

WP10 Virtual Access

General Assembly, 12 February 2021

- Hinode Science Data Centre Europe (Hinode SDC), UiO
- Belgian Web Incessant Screening for SDO Mission (BE-WISSDOM), ORB
- Stockholm SST Archive, SU
- IBIS Data Archive (IBIS-A), INAF
- GRIS Data Archive, KIS

Deliverables

- **D I 0.1 Statistics of access provided. [month 18]**
- **D I 0.4 Assessment on virtual access. [month 18]**
- D I 0.2 Statistics of access provided. [month 36]
- D I 0.5 Assessment on virtual access. [month 36]
- D I 0.3 Statistics of access provided. [month 48]
- D I 0.6 Assessment on virtual access. [month 48]

Hinode Science Data Centre Europe (UiO)

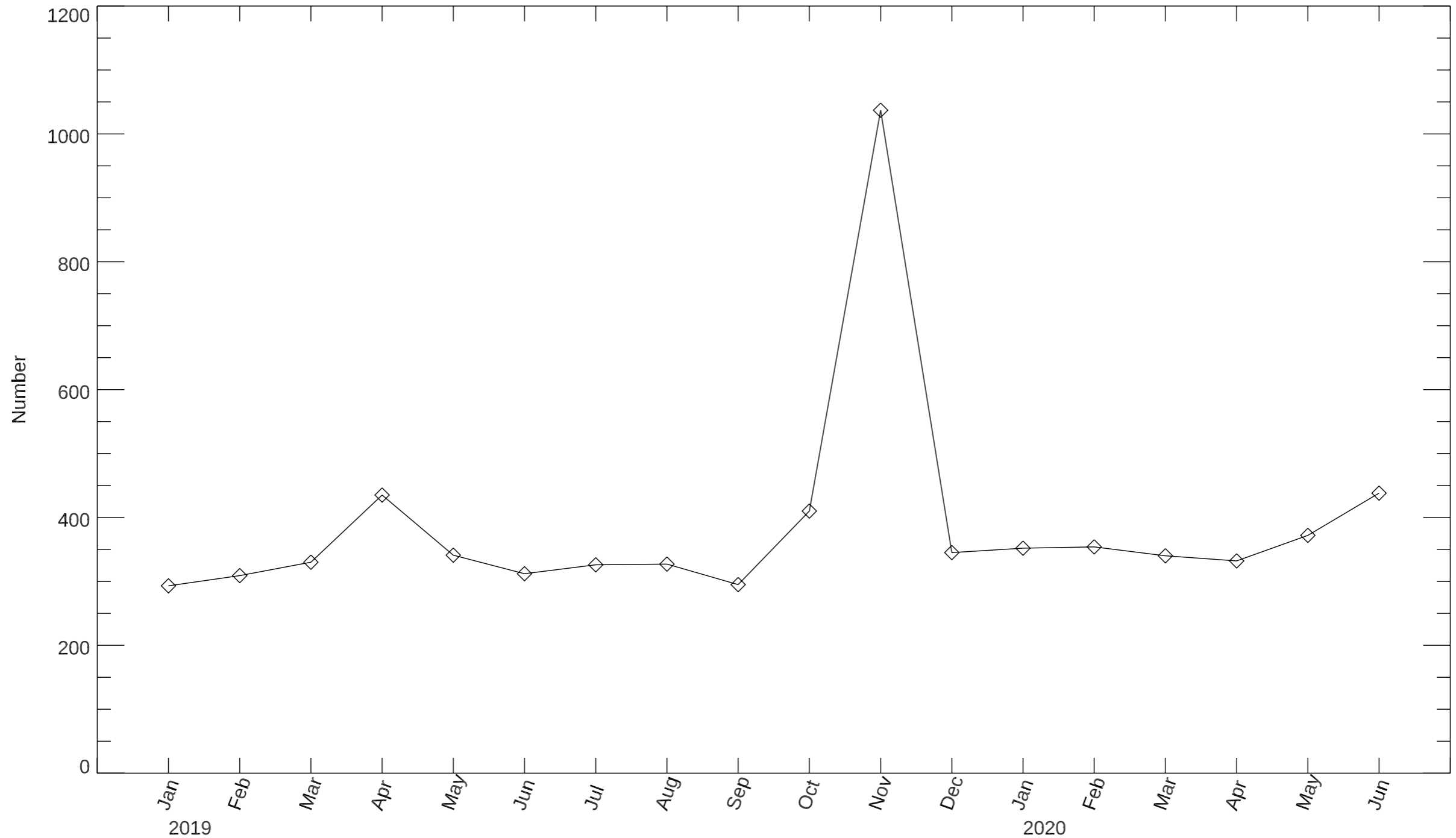
- Hinode
- IRIS
- Numerical simulations
- SST
- ALMA. Hiring 20 PM on CoG funding
- New search interface
- Ingestion of events from HEK
- Detect spacial/temporal overlap

