

DORIS

DAYS
2021

November 16, 17 and 18

Summary of IDS online resources

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November 16

Session 1 – Presentation 8

IDS and DORIS sites

- **IDS web site:** <https://ids-doris.org>

IDS / DORIS System / Analysis Coordination / Webservice

- **IDS webservice:** <https://ids-doris.org/webservice> (alias)

A Network viewer + a family of Plot Tools
(see presentation S1P10)

- **DORIS web site**

<https://www.aviso.altimetry.fr/en/techniques/doris.html>

The official DORIS web site is hosted by the Aviso website which is dedicated to altimetry, orbitography and precise location missions.

- **IDS ftp site:** <ftp.ids-doris.org>

A selection of resources to...

- discover DORIS and IDS products
 - Outreach material: leaflets, videos, ...
 - Network viewer and plottools
- know more about and use IDS products
 - Combined products
 - DORIS bibliography
- analyse the DORIS data
 - System monitoring
 - Documents for data analysis

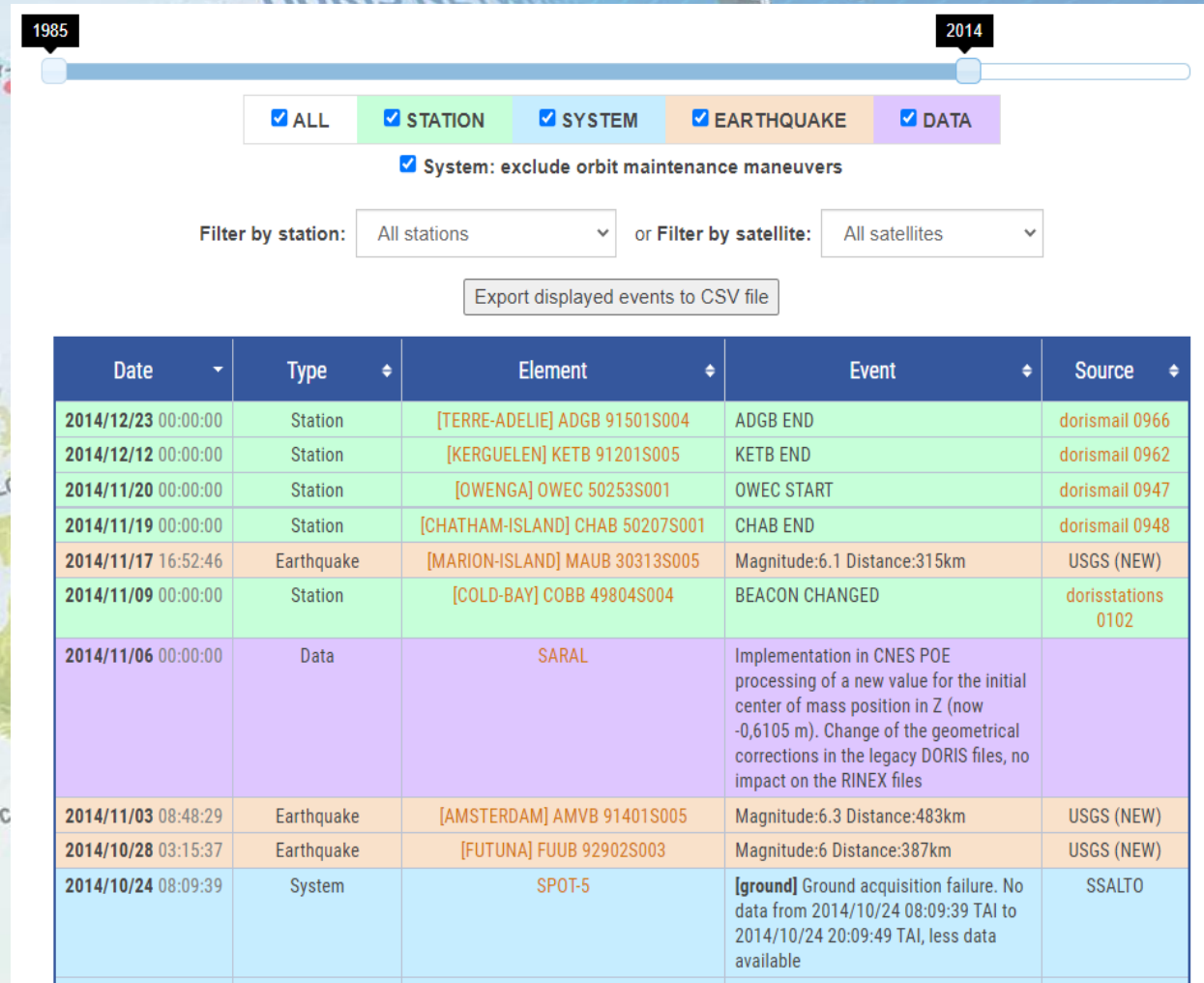
System events

chronology of the main events that occurred on the DORIS space segment and ground segment

