

BASS2000

A ground-based solar
observations database

<http://bass2000.obspm.fr>

28 Aug 2020 04:39 UT

BASe de données Solaire Sol
BASS2000
Observations systématiques du Soleil

Jour précédent 28/08/2020 OK Jour suivant

Entrer une date: Ex: 28/3/2001, 28.3.1, 28-3-01, AAAAMMJJ ou AAMMJJ

en | fr Ma Sélection

ACCUEIL
Dernières observations
Derniers films
Actualité
F.A.Q.

RECHERCHER
Des observations
Des fichiers
Des structures solaires
Des cartes synoptiques
HELIO features cat.

OUTILS
Ephémérides
Spectre solaire
Externes
Soleil live & webcams
Logiciels

GUIDES
Instruments
Données
Logiciels
Ressources éducatives

Collection avant 1980
Web Solaire
Galerie Multimédia

DERNIERES OBSERVATIONS

SPECTROHÉLIOGRAPHE DE MEUDON

27-Aug-2020 13:41:23
Image CaH
protubérances

.jpg
.fits.gz
grille + profils
3D
image avec grille
.img

RESEAU DECAMETRIQUE DE NANCAY

27-Aug-2020
Données intégrales avec
polarisation

.png
.RT1

SPECTROHÉLIOGRAPHE DE COIMBRA

27-Aug-2020 10:08:18
Image H Alpha

.jpg
.fits
grille solaire

27-Aug-2020 10:08:18
Dopplergramme H Alpha

.jpg
.fits

HELIOPHYSICS FEATURE CATALOGUE

27-Aug-2020
1 Régions actives
9 Protubérances

USET-ROYAL OBSERVATORY OF BELGIUM

27-Aug-2020 11:13:35
Image H Alpha

.jpg
.fts
grille solaire

design fuller@sig

l'Observatoire de Paris LESIA Données disponibles - A propos - Copyright - Contact WDC-Solar Activity, membre de WORLD DATA SYSTEM ICSU

Mise à jour le: 27 Apr 2020 09:39

* Database of ground-based solar observations (French at the origin...), with added-values