Numerical Simulations

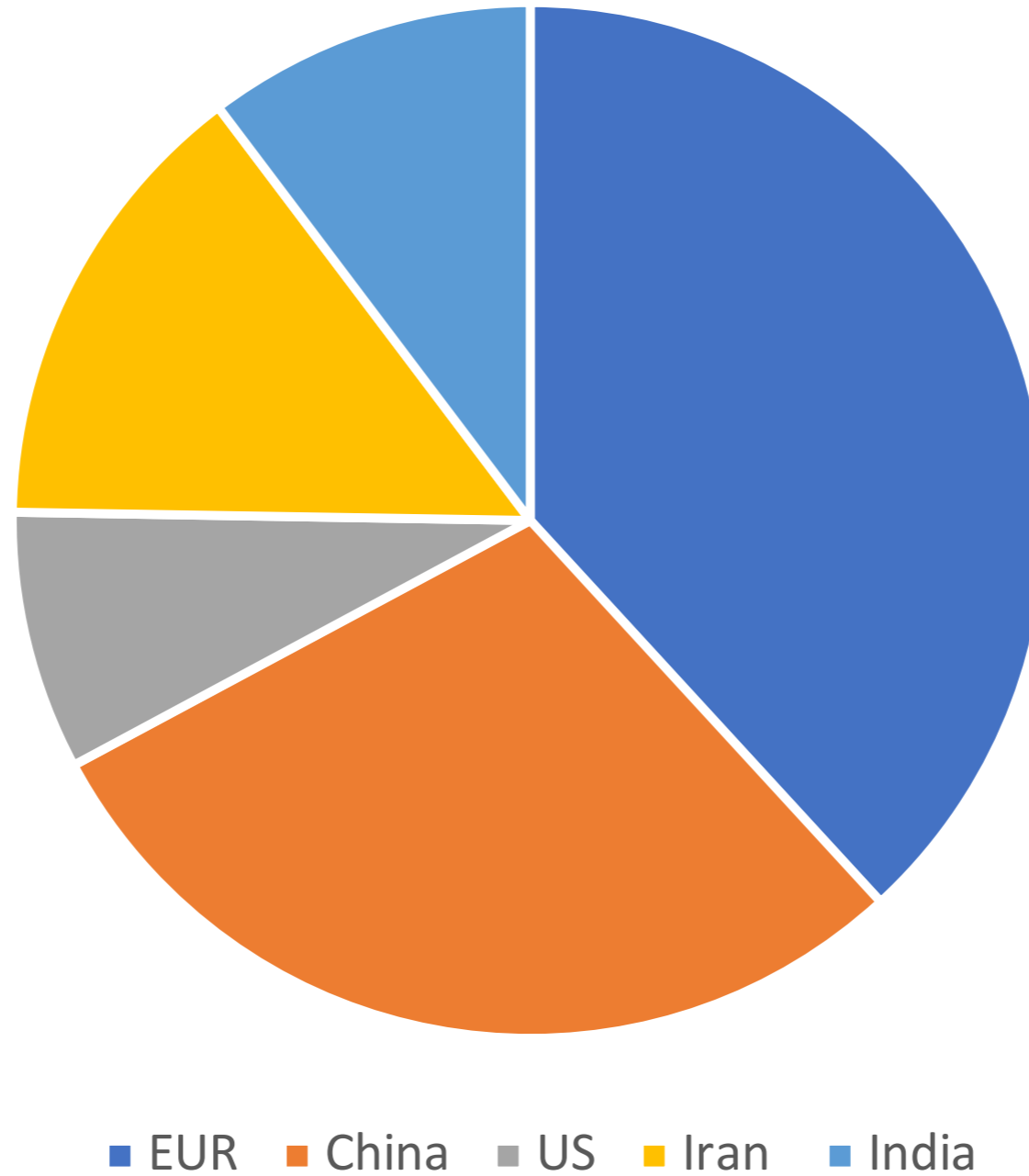
<http://sdc.uio.no/search/simulations>

Simulation name	Type of data	# downloaded files	Total volume
en024048_hion	Simulation data	9672	4539 GB
en024048_hion	MgII h&k synthetic obs	710	451 GB
en096014_gol	Simulation data	3939	158 GB
ch024031_by200bz005	Simulation data	408	688 GB
Total		14729	5836 GB

Number of distinct hosts



Downloads by affiliation



Belgian Web Incessant Screening for SDO Mission (BE-WISSDOM) (ORB)

- SDO-AIA
- SVO

The SDO archive in ESA's SWE portal

→ THE EUROPEAN SPACE AGENCY

Welcome to the SSA Space Weather Service Network
Please note that all SSA-SWE Services are under review/construction

CURRENT SPACE WEATHER

SPACE WEATHER AT ESA ▾

SERVICE DOMAINS ▾

EXPERT SERVICE CENTRES ▾

- ESC Solar Weather
- ESC Heliospheric Weather
- ESC Space Radiation
- ESC Ionospheric Weather
- ESC Geomagnetic Conditions

OTHER RESOURCES ▾

CONTACT

REQUEST FOR REGISTRATION

Expert Service Centres / ESC Solar Weather / sidc-S106-federated /

Federated products from the Solar Influences Data analysis Center (ROB)

[Data Products](#)
[Components](#)
[Similar products](#)
[Related products](#)
[Help](#)

SDO/AIA Solar EUV image archive

The AIA instrument onboard the SDO spacecraft provides full disc images in several different UV and EUV wavelength bands. The SIDC redistributes AIA 1024 x 1024 pixels AIA quicklook images at a 3 minutes cadence in near-real-time; 4096 by 4096 pixels AIA and HMI images in science quality at a 1 hour cadence; and videos for the last 24 hours of AIA images in all wavelengths for forecasting purposes.

Please enter a start and end date.
 SDO archive has data between 2013-04-03T00:00:00Z and 2020-11-06T15:38:24Z (might differ from filetype)

(results in MP4, PNG and FITS)