➤ A dynamic table with filters

➤ Type of events

- System:
 - onboard (satellites, DORIS instruments, Diode navigator software)
 - on the ground (Satellite Control Center, DORIS control and data processing center, acquisition station)
- Station: beacon network (new site, new installation, change of beacon equipment, data gap, invalid data)
- Data: events impacting data (not delivered data, data redelivery, change in POE data processing, change in acquisition mode)
- Earthquake: Earthquakes with magnitude larger than 6 in the vicinity of DORIS sites (less than 500 km) - based on USGS Earthquake notifications



1985 2014

☒ ALL ☒ STATION ☒ SYSTEM ☒ EARTHQUAKE ☒ DATA

☒ System: exclude orbit maintenance maneuvers

Filter by station: All stations or Filter by satellite: All satellites

Export displayed events to CSV file

Date	Type	Element	Event	Source
2014/12/23 00:00:00	Station	[TERRE-ADELIE] ADGB 91501S004	ADGB END	dorismail 0966
2014/12/12 00:00:00	Station	[KERGUELEN] KETB 91201S005	KETB END	dorismail 0962
2014/11/20 00:00:00	Station	[OWENGA] OWEC 50253S001	OWEC START	dorismail 0947
2014/11/19 00:00:00	Station	[CHATHAM-ISLAND] CHAB 50207S001	CHAB END	dorismail 0948
2014/11/17 16:52:46	Earthquake	[MARION-ISLAND] MAUB 30313S005	Magnitude:6.1 Distance:315km	USGS (NEW)
2014/11/09 00:00:00	Station	[COLD-BAY] COBB 49804S004	BEACON CHANGED	dorisstations 0102
2014/11/06 00:00:00	Data	SARAL	Implementation in CNES POE processing of a new value for the initial center of mass position in Z (now -0,6105 m). Change of the geometrical corrections in the legacy DORIS files, no impact on the RINEX files	
2014/11/03 08:48:29	Earthquake	[AMSTERDAM] AMVB 91401S005	Magnitude:6.3 Distance:483km	USGS (NEW)
2014/10/28 03:15:37	Earthquake	[FUTUNA] FUUB 92902S003	Magnitude:6 Distance:387km	USGS (NEW)
2014/10/24 08:09:39	System	SPOT-5	[ground] Ground acquisition failure. No data from 2014/10/24 08:09:39 TAI to 2014/10/24 20:09:49 TAI, less data available	SSALTO

Satellite information and videos

Information on Satellite pages

- Attributes, references, events, picture, videos

Attributes

cospar :	1601101
launch_date :	2016/02/16
launch_site :	Plesetsk Cosmodrome, Russia
vehicle :	Rockot/Britz-KM
doris_instrument_end :	-
mission_end_date :	-
periapsis :	802 km
apoapsis :	807 km
period :	100.96 minutes
inclination :	98.65°
eccentricity :	0.0003
doris_receiver_generation :	DGXX-S
doris_redundancy :	Yes
other_tracking_system :	SLR+GPS
sp3_code :	L74



References

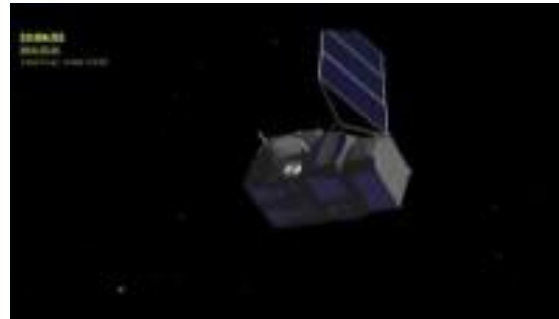
AVISO link
<http://www.aviso.altimetry.fr/en/missions/current-missions/sentinel-3.html>

