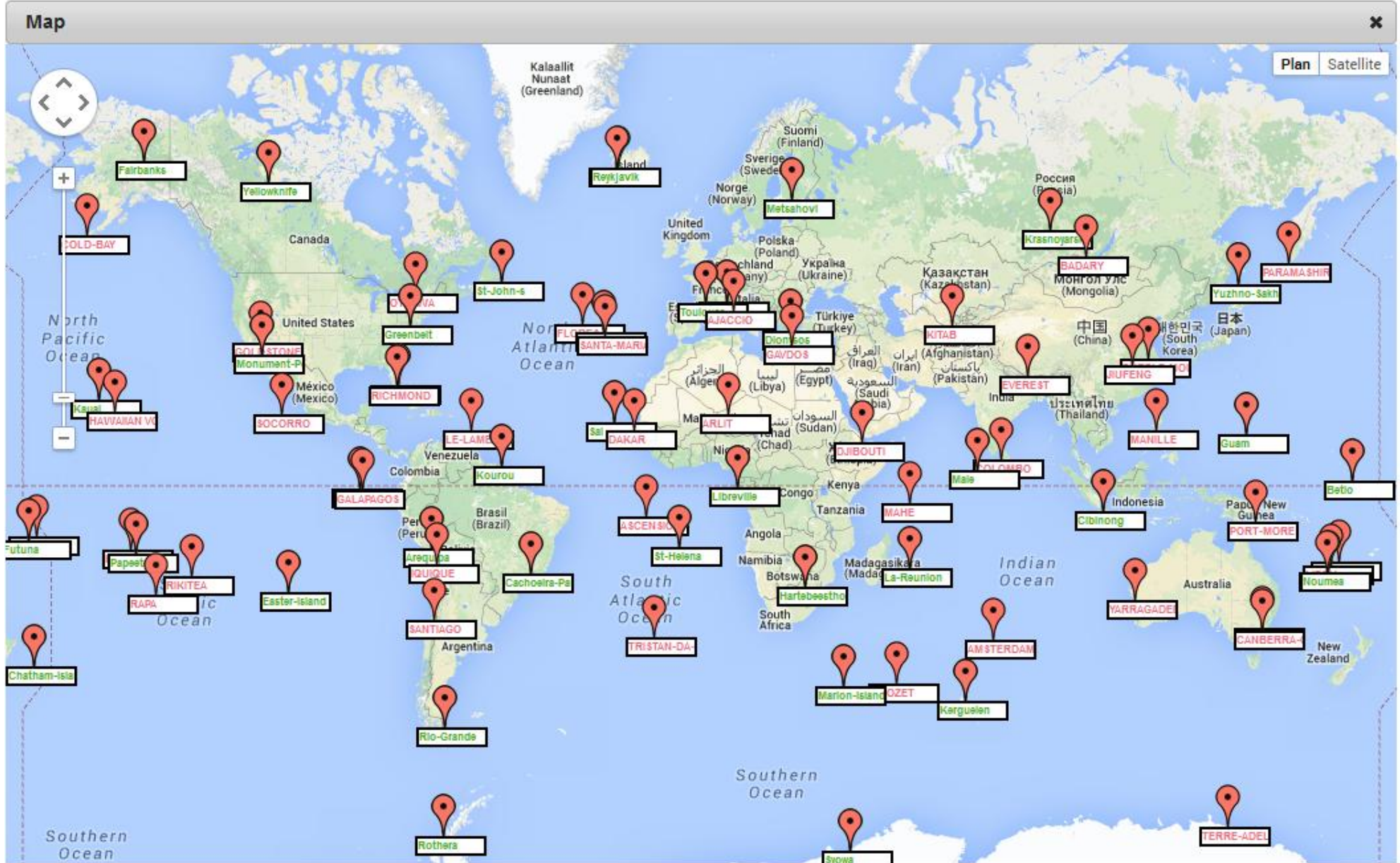
east

Series	Mean	WRSD	Fitted slope	Period
KOKA ids12wd01	125.24mm	21.68mm	-60.24+/-0.35mm/year	1993/1/7-2002/10/30
KOLB ids12wd01	-516.09mm	11.38mm	-62.3+/-0.16mm/year	2002/12/25-2013/8/15
KOKB igs14wp01	-611.76mm	4.93mm	-61.47+/-0.05mm/year	2002/12/26-2013/8/9

