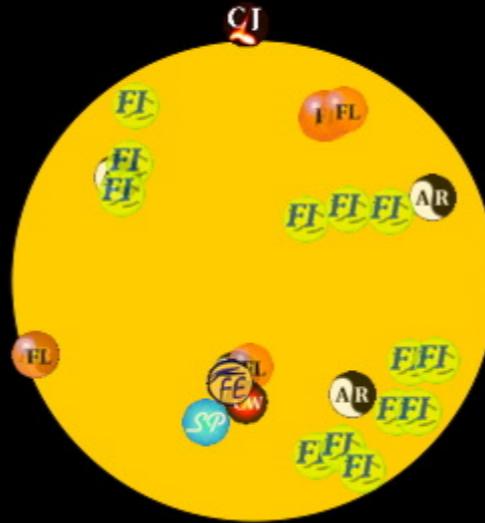


## Events



Disk

Carrington Map



<< < 2010-05-04T00:00:00 > >>  
2010-05-05T00:00:00



about / contacts

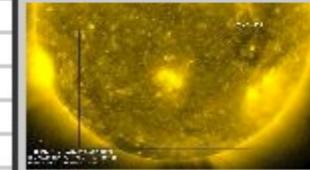
Search results ([export](#))

- 1.AR11063
- 2.AR11068
- 3.AR11067
- 4.AR11066
- 5.AR11065
- 6.AIA Flare
- 7.FE: FilamentEruption
- 8.FE: FilamentEruption
- 9.CJ: CoronalJet
- 10.CJ: CoronalJet
- 11.CJ: CoronalJet
- 12.AIA Flare
- 13.CW: CoronalWave
- 14.SP: SpraySurge
- 15.FI: Filament
- 16.FI: Filament
- 17.FI: Filament
- 18.FI: Filament
- 19.FI: Filament
- 20.FI: Filament
- 21.AIA Flare
- 22.AIA Flare
- 23.AIA Flare
- 24.AIA Flare
- 25.AIA Flare
- 26.AIA Flare
- 27.FI: Filament
- 28.FI: Filament
- 29.FI: Filament
- 30.FI: Filament
- 31.FI: Filament
- 32.FI: Filament
- 33.FI: Filament

13. CW: CoronalWave



A wave covering a large part of the southern hemisphere is visible.



[Movie](#)

Rating: 0.2 (1 vote)

Start: 2010-05-04T06:08:51

End: 2010-05-04T08:47:34

Location: -67, -458

Coord Sys: UTC-HPC-TOPO

Observatory: SDO

Instrument: AIA

Channel: 211

FRM: Annotator

Archived :2010-05-21T20:43:38

[Heliviewer.org](#)

[HER event summary](#)

[VOEvent XML](#)

Observations in the neighborhood

[AIA\\_4 \(211, 171, 304, 193\)](#)

[AIA\\_4 \(211, 171, 304, 193\)](#)

# EVENT-BASED DATA SEARCH

SDO generates as much data in a single day as our previous mission, TRACE, produced in five years.