nominal attitude law
not available

maneuver history
<ftp://ftp.ids-doris.org/pub/ids/satellites/s3aman.txt>

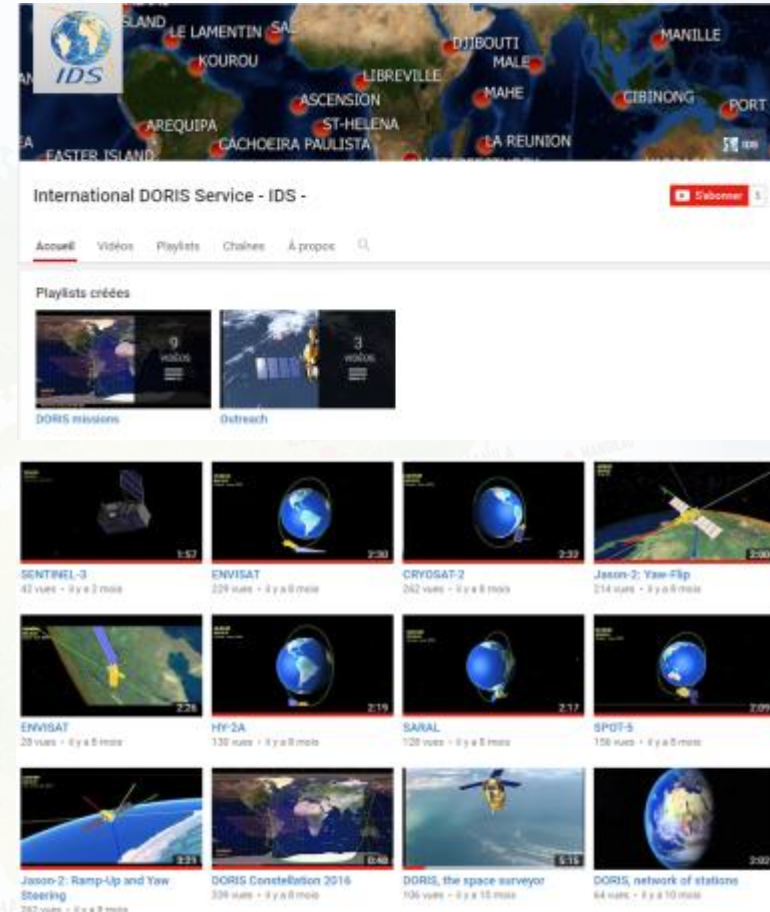
mass and gravity center history
<ftp://ftp.ids-doris.org/pub/ids/satellites/s3amass.txt>

Videos



Date	Origin	Info	Consequence
2021/11/04	on board	Orbit Maintenance Maneuver (end : 2021/11/04 07:10:45 TAI)	all data available
2021/09/08	on board	Orbit Inclination Maneuver (end : 2021/09/08 06:48:18 TAI)	all data available
2021/08/10	on board	Orbit Maintenance Maneuver (end : 2021/08/10 09:15:39 TAI)	all data available
2021/06/01	on board	Orbit Maintenance Maneuver (end : 2021/06/01 09:30:44 TAI)	all data available
2021/03/17	on board	Orbit Inclination Maneuver (end : 2021/03/17 07:26:42 TAI)	all data available
2021/01/27	on board	Orbit Maintenance Maneuver (end : 2021/01/27 08:23:38 TAI)	all data available
2020/12/16	on board	Orbit Inclination Maneuver (end : 2020/12/16 11:55:40 TAI)	all data available
2020/12/02	on board	Orbit Maintenance Maneuver (end : 2020/12/02 07:47:44 TAI)	all data available

IDS video channel on Youtube



Sitelogs

The page « sitelogs » provide information for each site:

- sitelog (current and previous versions)
- pictures
- map
- site news (dorismails)
- local events
- access to time series

DORIS System > Tracking Network > Site Logs

<https://ids-doris.org/doris-system/tracking-network/site-logs.html>

TOULOUSE - FRANCE



Site logs

TL5B20170301.LOG (current; see below)
 TL5B20130129.LOG
 TL5B20120202.LOG
 TL5B200812.LOG
 TL5B200803.LOG
 TLHA200707.LOG
 TLHA200607.LOG
 TLHA200405.LOG

PLOTS

Time series of coordinates

Other pictures (More in the Gallery)

TL5B-2020-B43.JPG
 TL5B.jpg
 TL5B-obstructions-2007-07-v1.jpg
 TLHA.jpg

Map

Plan Satellite

TOULOUSE FRANCE

Site news

Doric mails

- No 0005 different ID for Master Beacons
- No 0790 ITRF2008-CP02008 coordinates for all DORIS
- No 0504 Antenna change at Toulouse (France)
- No 0338 DORIS summary files available from ICG/PL Analysis Center
- No 0047 Cycle 210
- No 0020 Master Beacon Moving at Toulouse (France)