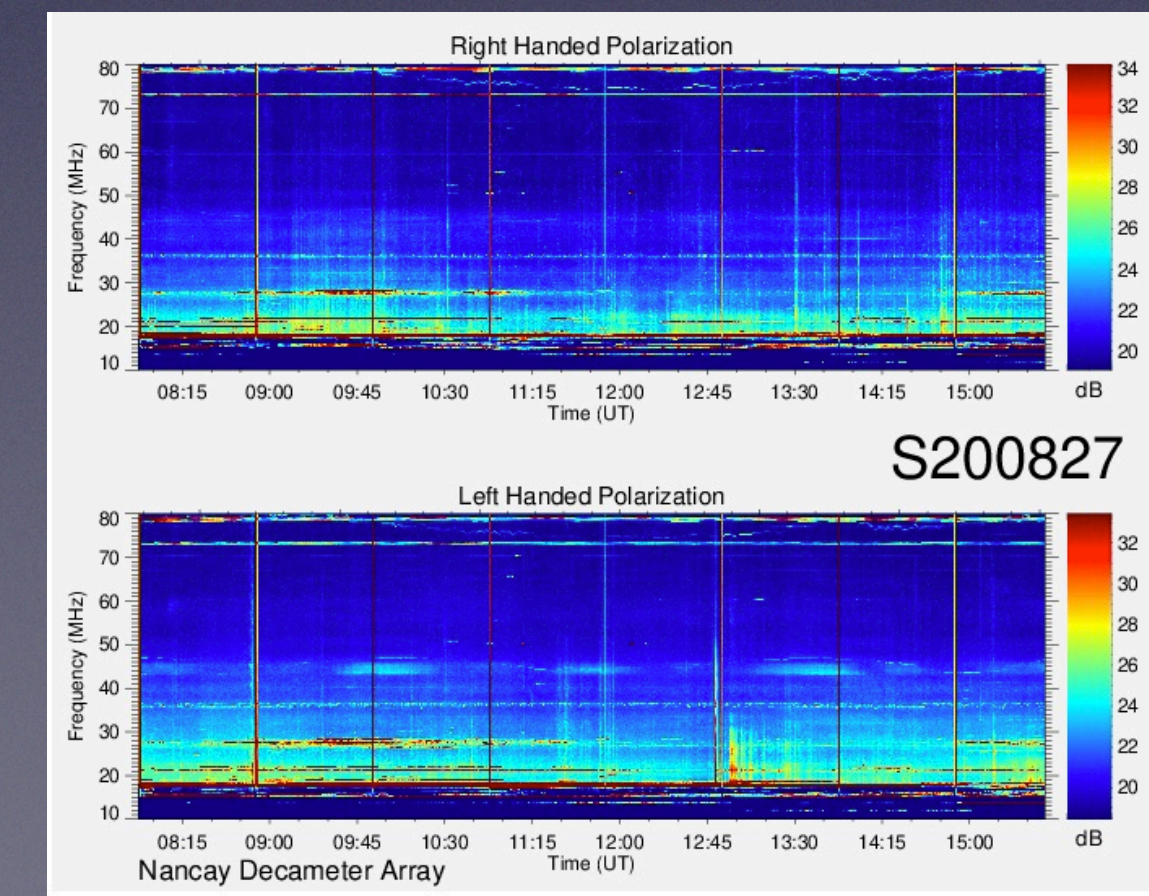
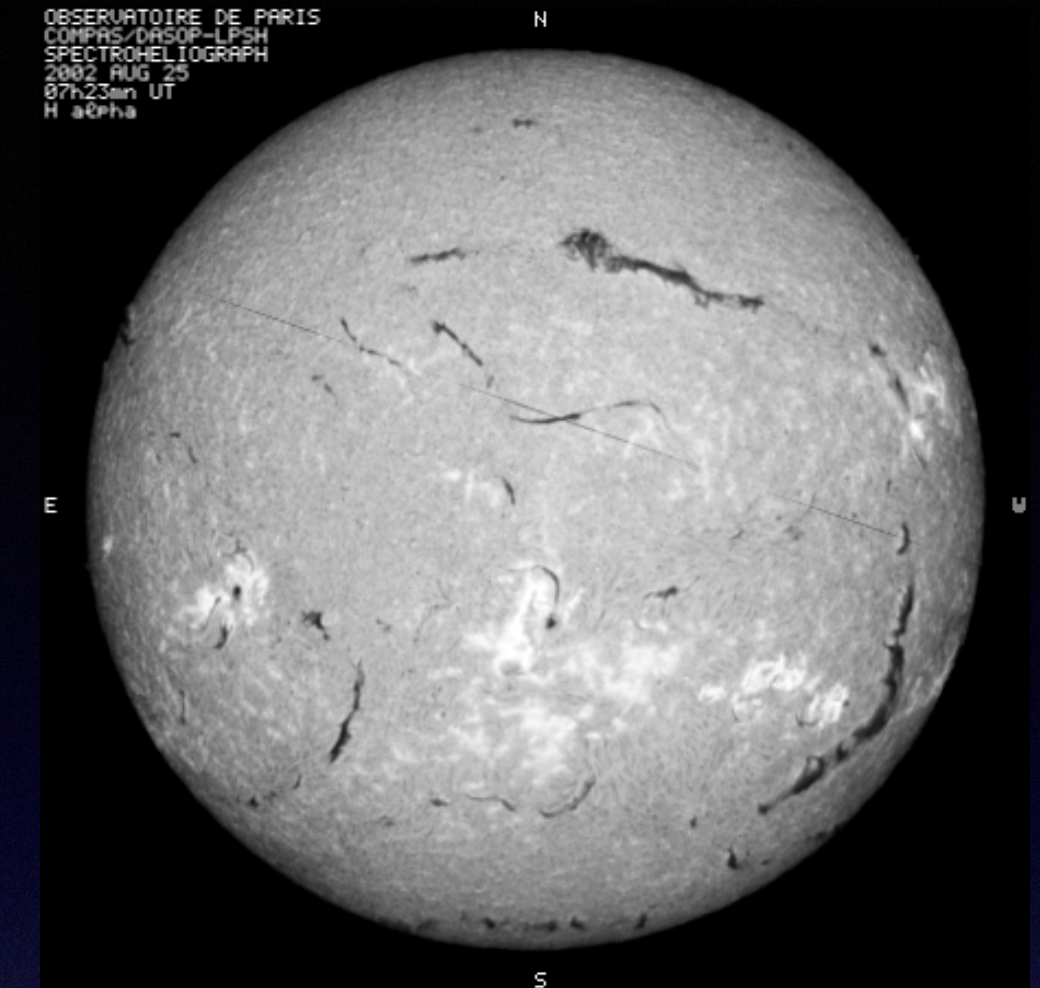
Daily full Sun images directly available from database since 1980, and from archive since 1919 regularly, with older image in 1870.

