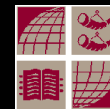




European Grid of Solar Observations Solar Feature Catalogue (SFC) design



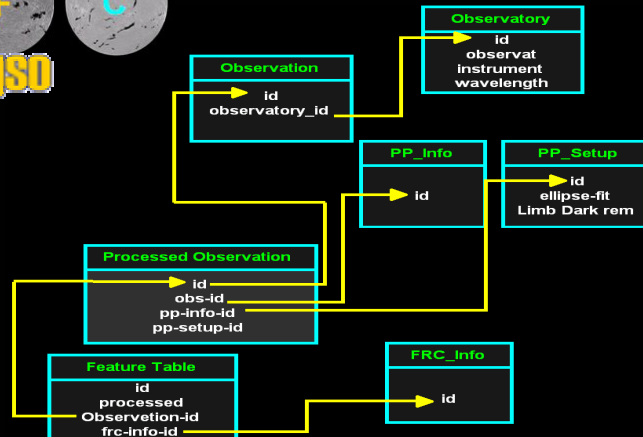
Main objectives:

- Searchable Data
- Expandable database
- Data Reconstruction and Analysis

Database design:

- ❑ Developed a list of key parameters for Feature catalogues
- ❑ Designed IDL data structures for the key parameters relating to: sunspots, active regions and filaments. Stored data for April-July '02 in ASCII file format.
- ❑ Developed a relational database (in mysql)
- ❑ Populated this database with the SFC data in ASCII format
- ❑ Working on the search engine and query formats

In the Feature link table shown to the right, the reference *pre-processed 1* corresponds to the observations that has been used for the primary extraction of the feature. Reference *pre-processed 2* and 3 correspond to other files (if any) that have been used to improve the FR.



European Grid of Solar Observations
Solar Feature Catalogue Test Page

SEARCH OBSERVATIONS

DATE
Start Date: [01] [04] [2002] -- hh:mm:ss
End Date: [31] [07] [2002] -- hh:mm:ss

SOURCE
r: Heuda # 50RH/IDE

Sort Observations by:
+ S# + Date + Source
 Descending Ascending

EXTENDED FILAMENT SEARCH

Please enter filament (skeleton) length (please see Keyword Parameters document for definition):
Filaments Length: from [] degree

Use DATE (check the box if you want to narrow down the results by date)
Start Date: [01] [04] [2002] -- hh:mm:ss
End Date: [31] [07] [2002] -- hh:mm:ss

Order By:
+ Date + Length (Desc) + Length (Asc)

Generate ASCII file
 Submit Form Reset Form

SFC query page examples

QUERY FILAMENTS CATALOGUE

DATE
Start Date: [01] [04] [2002] -- hh:mm:ss
End Date: [31] [07] [2002] -- hh:mm:ss

CARRINGTON ROTATION # [1988]

Gravity Center Location:
Longitude: from 0.00 to 360.00
Latitude: from -90.00 to 90.00

Arcseconds X-axis: from -1000.00 to 1000.00
Arcseconds Y-axis: from -1000.00 to 1000.00

Generate ASCII file

QUERY SUNSPOT CATALOGUE

DATE
Start Date: [01] [04] [2002] -- hh:mm:ss
End Date: [31] [07] [2002] -- hh:mm:ss

CARRINGTON ROTATION # [1988]

Gravity Center Location:
Longitude: from 0.00 to 360.00
Latitude: from -90.00 to 90.00

Arcseconds X-axis: from -1000.00 to 1000.00
Arcseconds Y-axis: from -1000.00 to 1000.00

Area: from 0 to 1000.00
Diameter: from 0.00 to 1000.00
N_umbra: from 0 to 10000
Pixel Count: from 0 to 10000
Umbra Pixel Count: from 0 to 10000

Generate ASCII file

QUERY Active Region CATALOGUE

DATE
Start Date: [01] [04] [2002] -- hh:mm:ss
End Date: [31] [07] [2002] -- hh:mm:ss

CARRINGTON ROTATION # [1988]

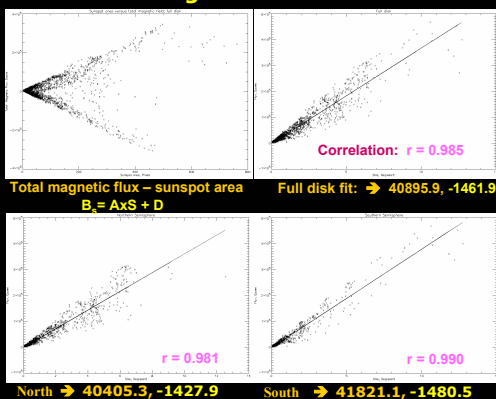
Gravity Center Location:
Longitude: from 0.00 to 360.00
Latitude: from -90.00 to 90.00

Arcseconds X-axis: from -1000.00 to 1000.00
Arcseconds Y-axis: from -1000.00 to 1000.00

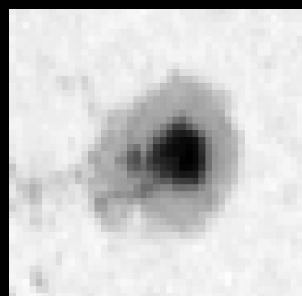
Generate ASCII file

Solar features science work

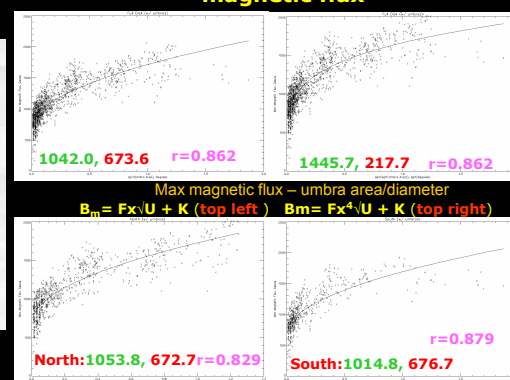
South-North asymmetry in sunspots magnetic field



1. SUNSPOTS



South-North asymmetry in umbers magnetic flux



2. ACTIVE REGIONS