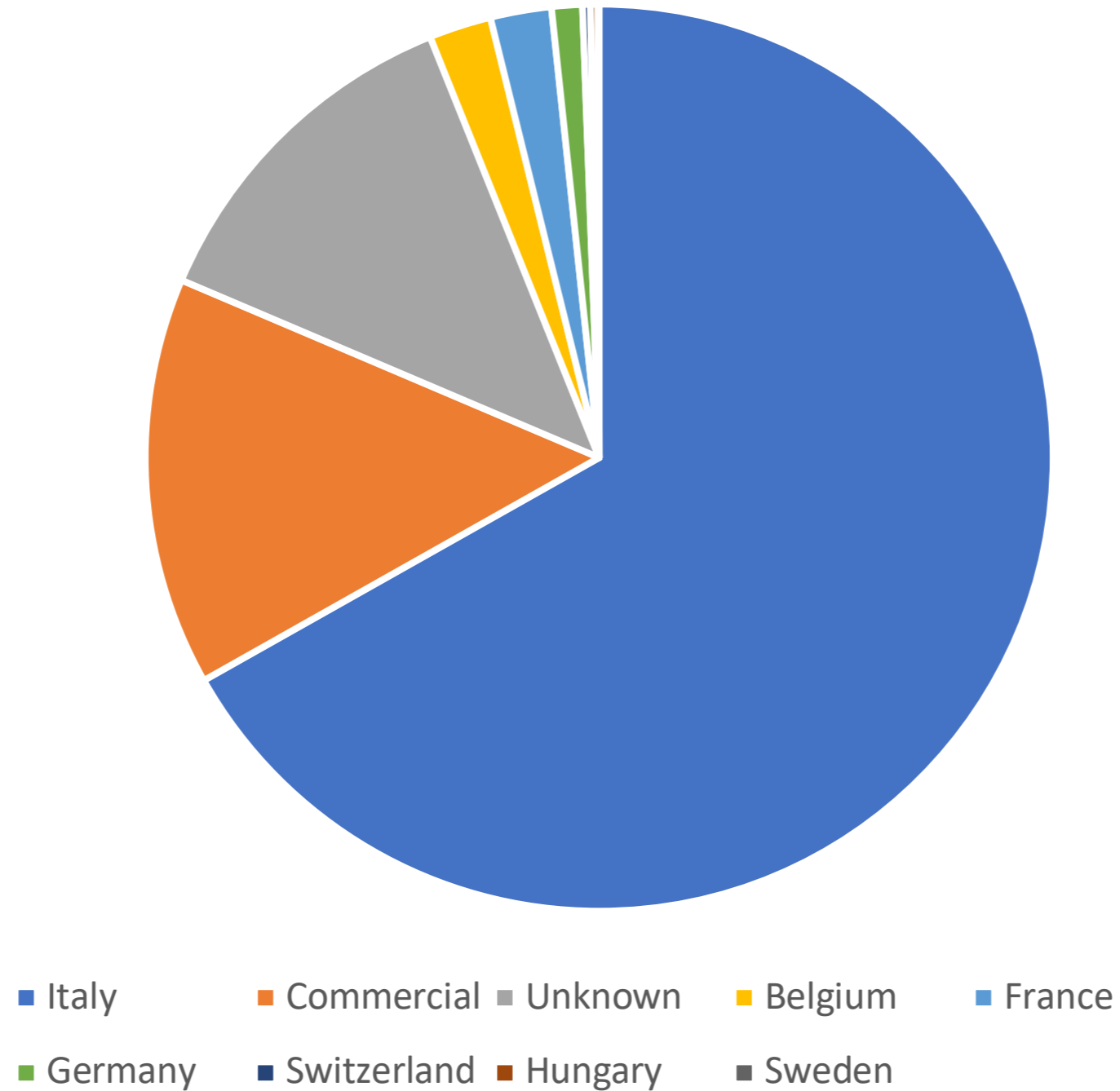
SUBMIT >

MP4

timestamp	file	size (kB)
2020-11-06T12:00:00Z	AIA.20201106_120000.0171.quicklook.mp4	94.80
2020-11-06T00:00:00Z	AIA.20201106_000000.0171.quicklook.mp4	3 462.94
2020-11-05T12:00:00Z	AIA.20201105_120000.0171.quicklook.mp4	6 887.41
2020-11-05T00:00:00Z	AIA.20201105_000000.0171.quicklook.mp4	6 940.61
2020-11-04T00:00:00Z	AIA.20201104_000000.0171.quicklook.mp4	3 550.86
2020-11-04T12:00:00Z	AIA.20201104_120000.0171.quicklook.mp4	7 029.31
2020-11-03T12:00:00Z	AIA.20201103_120000.0171.quicklook.mp4	7 072.00
2020-11-03T00:00:00Z	AIA.20201103_000000.0171.quicklook.mp4	3 552.55