Which data?

- Observations
- Solar & Heliophysics features
- Solar spectrum

1) Observations

- Full Sun images (or global Sun, in radio-wl)
- When loading FITS files (available from the database), the header contains all useful information: date/time, observatory, wavelength
- Data come from Meudon and Nançay (France), Coimbra (Portugal) and Brussels (Belgium)



1) Observations

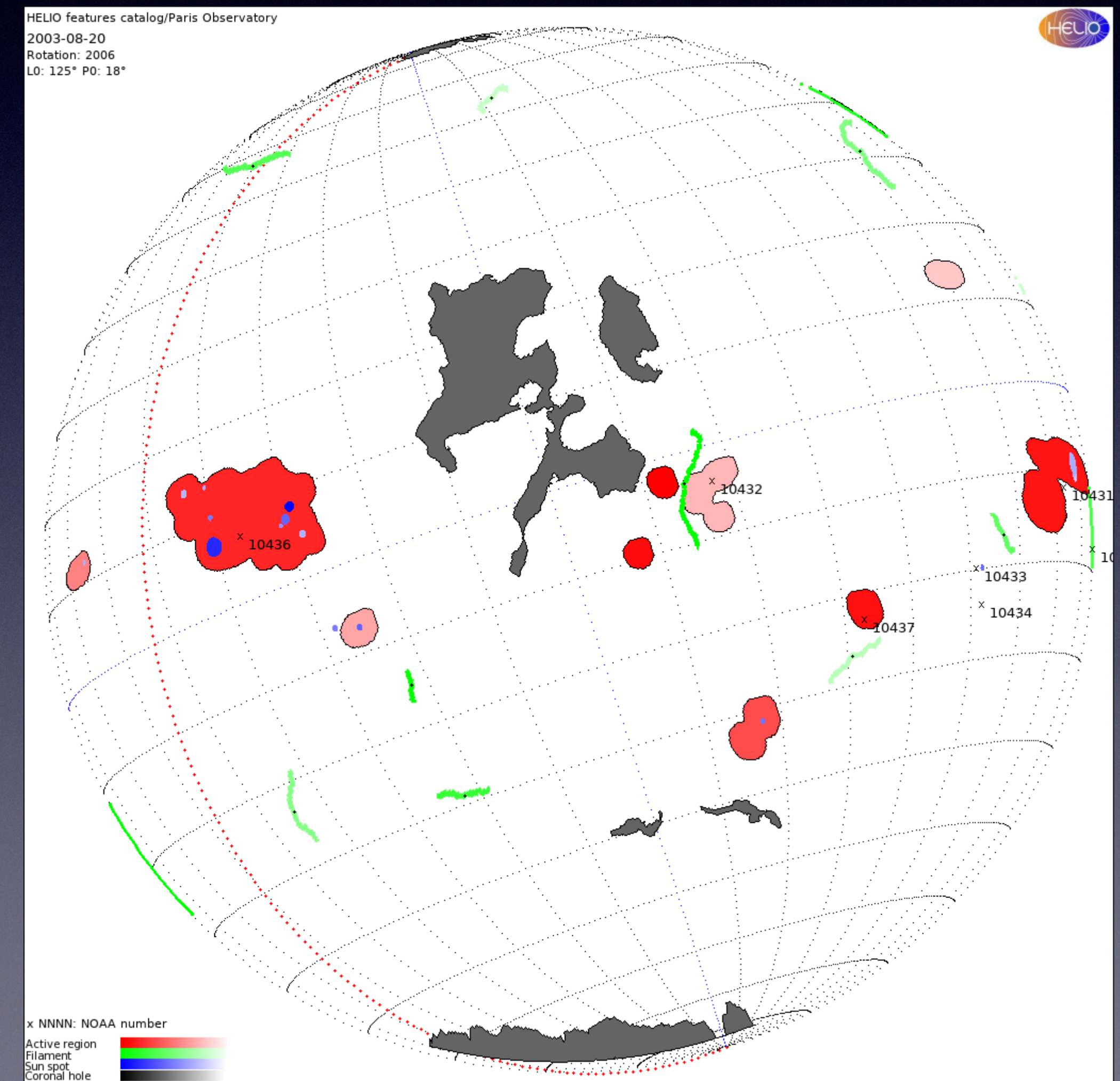
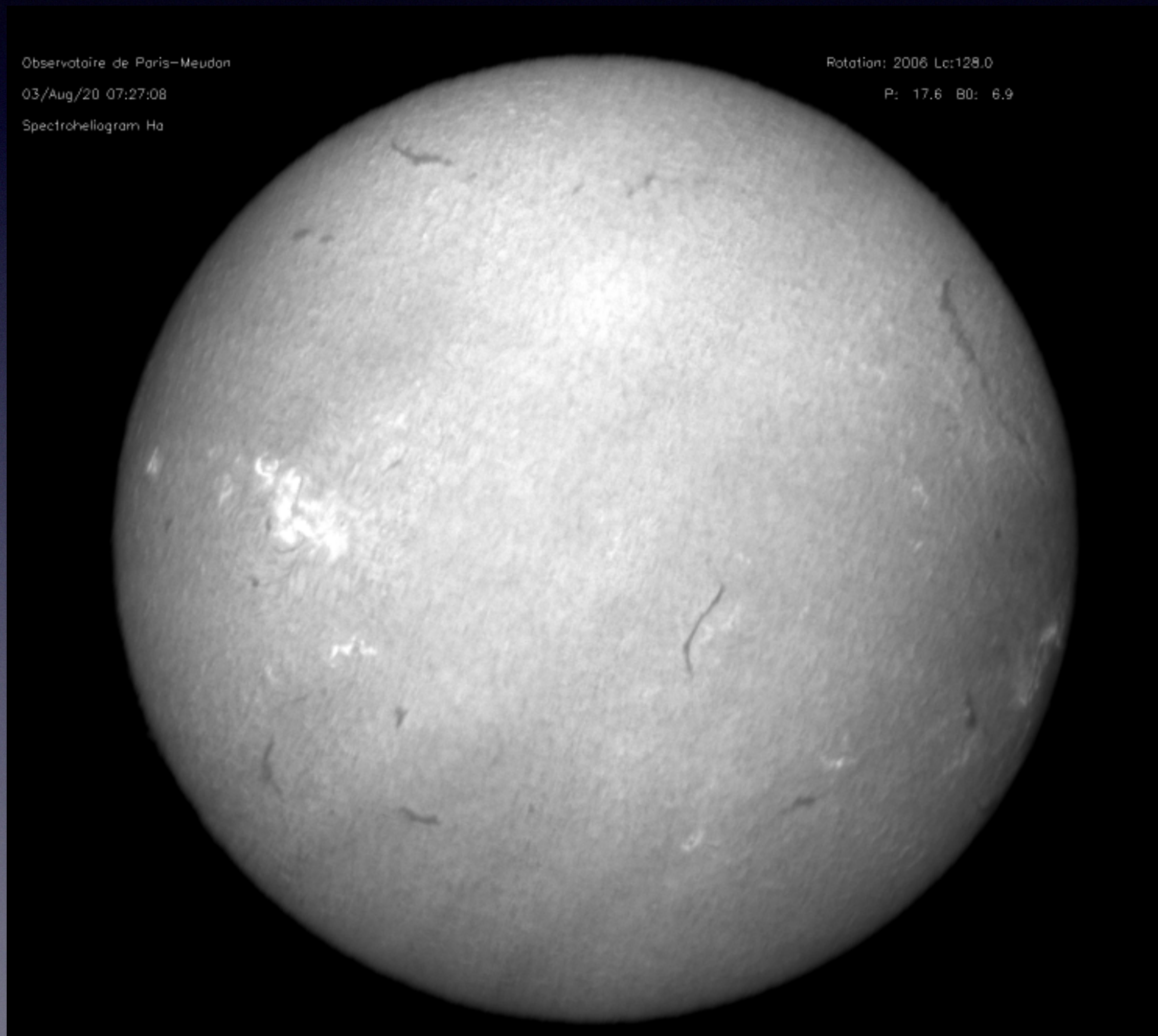


Solar & Heliophysics features (developed during the European program HELIO)

- Filaments
- Prominences
- Active regions
- Coronal holes
- Sunspots
- Type III radio bursts
- Radio sources