Local events

Date	Acronym	Information provided
2020/09/01	TL5B	BEACON CHANGED
2015/04/17	TL5B	TRACKING OSCILLATOR CHANGED
2015/04/17	TL5B	BEACON CHANGED
2014/02/06	TL5B	TRACKING OSCILLATOR CHANGED
2013/12/04	TL5B	TRACKING OSCILLATOR CHANGED
2010/10/13	TL5B	potential perturbation on DORIS data (wrong meteorological data (humidity, temperature)) START
2007/07/04	TL5B	TL5B START - Antenna change

TOULOUSE DORIS site description form

0. Form

Prepared by : SIMB (DORIS installation and maintenance department)
 Date prepared : 01/03/2017
 Report type : UPDATE

1. Site location information

Site name : TOULOUSE
 Site DOMES number : 10003
 Host agency : CLS
 City : Ramonville-St-Agne
 State or province : Haute-Garonne
 Country : FRANCE
 Tectonic plate : EURA
 Geological information :

Geographical coordinates (ITRF) :

North Latitude : 43 deg 32' 59''
 East Longitude : 1 deg 29' 6''
 Ellipsoid height : 211 m
 Approximate altitude : 161 m

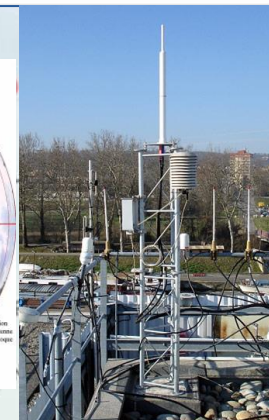
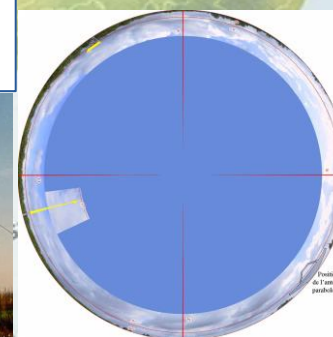
2. DORIS antenna and reference point information

2.1

Four character ID : TL5A
 Antenna model : Alcatel
 Antenna serial number :
 IERS DOMES number : 100035001
 CNES/ IGN number : 100031
 DORIS SSALTO number : 4
 Date installed (dd/mm/yy) : 03/08/1989
 Date removed (dd/mm/yy) : 12/08/1997
 Antenna support type : Guyed 4 metre tower
 Installed on : concrete pad on the terrace roof of a 3 storied building
 Height above ground mark : 4.176 m
 Ground mark type : Brass mark 12 mm diameter
 Ground mark DOMES number : 10003M000
 Notes :

2.2

Four character ID : TLIA
 Antenna model : Alcatel
 Antenna serial number : 66
 IERS DOMES number : 100035003
 CNES/IGN number : 100033
 DORIS SSALTO number : 259
 Date installed (dd/mm/yy) : 12/08/1997
 Date removed (dd/mm/yy) : 03/07/2007
 Antenna support type : Guyed 2 metre tower
 Installed on : concrete pad on the terrace roof of a 4 storied building
 Height above ground mark : 2.130 m
 Ground mark type : domed brass mark 12 mm diameter
 Ground mark DOMES number : 10003M006
 Notes : TLIA & TLHA are the alternate acronyms (nominal)



