The Analysis Coordination information website

M. Feissel-Vernier
(Paris Observatory and IGN)

http://lareg.ensg.ign.fr/IDS/index.html

Share of storage

Data centers at CDDIS and IGN
> store observational data and products
> + formats and analysis descriptions.

Central Bureau
> produces/stores/maintains basic information on the DORIS system,
> including various standard models (satellites, receivers, signal,
> reference frames, etc).

Analysis Coordinator website
> refers to CB and DC information on the data and modelling, and
> generates/stores analyses of the products.

Two criteria are considered for deciding where files are stored/maintained:
> **1. the responsibility on their content and updating,**
> **2. the easyness of user access**.

Data-directed software is stored and maintained at the CB, analysis-directed
sofware is stored/maintained, or made accessible through the AC site.

INTERNATIONAL DORIS SERVICE

ANALYSIS COORDINATION

[Documents] [Events] [Addresses] [Links] [Discussion] [Software] [Novelties]

IDS home site - Central Bureau site

Latest IDS-related events: IDS Plenary meeting: 3 & 4 May 2004 in Paris

The final report of the 2002 Analysis Campaign is available.

IDS-GRACE Analysis Campaign

IDS-related events

2004

• IDS Plenary Meeting: 3 & 4 May 2004 in Paris

2003

• IDS-GRACE Analysis Campaign

• Official start of the International DORIS Service on 1 July 2003.

• IDS Workshop: 20-21 February at Marne la Vallée

2002

• IERS Analysis Workshop: 18-21 November in München.
   Summary regarding DORIS

• IDS Workshop: 13-14 June in Biarritz (France).

• IERS Combination Campaign

• IDS Analysis Campaign.

• IERS campaign on EOP alignment.

Documentation page

- General information
- **Information on data centers organisation**
  - Frequently Asked Questions on Doris

- Space segment: satellites, geometry, events,..

- Ground segment: network, beacons, antennas,...
- **Stations: site logs, history, coordinates,...**

- **Observations: availability, measurements, data contents**
  - **Access permanent and operational information**
  - **Access observation files**

- Analysis: models, centers,...

- **The products and their availability**
  - **Access product files**

The space and ground segments

• **Space segment**

- The DORIS-equiped satellites
- COSPAR numbers
- On board antenna
- Types of receivers
- Frequencies and time scales
- Geometry and on-board reference frames
- Attitude
- Maneuver interface specifications between the DORIS network beacons
   and the onboard instrument.

• **Ground segment**

- The DORIS network
- Network and visibility maps
- Antenna types
- Beacon types
- Phase center offsets (TBD)

Information on the stations

Stations

- Site logs
- DOMES Numbers: the IERS/TRF station naming system.
- A priori coordinates
- Stations history in order of station names, DORISMails
- List of station events: Start/End of stations, warnings, breaks, coordinates changes, etc
- Station breaks in Sinex format
- Local ties with colocated stations (DORIS or other techniques)
- Colocated sites with GPS, SLR, VLBI and tide gauges

The station events file

http://lareg.ensg.ign.fr/IDS/doc/station_events.txt

- Start date of observations
- End date of observations

- Warnings
- Data to be deleted

- Breaks in station history, e.g. after an earthquake
- Coordinate changes between two stations in the same site.

- A priori coordinates when not available in ITRF2000
- A priori velocities when not available in ITRF2000

See poster

Information on observations

- **Observations**
- Presentation of the data
- Available data
- Arcs/cycles descriptions, maneuvers for SPOT2, SPOT4, SPOT5, TOPEX, JASON and ENVISAT
- The DORIS measurement sequence
- The DORIS data
- Current preprocessed formats

Information on data analysis

Analysis: models

- IERS Conventions: reference systems and frames, astronomical
  and geophysical models
- Gravity field: IERS/GGFC Special Bureau for Gravity/Geocenter
- Gravity field: **GRIM5**
- Gravity field: **GRACE**
- Non gravitational forces
- Local corrections: IERS/GGFC Special Bureau for Loading

Analysis Centers

- Analysis blank form
- Analysis summaries for products submitted for the 2002 Analysis
  campaign

Products

```
---------------------------------------------------------------------

Data/Product              Data/Product file              Description file
---------------------------------------------------------------------

Data
              sssdataMMM.LLL.Z                sssdataMMM.dsc
Data summary
              sssdataMMM.LLL.sum              sssdata.LLL.sum.dsc
Orbits
              cccsssVV.bXXDDD.eYYEEE.sp1.Z    cccsssVV.sp1.dsc
Global sinex solutions
              cccWWuVV.snx.Z                  cccWWuVV.snx.dsc
Time series of sinex solutions
              cccYYDDDtuVV.snx.Z              ccctuVV.snx.dsc
Station coordinates time series
              cccWWtuVV.stcd.aaaa .Z          cccWWtuVV.stcd.dsc
TRF origin time series
              cccWWtuVV.geoc.Z                cccWWtuVV.geoc.dsc
EOP time series
              cccWWtuVV.eop.Z                 cccWWtuVV.eop.dsc
Iono files
              cccsssVV.YYDDD.iono.Z           cccsssVV.iono.dsc
---------------------------------------------------------------------
```

IDS Analysis: Discussion (experimental version)

• **Data files contents and formats**

• J.-P. Berthias: Dorismail announcing the data format checking campaign [TBD]

• **Products contents and organization**

• J.-J. Valette: comments on the Sinex 2.0 format

• **Orbits**

• J. Ries: Orbit combinations

• **Station time series**

• P. Willis: generating a catalog of coordinates breaks per station [TBD?]

• **Earth orientation Parameters**

• P. Willis: DORIS/EOP precision vs number of satellites (cont'd)
• P. Willis: DORIS/EOP precision vs number of satellites + epoch of minimum variance

Still missing

- Information on the oscillators behaviour (link to the Central Bureau site)
- Description of the DORIS measurement sequence for the various satellites
- Availability of satellite attitude tables/subroutines
- Information on phase center offsets and their variations
- Availability of orbit products
- Analysis Coordination FAQ page
- …

- **Products validation area**