



IDS news

- **IDS life: latest news**
- **Data/products**
- **Website/Webservice**
- **Reports**
- **Newsletters**

Position	Term	Status	Name	Affiliation	Country
Analysis coordinator	2015-2018	Elected	Hugues Capdeville Jean-Michel Lemoine	CLS CNES/GRGS	France
Data Centers' representative	2017-2020	Elected	Patrick Michael	NASA/GSFC	USA
Analysis Centers' representative	2017-2020	Elected	Frank Lemoine (chair)	NASA/GSFC	USA
Member at large	2015-2018	Elected	Marek Ziebart	UCL	UK
Member at large	2017-2020	Elected	Denise Dettmering	DGFI/TUM	Germany
Director of the Central Bureau	Since 2003	App.	Laurent Soudarin	CLS	France
Combination Center representative	Since 2013	App.	Guilhem Moreaux	CLS	France
Network representative	2017-2020	App.	Jérôme Saunier	IGN	France
DORIS system representative	2017-2020	App.	Pascale Ferrage	CNES	France
IAG representative	2017-2020	App.	Petr Štěpánek	Geodetic Pecny	Obs. Czech Republic
IERS representative	2017-2020	App.	Brian Luzum	USNO	USA

- **Rolf Koenig is the new point of contact for the GFZ Associate Analysis Center**

(Sergei Rudenko moved to DGFI/TUM on August 1st)

- **Creation of the WG « Near Real Time data »**

Objective: to implement delivery of DORIS data in NRT for assimilation in ionospheric model and other potential rapid products

Chair: Denise Dettmering (DGFI/TUM)

Based on test results (cf Jean-Michel's presentation at IDS Workshop),
CNES decided to switch back to DIODE time tagging.

→ Back to Version 001 (instead of 010)

Routine delivery from Wednesday January 25th, for all missions
(JASON2, CRYOSAT-2, HY-2A, SARAL, JASON3, SENTINEL3A) with a
latency of 1 day (instead of 3 days).

Delivery of previous periods done in February

Still some files missing at CDDIS only for S3A

Still TBD: clean-up in data directories + readme

DPOD

- Storage of DPOD solutions has been reorganized at the Data Centers:
- All the versions of the current and past DPOD are stored with version numbers in corresponding directories:

pub/doris/products/dpod/dpod2000

pub/doris/products/dpod/dpod2005

pub/doris/products/dpod/dpod2008

pub/doris/products/dpod/dpod2014

- The latest recommended DOPD version is in:

pub/doris/products/dpod/

→ dpod2014_current.snx (currently dpod2014_1.00.snx)

→ dpod2014_current.txt (currently dpod2014_1.00.txt)

- Readme: products/dpod/dpod.readme

Cumulative solutions

- Available at Data Centers in `doris/products/sinex_global/ids/`
- Convention name: `idsYYdXX.snx` and `idsYYdXX.ssc`
- Delivery every 3 months
- Current version `ids17d01.snx`
- Readme: `products/sinex_global/ids/ids.snx_global.readme`



IDS web site

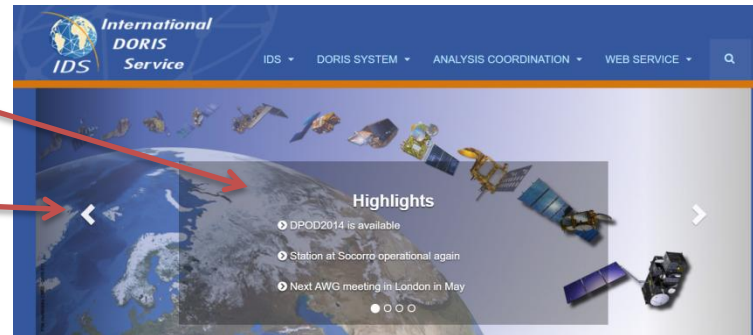
<http://ids-doris.org>



highlights

slideshow

the 4 parts of the website



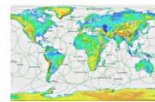
IDS

Organization of the service and documents, access to the data and products, event announcements, contacts and links.



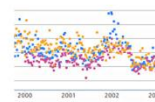
DORIS System

Allows to access general description of the system, and gives information about the system events and the tracking network.