Solar & Heliophysics features

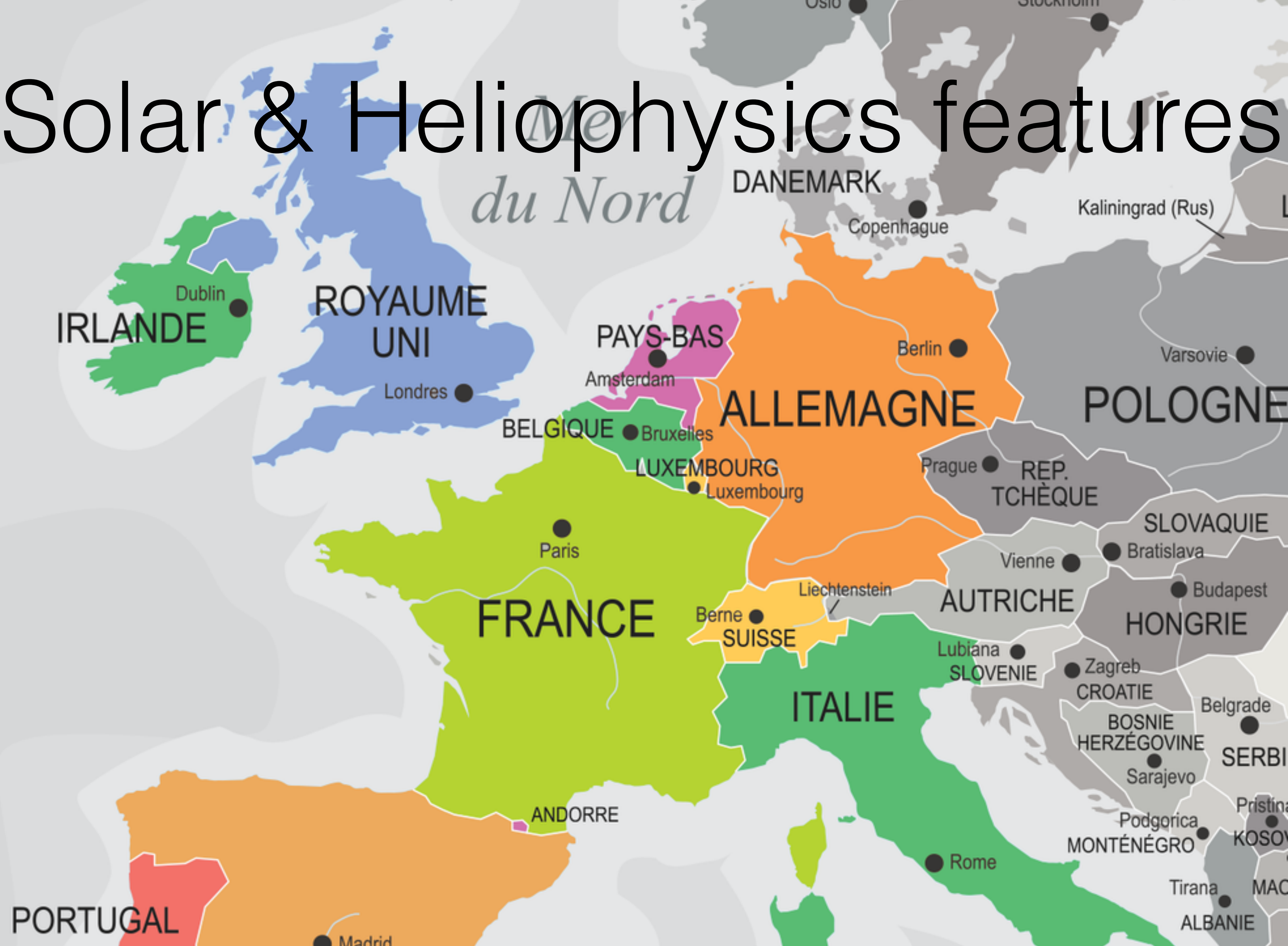
Left: Halpha observation. Right: some of the automatically detected features.
Green: Filaments, Red: Active Regions, Blue: Sunspots, Grey: Coronal Holes



Data from:

- Meudon
(France)
- Nançay
(France)
- SOHO & SDO
(NASA - USA)
- Wind &
STEREO
(ESA -
Europa)