Network viewer



To select sites and display

DORIS: DORIS sites since network deployment start

GNSS: IGS sites colocated with DORIS

PLATES: Plate boundaries from Bird, 2003

H. VELOCITIES: Horizontal velocity vectors from DPOD2014 solution

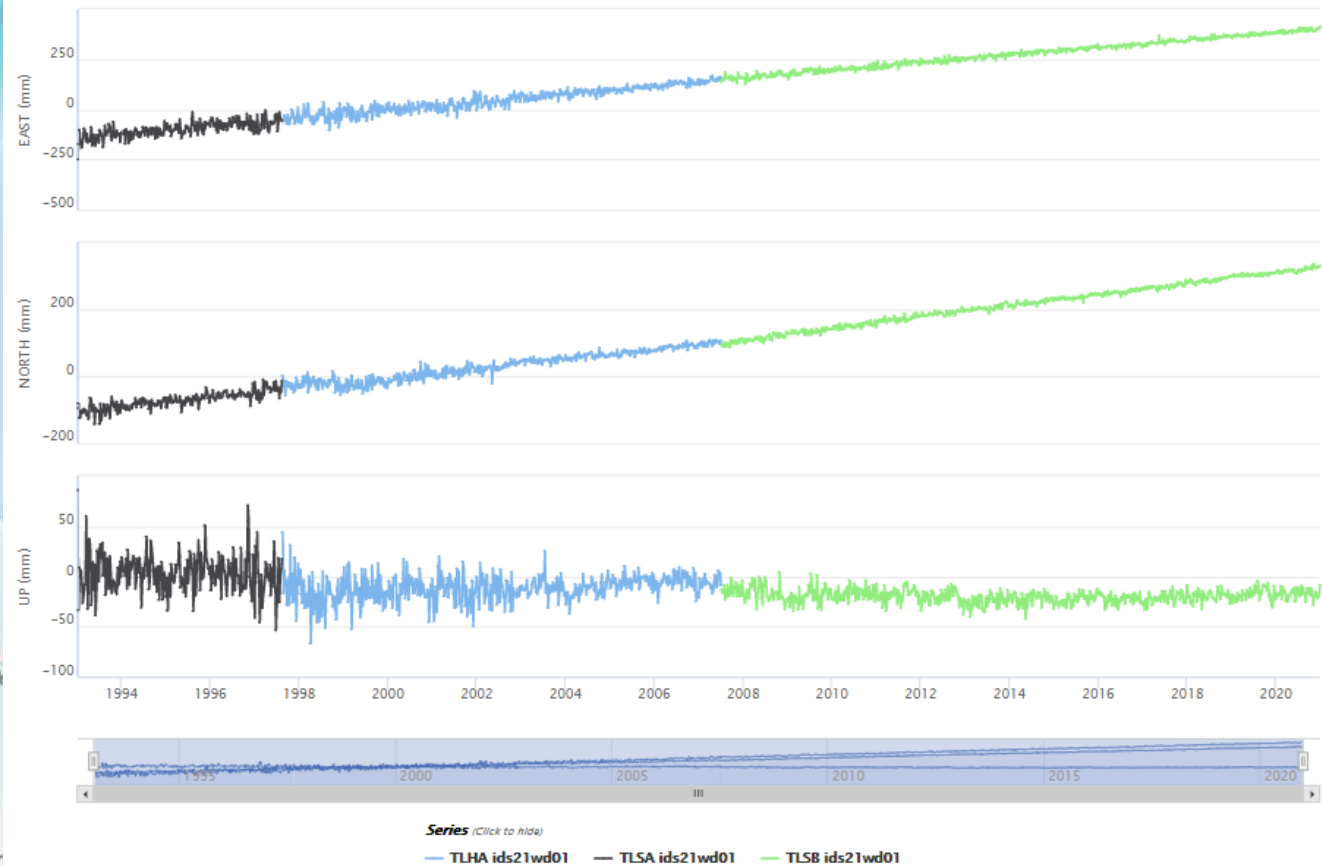
V. VELOCITIES: Vertical velocity vectors from DPOD2014 solution