Analysis Coordination

Provides information and discussion areas about the analysis strategies and models used in the IDS products. It includes also the information about the Combination Center activities.



Web service

Gives access to DORIS-T, the IDS Web service, that proposes a family of plot tools to visualize time series of DORIS-related products and a network viewer to select sites.

citation

Acknowledge IDS

Whenever you use IDS data, products, or results in a publication, please include the proper citation.

Survey

WHAT'S NEW ON IDS

IDS - December 2016

New Chair of the IDS Governing Board from January 1, 2017 (dorisat)

IDS - October 2016

Jason-2 data: No orbit file and no DORIS 2 data are available on IDS data Centers during the period of orbit change...

What's new on IDS
What's new on DORIS
Site updates

Footer: quick links

Documentation

- Table of documents
- Newsletter
- Bibliography
- Activity reports
- Documents for analysts
- Presentations at IDS meetings
- IDS-related presentations
- DORIS-related presentations

About DORIS

- Tables of data and products
- Discover DORIS (AVISO website)
- List of stations (sitelogs)
- List of satellites
- Videos of satellites
- Network on Google Earth

Monitoring

- Visualize products time series
- Table of system events
- MOE statistics
- POE statistics



IDS web site new section « Combination Center »



Home - International DORIS Service

Sécurisé | https://ids-doris.org

International DORIS Service

IDS ▾ DORIS SYSTEM ▾ ANALYSIS COORDINATION ▾ WEB SERVICE ▾

Activity & Products

Cumulative solution

DPOD

Contributions to ITRF ▸

Next AWG meeting in London

Presentation

Combination Center ▸

Documents related to data analysis

About DORIS/RINEX format

Analysis related events

ITRF2008


ITRF2014


- Graphic library upgraded
- Selection windows revised
- New version of the network viewer
- IDS combined solution is proposed by default
(stations, combination parameters, EOP)
Only the 5 last years are displayed by default
→ One quick plot in one click



data

TOULOUSE : *TLHA*, *TLSA*, *TLSB*

DORIS stations			Series						
Name		Code	ids17wd05	esa17wd04	gop17wd03	grg17wd03	gsc17wd05	ign17wd05	ina17wd05
TOULOUSE	 	TLHA	 	 	 	 	 	 	 
		TLSA	 	 	 	 	 	 	 
		TLSB	 	 	 	 	 	 	 

☐ Unselect all series Reset all selections



IDS webservice

<http://ids-doris.org/webservice>



Station position

Station position differences at observation epochs relative to a reference position (North, East and Up trended time series).

Combination parameters

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).

Earth Orientation Parameters

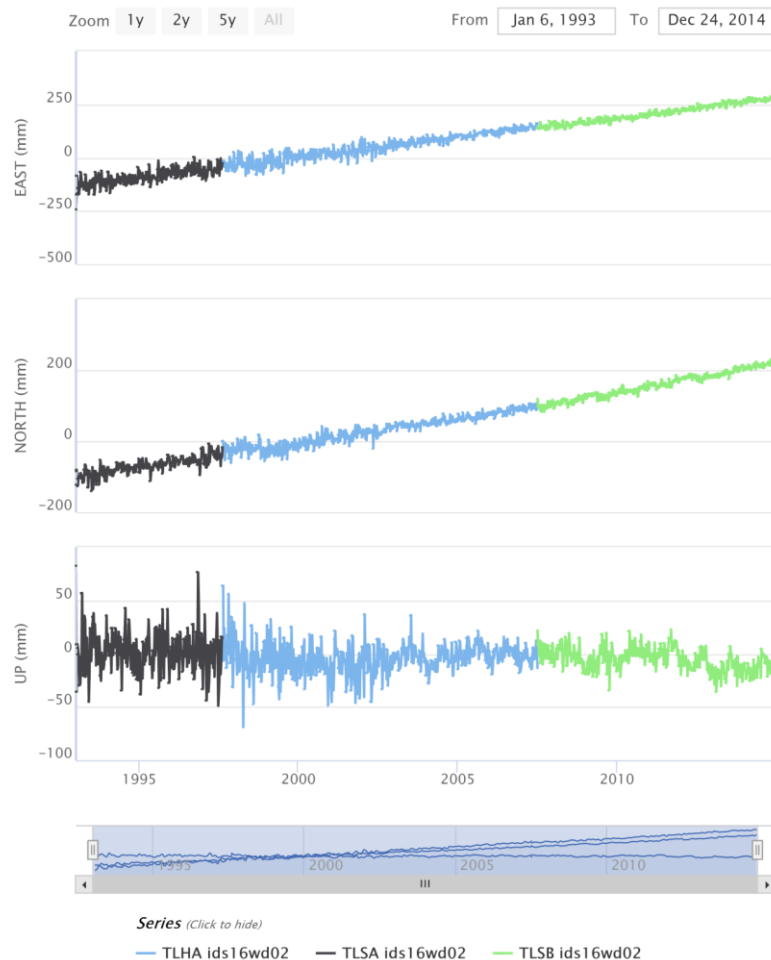
Earth Orientation Parameters from the IDS Combination Center analysis (Xp, Yp, LOD).