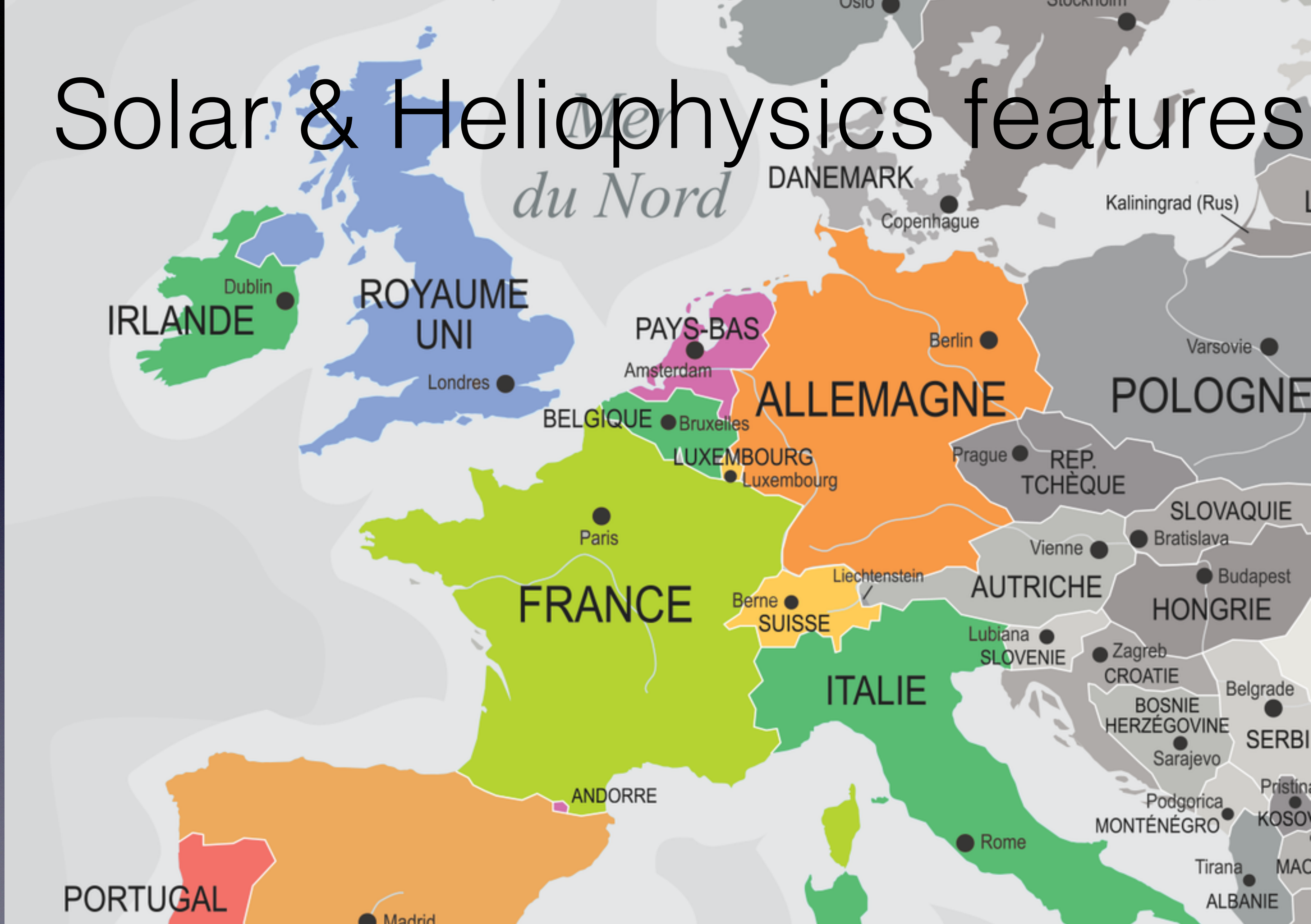
Solar & Heliophysics features



Features
recognition
codes
from:

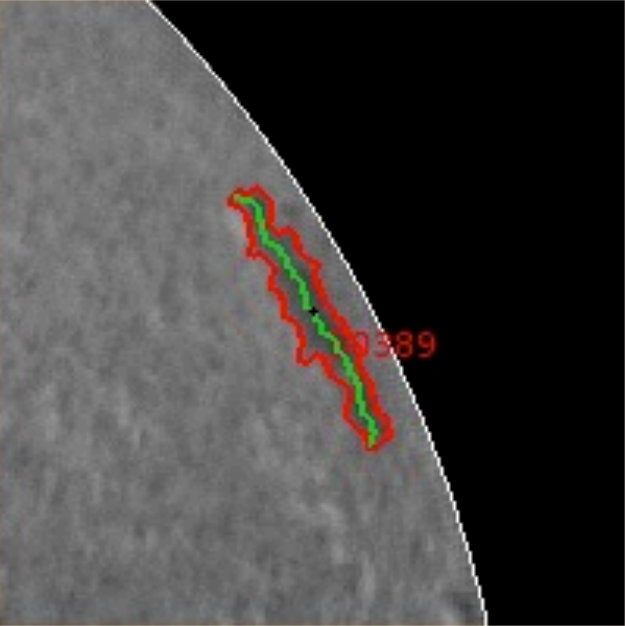
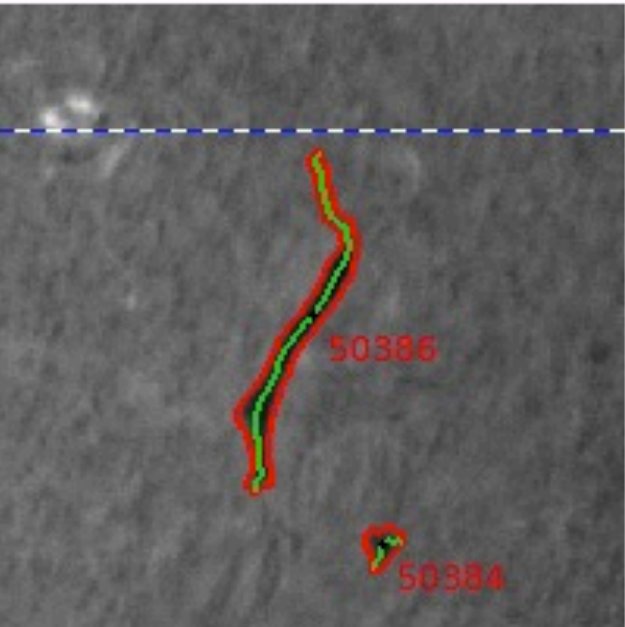
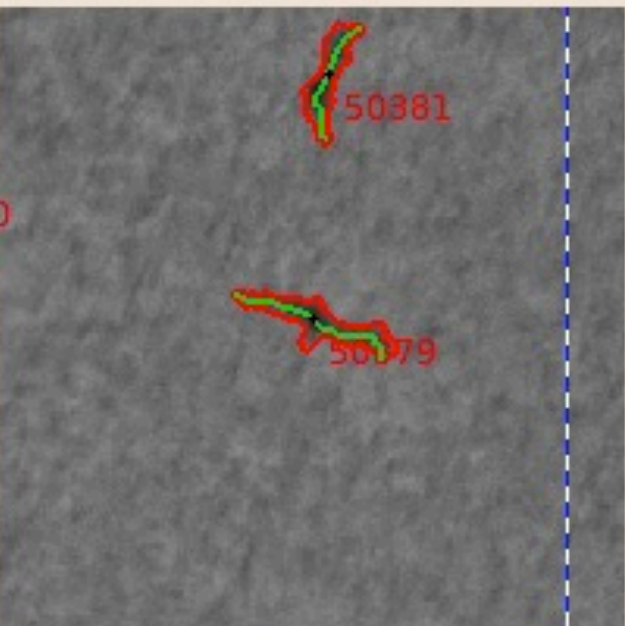
- Meudon
(France)
- Dublin
(Ireland)
- Bradford
(UK)
- Brussels
(Belgium)