EARTHQUAKES: USGS Earthquakes with mag. ≥ 6 around DORIS stations

Plottools of the IDS webservice

To visualize time series of DORIS-derived products

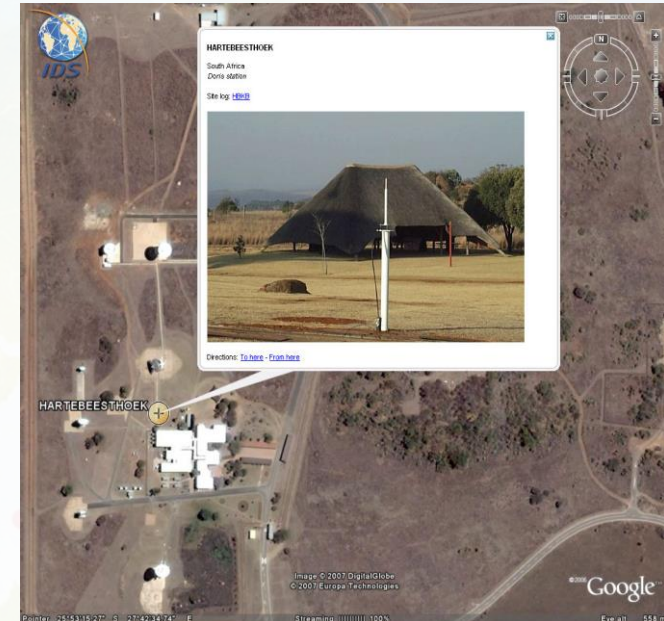
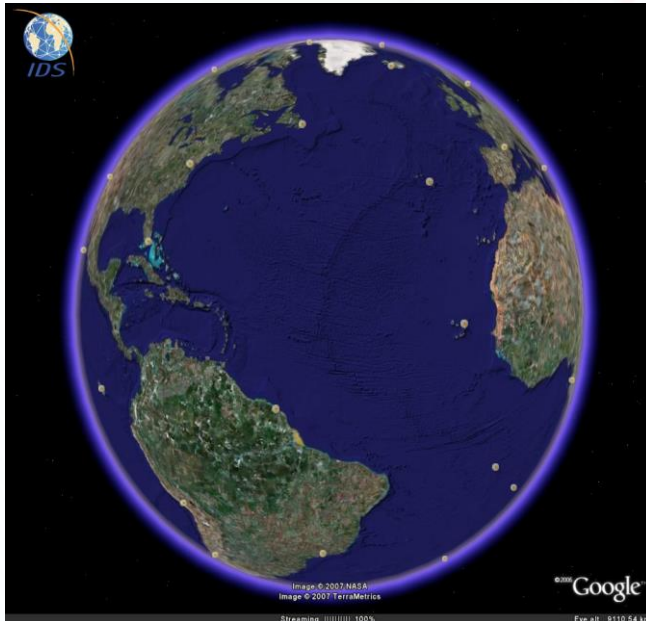
- Station positions
- Position residuals
- Orbit residuals
- EOP
- Combination parameters (TRF scale and translations, position RMS...)



➤ <https://ids-doris.org/webservice>

Network on Google Earth

- Download a xml file generated from the table « station » of the IDS data base and make a virtual tour of the DORIS network



➤ <https://ids-doris.org/network/googleearth.html>

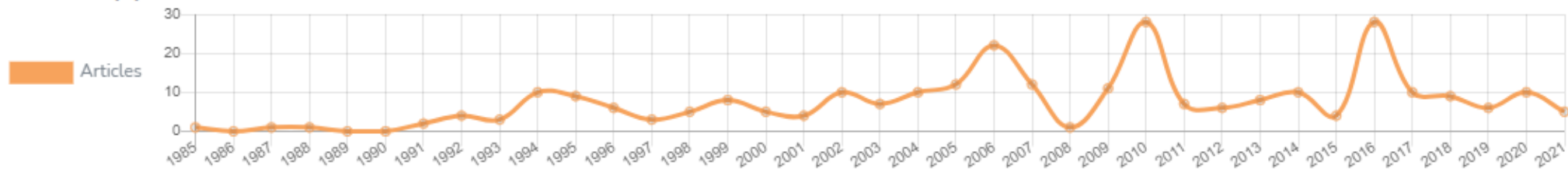
DORIS bibliography

IDS maintains a list of articles related to DORIS in international peer-reviewed journals

- 278 articles from 1985 to now
- 3 DORIS Special Issues (2006, 2010, 2016)

Currently: call for a new one to be published in ASR in 2022

Articles by year



Home > IDS Documentation > DORIS bibliography > Peer-reviewed journals

<https://ids-doris.org/ids/reports-mails/doris-bibliography/peer-reviewed-journals.html>

- dynamic page with filters
- references with DOI

Documents

- Documents for the data analysis:
 - DORIS satellites macro models implemented in POE processing
 - Modelling of the DORIS instruments
 - Satellites characteristics for POD processing
 - About DORIS/RINEX format (dedicated page)
 - ...
- Meetings presentations (IDS Workshop, AWG meetings, ...)
- IDS activity reports
- ...

Keep up to date by receiving the IDS Newsletter

- Articles about:
 - The missions: project news
 - The network: focus on a station with insert written by the host agency presenting its institution
 - Analysis results
 - IDS life
- Distributed by email and available on IDS web site <https://ids-doris.org/documents/newsletters/>



Key points

- IDS web site: ids-doris.org
- various ressources: documents, webtools, videos, ...
- work in progress to assign DOI to IDS data/products/information
- a new version of the website is in preparation to facilitate access to the various contents according to the level of the user (beginner, competent, expert)

Flash here to visit
the IDS website