Orbit residuals

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).

Network viewer

A network viewer to select sites. You can access to the **DORIS combined time series** from the IDS Combination Center and **GNSS combined time series at colocated sites** from the IGS TRF Combination Center.



DORIS IDS Reports



IDS Annual report 2016

- all contributions received but one
- objective: June

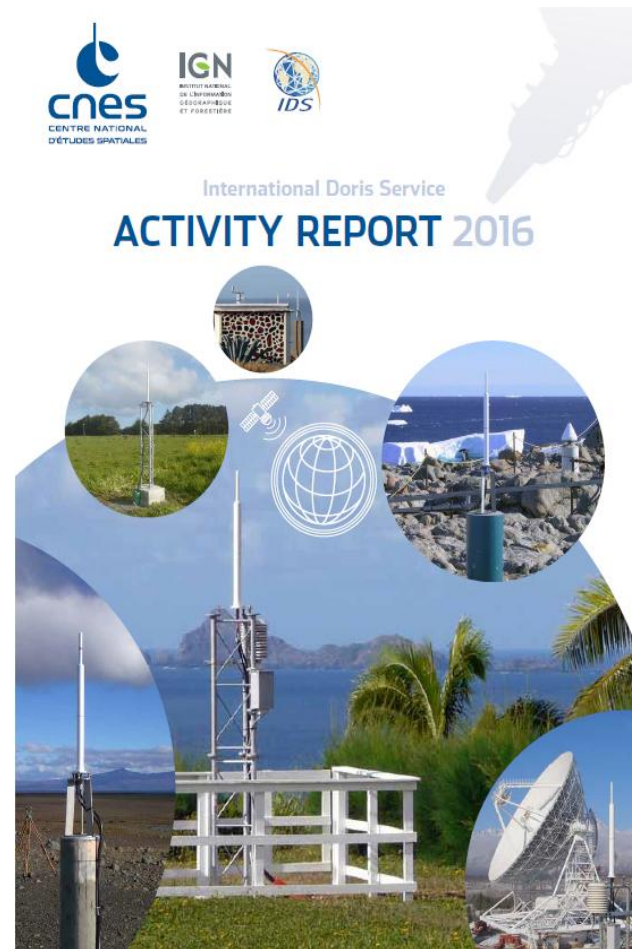
IDS report for IERS

Submitted

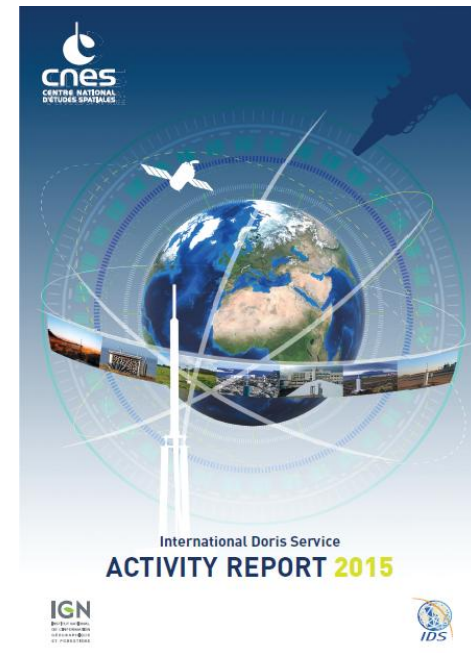
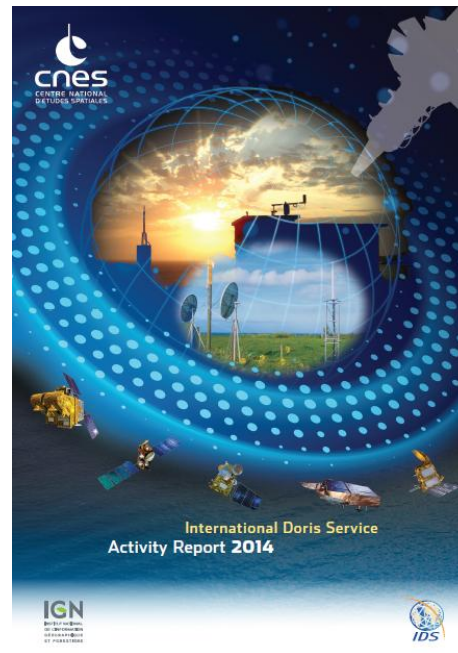
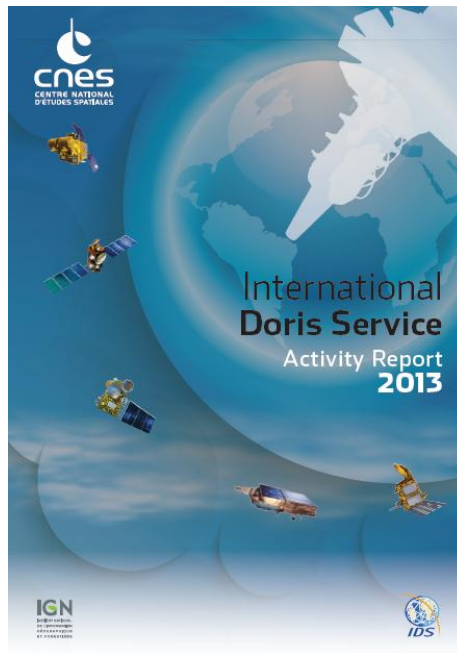
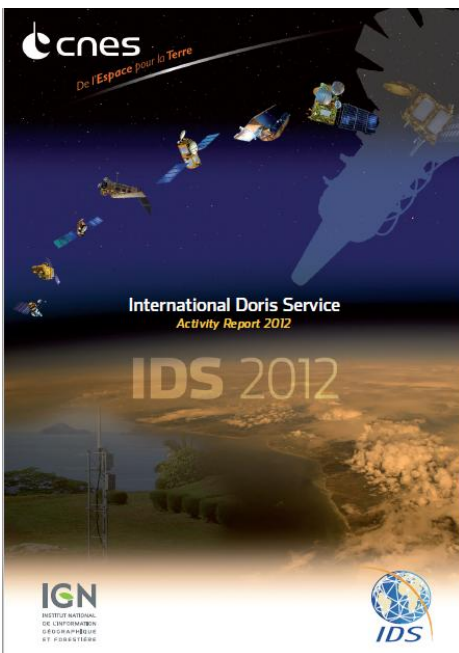
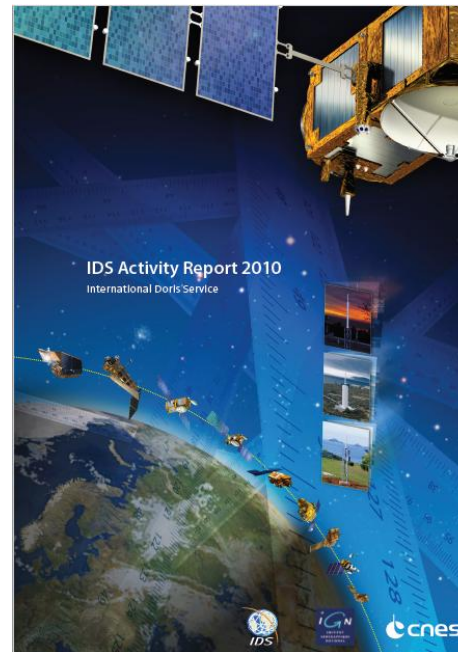
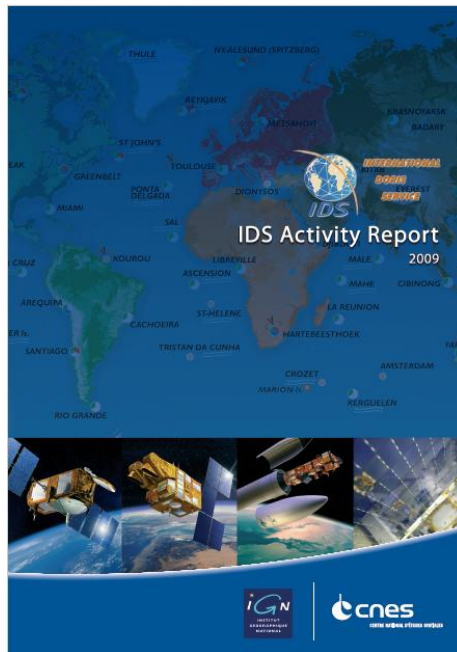
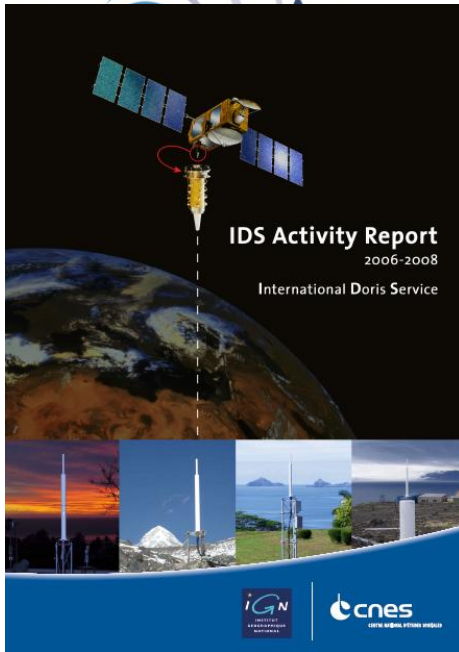
IDS contribution for IAG travaux 2015-2016