PNG

ftp access by affiliation (MTR)



Stockholm SST Archive (SU)

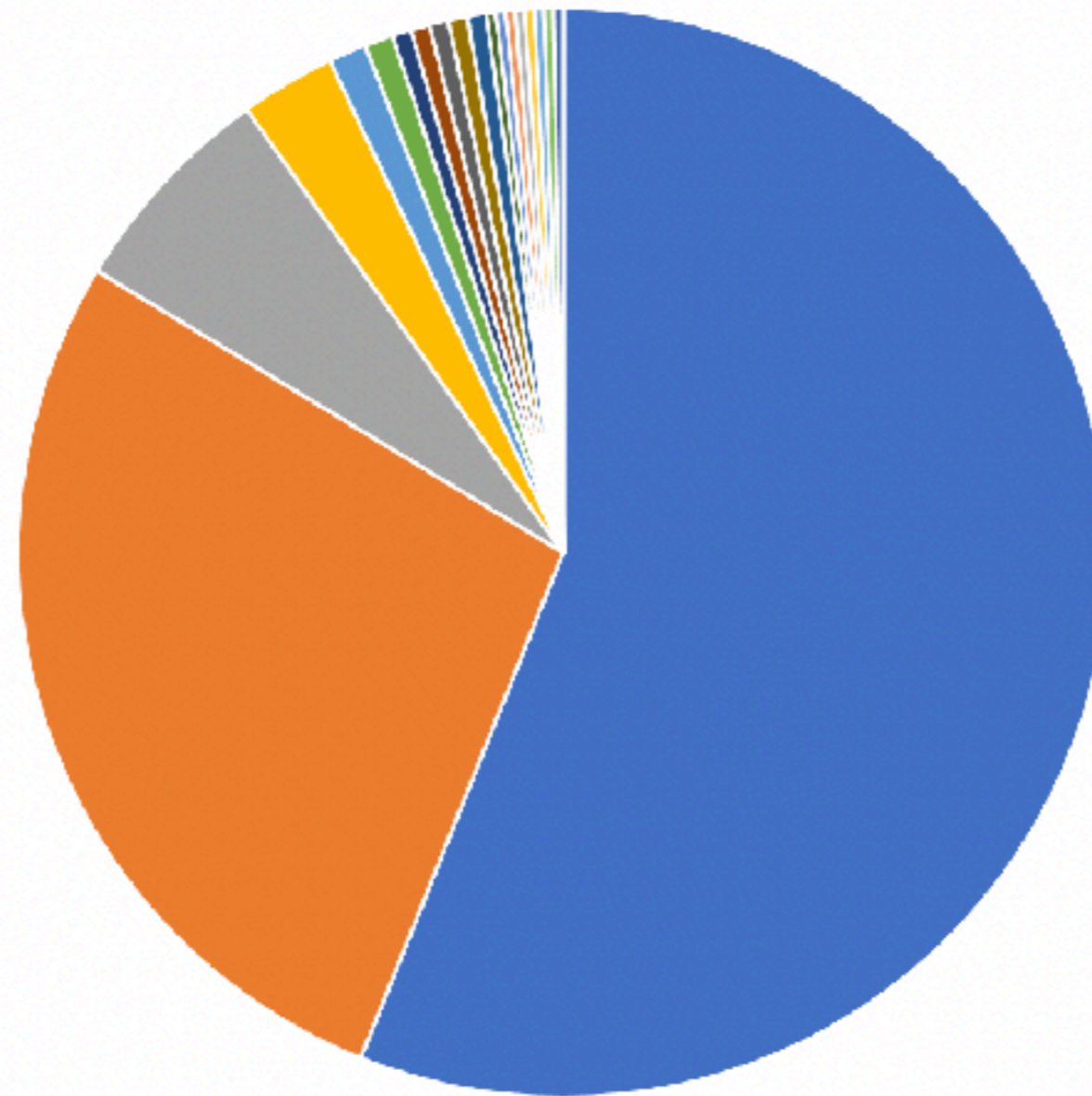
- **SST data (2020)** work is completed, ready for first release of public Solarnet SST data. 9 CHROMIS cubes and 23 CRISP cubes available.
- **Searches through SVO** mechanisms for private/public data developed.