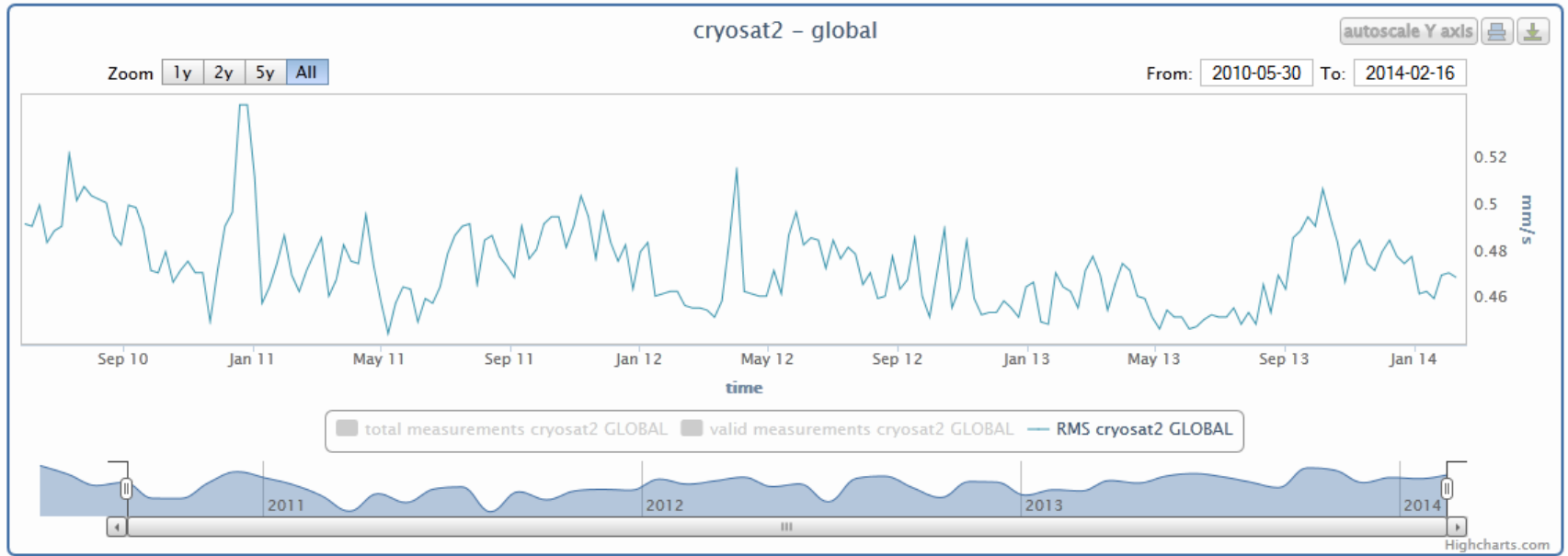
up

Series	Mean	WRSD	Fitted slope	Period
KOKA ids12wd01	-1.68mm	18.21mm	-0.34+/-0.29mm/year	1993/1/7-2002/10/30
KOLB ids12wd01	0.19mm	10.46mm	0+/-0.14mm/year	2002/12/25-2013/8/15
KOKB igs14wp01	3.64mm	5.07mm	-0.54+/-0.05mm/year	2002/12/26-2013/8/9





Description Station position Orbit residuals Combination parameters Network viewer




Description | Station position | Orbit residuals | Combination parameters | Network viewer

Series selection ✕

Charts type selection (All / None)