Submitted

Thanks to all contributors!



IDS Activity Reports





Editorial

This is the first issue of the Newsletter of the International DORIS Service. The intention is to improve the flow of information within the community of providers and users of DORIS data and products, to highlight the activities of the groups participating in the IDS, and to bring the DORIS and IDS news to a wider audience, from the host agencies to the other

in other services. We plan to provide regular information on the DORIS system, its evolution, the evolution of the space and ground segments, and the life of IDS, such as news from the service's components, meetings, various activities, results, DORIS is encouraged and invited to contribute to the Newsletter on any topic considered of important interest for

the community. Send your material at any time to the IDS Central Bureau.

We hope you enjoy reading the IDS Newsletter and that it stimulates your interest in the data, products and applications of the DORIS system.

A high performing network

Andrea Soudan (CLS)

DORIS provides a reliable service in 2015 with a network availability maintained over 95% of operating stations thanks to the joint effort of CNES, IGN and all agencies hosting the stations.



The network availability rate is expressed as a percentage of operating ground network stations.

It is far above the 75% line, which is the minimum CNES target to ensure a good performance of the DORIS system.

IDS Newsletter

Page 1

#1 April 2016

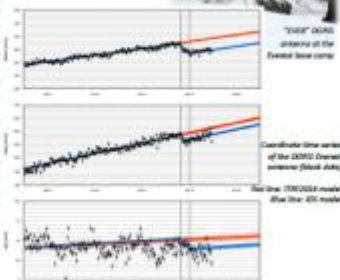


2015 Nepal Earthquakes moved the DORIS station on Everest by a few centimeters

Souham Menon (CLS)

On 25 April, 2015, an earthquake with a magnitude of 7.8 on the Richter scale shook central Nepal approximately 30 km northwest of the city of Kathmandu. The DORIS earthquake station was moved, also followed by a large number of aftershocks, including one that measured 7.3 on 12 May. Seismicity in the Himalaya Mountains is due to the collision of the Indian and Eurasian plates, which are converging at a relative rate of 40-50 mm/y. All these events were also recorded by the DORIS station "EVER" located at the Everest base camp (70-80 km from the epicenter). Monitoring the position of the DORIS antenna revealed a sudden change as of 15 April 2015. The offsets of positions resulting from the earthquakes, in the directions north and east, and along the up/down axis are estimated from the updated linear displacement model based on the DORIS time series and by comparing them with those produced by the ITRF2014 model.