IBIS-A (INAF)

- IBIS data
- (14 campaigns, 92 days, 12 TB at time of proposal)
- More data now 26 campaigns, 152 days (2012-2019), 29 TB
- More calibrated data products, 3 TB science ready
- Contextual full disk images added
- Co-temporal observations of Hinode and IRIS
- NICOLE Inversions will be added
- Statistics reporting procedures implemented.

Access by affiliation

IBIS-A IP Access (Mar 2019 - Feb 2021)



- | | | | | | | | | | |
|----------|-----------|----------|---------------|----------|---------|---------------|----------|---------|----------|
| ■ Italy | ■ USA | ■ China | ■ Germany | ■ GB | ■ Egypt | ■ Netherlands | ■ Canada | ■ Spain | ■ Russia |
| ■ France | ■ Algeria | ■ Sweden | ■ Switzerland | ■ Brasil | ■ Iraq | ■ Japan | ■ Korea | ■ India | |

GRIS Data Archive (KIS)

- GRIS — GREGOR IR Spectrograph: Spectro-polarimetric observations of high-resolution around the 1.5micron or 1.08 micron (Hel) ranges.
- LARS — Laser Absolute Reference Spectrograph: the emission spectrum of a Laser Frequency Comb is superimposed with the solar spectrum from the echelle spectrograph at VTT.
- ChroTel — Chromospheric Telescope: full-disc observations of the solar chromosphere in Calcium II K (393.3 nm), H alpha (656.3 nm) and Helium I (1083.0 nm) with a cadence of less than a minute.
- Data from the Broad-Band Imager (BBI) system and the Integral Field Unit instrument (Collados et al., IAC) at GREGOR have been ingested and will become accessible soon.

GRIS Data Archive

- An importer has been developed that by now can ingest most of the LI data from different (GRIS, BBI, LARS, ChroTel) instruments in an automated way.
- The query system has been improved. Now data are available via sdc.leibniz-kis.de
- The ingestion of IFU data is worked on but not completed yet.
- Automated tagging of solar features has not been implemented yet.
- An algorithm for the automated selection of data based on data quality for the ChroTel telescope (OT) has been developed.
- In May 2020 first tests started to run VFISV inversions (i.e., creation of L2 data) in an automated manner over all GRIS archived data.

D I 0.4 Assessment on virtual access. [month 18]

- Independent group of experts
 - Louise Harra, Director PMOD/WRC, affiliated Prof. at ETH-Zürich, Davos, Switzerland
 - Neil Hurlburt, Lockheed Martin Solar and Astrophysics Laboratory, Palo Alto, USA

D10.4 Recommendations

- What is the best source for SST data?
 - SOLARNET data in SST Archive with SVO access
 - Oslo SST data at Hinode SDC-Europe
- IBIS data archive – what is the plan for improving in the future?
 - Add links to coordinated data from IRIS/Hinode
 - Add contextual full disk data
 - Add Science ready (L1) data for the L0 datasets
 - Add higher level data products (e.g. inversions)

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DI0.4 Recommendations

- One common access point for five Archives
 - SVO efforts at ORB
- Coordinate metadata efforts in SOLARNET with efforts in the US
 - US experts take part in SOLARNET effort
- How is BE-WISSDOM SVO different from US VSO?
 - More modern SW design - can work with latest operating systems
 - Standards for interfacing with other tools, e.g. JHelioviewer
 - Cross-dataset searches
 - More tailored for ground-based observations

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 - Common advertising on web
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