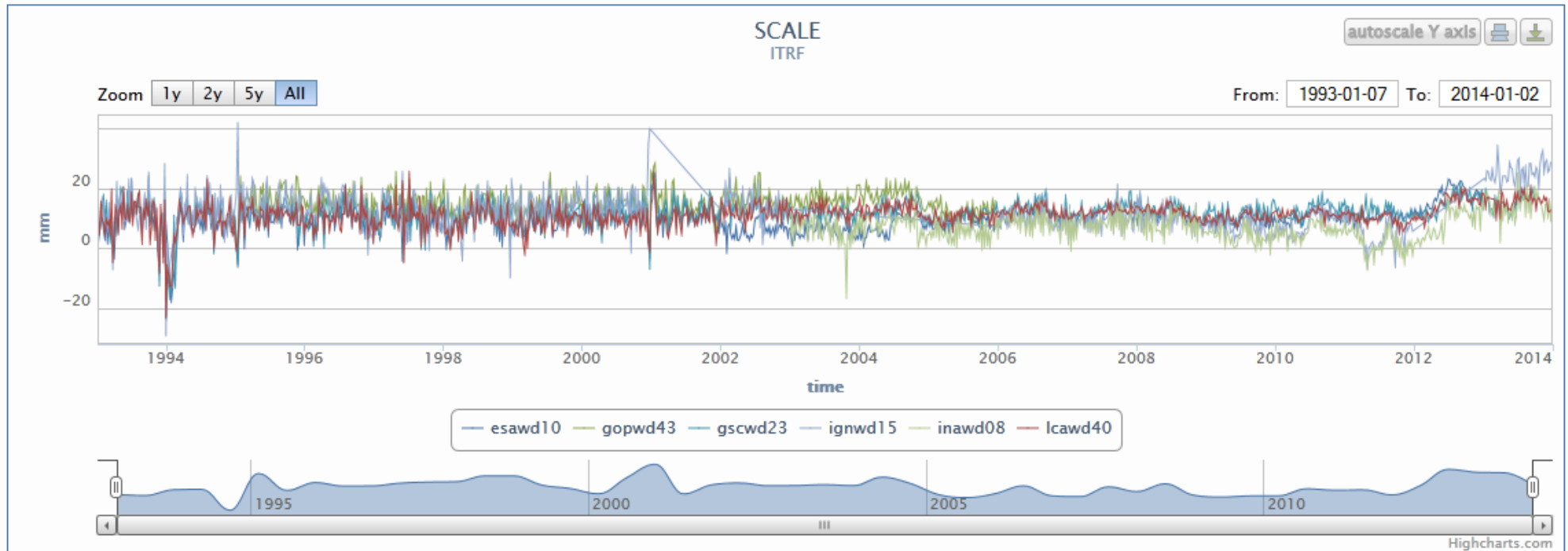
Number of stations in the original SINEX Number of stations used for the estimation of Helmert parameters
 WRMS SCALE TX TY TZ

 Charts display may be slow if you select a large number of charts and series (up to 2 minutes)

Reference ITRF

Analysis centers	Series				
ESA	<input checked="" type="checkbox"/> esawd10	<input type="checkbox"/> esawd08			
GOP	<input checked="" type="checkbox"/> gopwd43				
GSC	<input type="checkbox"/> gscwd24	<input checked="" type="checkbox"/> gscwd23	<input type="checkbox"/> gscwd21	<input type="checkbox"/> gscwd20	
IGN	<input checked="" type="checkbox"/> ignwd15				
INA	<input checked="" type="checkbox"/> inawd08				
LCA	<input checked="" type="checkbox"/> lcawd40				

Plot new graphs



mapshup

Search / Add a layer url

S S R M O

1992

1995

1998

2001

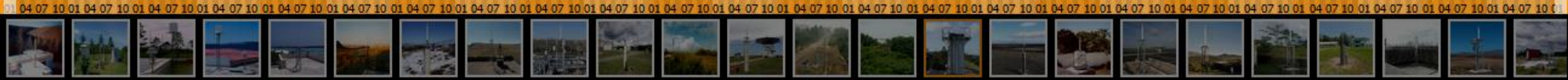
2004

2007

2010

2013





IDS WEB SERVICE: STATIONS COORDINATES [X]

Select data to plot from the following DORIS antenna selection :

- KOKA
- KOLB

KAUAI (DORIS) [X]

DORIS

GNSS