The offsets showed that the successive earthquakes in Nepal moved the DORIS Everest station 44 mm southwards, 26 mm westwards and 11 mm downwards. Analysis of a longer time series after mid-2015 will enable us to determine how the earthquake also changed the velocity of the DORIS Everest station.



IDS Newsletter #2

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#2 July 2016



IDS held its Workshop 2016 in La Rochelle

Laurent Soudan (CLS)

The IDS Workshop 2016 was held in La Rochelle, France, on October 31 and November 1, in conjunction with a SAR Altimetry Workshop and the 2016 Ocean Surface Topography Science Team meeting. About 30 people participated in the Workshop. The program was divided into four sessions, during which 34 contributions were presented. The PDF versions are available on the IDS website for viewing or downloading.



Attentive audience at IDS Workshop 2016

The objective of the first session was to present the status and developments in the DORIS network and constellation, whose main features are reported in this issue. Thomas Kluge from BKG presented the VLBI-DORIS compatibility tests performed at the Geodetic Observatory Wettzell

with CNES and IGN prior to the installation of DORIS in September 2016, making Wettzell a new GGOS core site.

The second session focused on Precise Orbit Determination (POD) and orbit modeling. It covered items such as the potential sensitivity to radiation of the DORIS oscillators on Jason-3 and Sentinel-3A, the time-tagging method for DORIS measurements in RINEX data files, and the development of DPOD2014, the

new version of the DORIS-oriented Terrestrial Reference Frame for POD.

The third session was devoted to the recent completion of the International Terrestrial Reference

Frame (ITRF2014), which provided the opportunity to look back on DORIS's contribution and address the issues raised during and after its development. Zuhair Attamimi, Head of the ITRF Center, reviewed the main DORIS results of the ITRF2014 analysis, while other

speakers presented assessments of the uses of ITRF2014 for orbit determination.

The last session was an open forum on research activities and new applications. The DORIS-DIODE navigators' onboard computation of Earth Pole coordinates was highlighted. These promising results could benefit the IERS Rapid Service. DORIS observations were also shown to provide significant input for ionosphere modeling with a higher temporal resolution. The need for near real time DORIS data for operational ionospheric mapping and prediction processing was expressed. The message was clearly received by IDS, which proposed the creation of a "Near real time data" working group.

Pascal Willis, Chair of the Governing Board, closed the Workshop with a final presentation in which he reviewed IDS achievements and mapped out options for the future.

#3 December 2016



IDS Newsletter

<http://ids-doris.org/report/newsletter.html>



#4 in preparation:

1 article about DIODE Pole by C. Jayles (in progress)

1 article about DPOD by Guilhem (TBC)

1 article by Jérôme about Kitab and/or focus on an area (ex. Central America) (TBC)

1 article by Christian about Grasse, first atomic orbitography beacon in operation (TBC)

Objective: June

Contributed articles, pictures, cartoons, and feedback are welcome at any time.

Please send your contributions to: ids.central.bureau@ids-doris.org.

« Scientific Applications of DORIS in Space Geodesy »

Advances in Space Research (Dec. 15, 2016. Volume 58, Number 12)

18 papers grouped under five themes:

- (1) ITRF2014;
- (2) DORIS Ultra Stable Oscillator (USO) -- Jason2;
- (3) Precise Orbit Determination;
- (4) DORIS System and Network
- (5) Intertechnique comparisons of DORIS Products

Guest editors:

Frank G. Lemoine (NASA/GSFC, USA)

& Ernst J.O. Schrama (T.U. Delft, The Netherlands)





THANK YOU