Solar & Heliophysics features



Solar & Heliophysics features

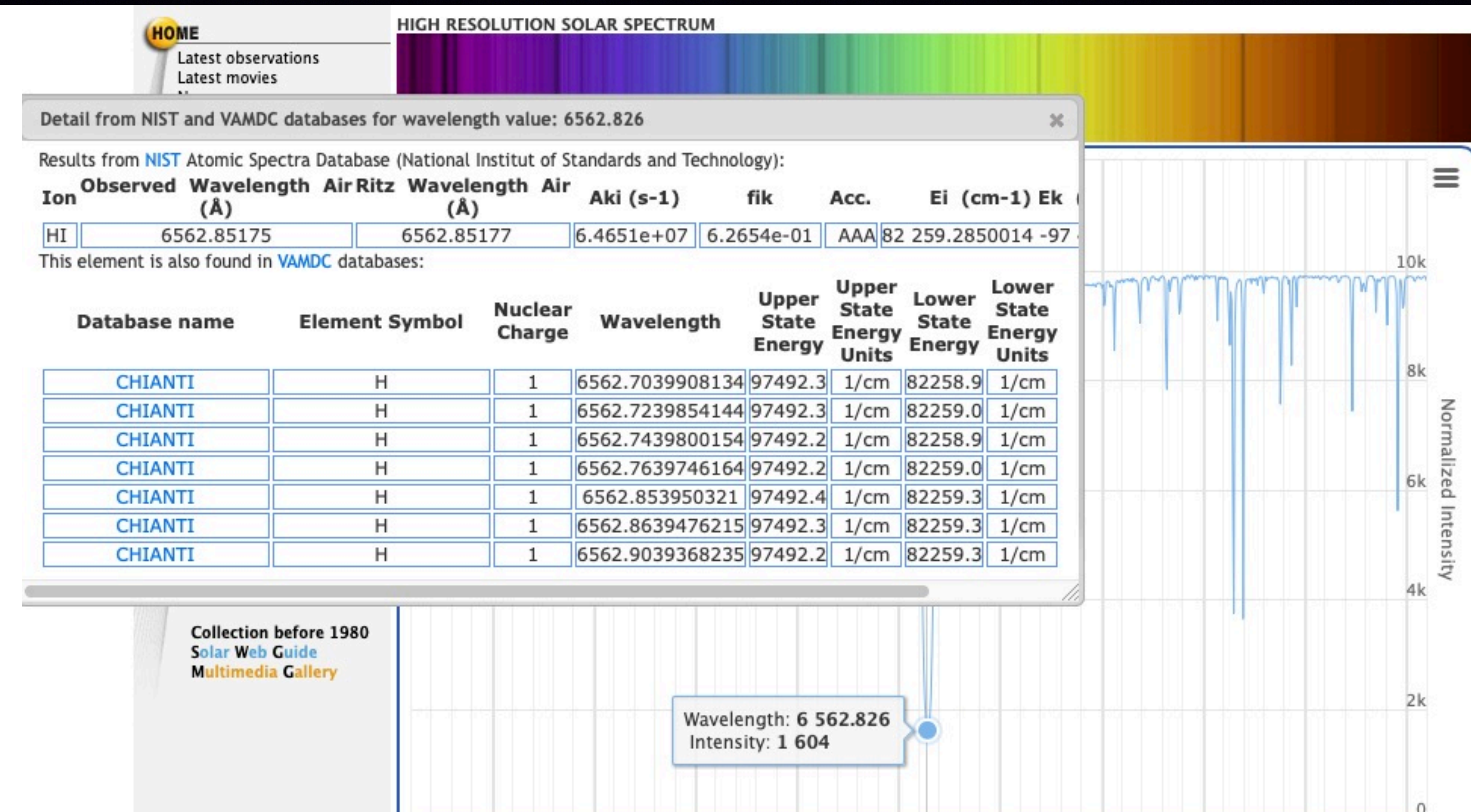
Show 10 entries

Index of the feature during a rotation Click for tracking info	Id of filament's component(s)	Name of the observatory (or spacecraft) that made the observation	Phenomen	Carrington latitude of the filament skeleton centre in degrees	Carrington longitude of the filament skeleton centre in degrees	Length of the filament in degrees	PROPA_MOD	SNAPSHOT
50191 2003-08-09 to 2003-08-21	50389	MEUDON/SPECTROHELIOGRAPH/SPECTROHELIOGRAPH	-	29.29	189.63	27.11	CME	
50317 2003-08-16 to 2003-08-22	50386	MEUDON/SPECTROHELIOGRAPH/SPECTROHELIOGRAPH	-	-1.96	141.54	17.87	CME	
50344 2003-08-18 to 2003-08-24	50379	MEUDON/SPECTROHELIOGRAPH/SPECTROHELIOGRAPH	-	-28.94	102.18	9.09	CME	

Solar spectrum

- From 670 Å to 54 000 Å
- 3 different sources
- Connected to VAMDC (Virtual Atomic and Molecular Data Center)

Solar spectrum



Specificities of BASS2000

- World Data Center for Solar Activity of the World Data System (WDS) of ICSU
- Has a CoreTrustSeal certification
- All data are covered with a CC-BY-NC-SA license
- Most of the database (in progress) are already accessible using VO protocole EPN-TAP
- We're working on allocating DOI on all data (globally, by dataset) and on added-values

Thank you for your attention