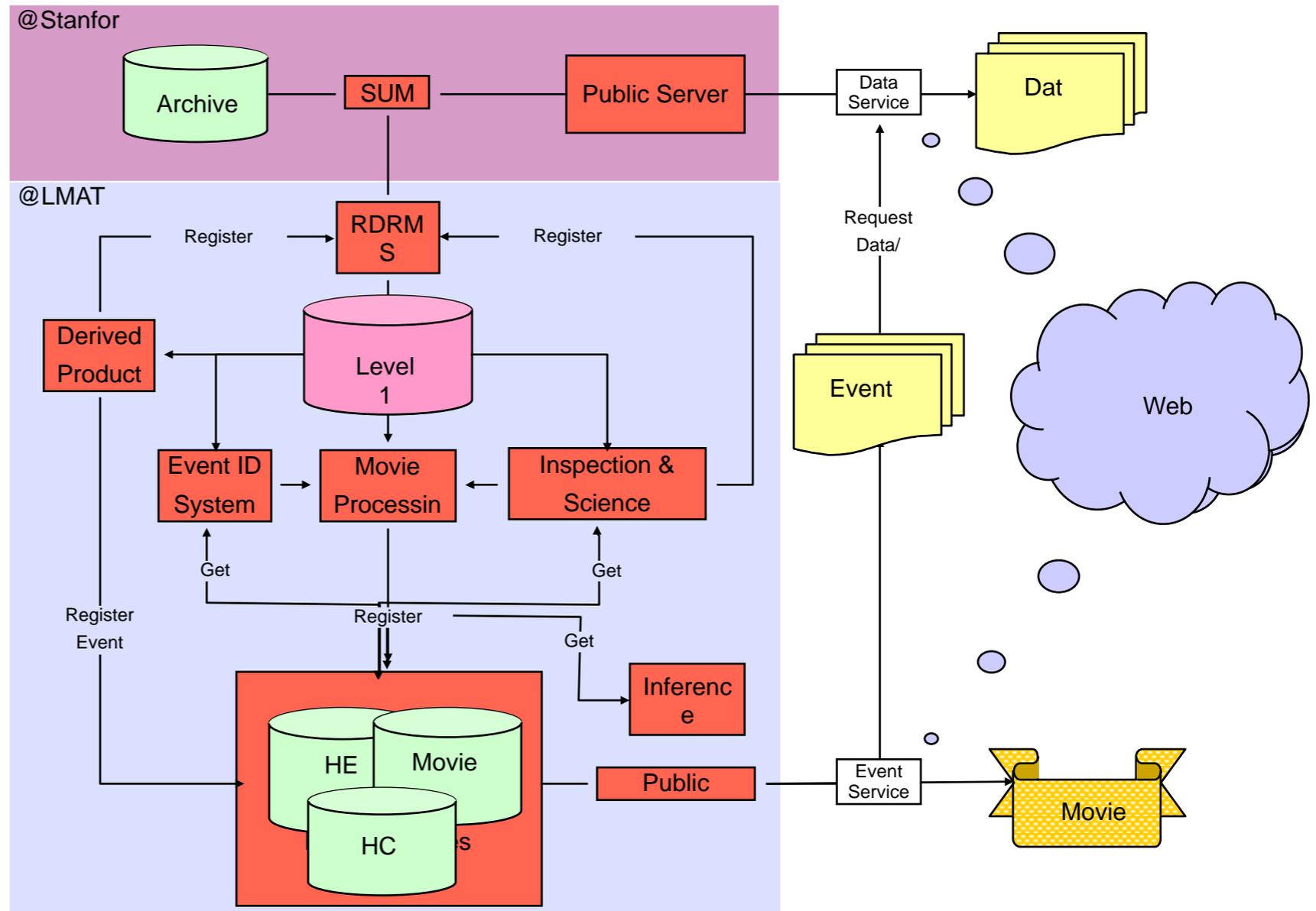
---

## The Heliophysics Events Knowledgebase (HEK):

- Helps researchers find data sets relevant for their topics of interest.
- Serves as an open forum where solar/heliospheric features and events can be reported and annotated.
- Facilitates discovery of statistical trends / relationships between different classes of features and events.
- Lightens the load on SDO data system in terms of providing access to large subsets of data (too large to transmit over the Internet).

# HEK System

- Event, Movie & Coverage Registries
- Inspection & Analysis Tools
- Event Detection System
- Summary Movie Processing
- Query/Display



# Annotating new data



# What's happening daily?

- Daily summary of state of the sun
- Events and features
- Multi-thermal images
- Links to detailed descriptions
- [Http://Lmsal.com/suntoday](http://Lmsal.com/suntoday)

The Sun Today

http://sdowww.lmsal.com/suntoday.html?suntoday\_date=2010-05-04

SunToday LMpeople LMPassage Log In comeric TRACEpipeline Sungate News (1412) Dept Calendar Bandwidth HEKbeat EDS Lookdata

The Sun Today JSOC Lookdata Lookdata ARCHIWARE :: Archiving Software...

## ATMOSPHERIC IMAGING ASSEMBLY

HOME SOLAR INFO AND SPACE WEATHER RESULTS - PUBLICATIONS RELATED LINKS  
SCIENCE INVESTIGATION INSTRUMENT OPERATIONS DATA TEAM SITE

### The Sun 2010-5-4

Last Updated 04-May-10 23:44:47.130 UT "What's this?"

#### Events

0+0

Disk Carrington Map

2010-05-04T00:00:00  
2010-05-05T00:00:00

clear

about / contacts

Search results (export)

1.AR11063
2.AR11068
3.AR11067
4.AR11066
5.AR11065
6.AIA Flare
7.FE: FilamentEruption
8.FE: FilamentEruption
9.CJ: CoronalJet
10.CJ: CoronalJet
11.CJ: CoronalJet
12.AIA Flare
13.CW: CoronalWave
14.SP: SpraySurge
15.FI: Filament
16.FI: Filament
17.FI: Filament
18.FI: Filament
19.FI: Filament
20.FI: Filament
21.AIA Flare
22.AIA Flare
23.AIA Flare
24.AIA Flare
25.AIA Flare
26.AIA Flare
27.FI: Filament
28.FI: Filament
29.FI: Filament
30.FI: Filament
31.FI: Filament
32.FI: Filament
33.FI: Filament

13. CW: CoronalWave

A wave covering a large part of the southern hemisphere is visible.

Rating: 0.2 (1 vote)

Start: 2010-05-04T06:08:51

End: 2010-05-04T08:47:34

Location: -67, -458

Coord Sys: UTC-HPC-TOPO

Observatory: SDO

Instrument: AIA

Channel: 211

FRM: Annotator

Archived: 2010-05-21T20:43:38

[Helioviewer.org](#)

[HEP event summary](#)

[VOEvent XML](#)

Observations in the neighborhood

[AIA\\_4 \(211, 171, 304, 193\)](#)

[AIA\\_4 \(211, 171, 304, 193\)](#)

"When were these images taken?"

#### Image Channels

4500: [1024] [4096]	094 335 193: [1024] [4096]	211 193 171: [1024] [4096]	HMI B(108): [1024] [4096]
1600: [1024] [4096]	094: [1024] [4096]	211: [1024] [4096]	B(108) 171: [1024] [4096]
1700: [1024] [4096]	335: [1024] [4096]	193: [1024] [4096]	
304: [1024] [4096]	193: [1024] [4096]	171: [1024] [4096]	
304 211 171: [1024] [4096]	131: [1024] [4096]		

# GUIDED DATA REQUESTS

- Researchers identify regions, intervals, wavelengths from event descriptions
- Automatic extraction of datasets from archive
- Extracted regions shared with other researchers

Cutout Information

[reset dates and times](#)

Start Date: 2010-05-20

Start Time: 00:07  [Open time picker](#)

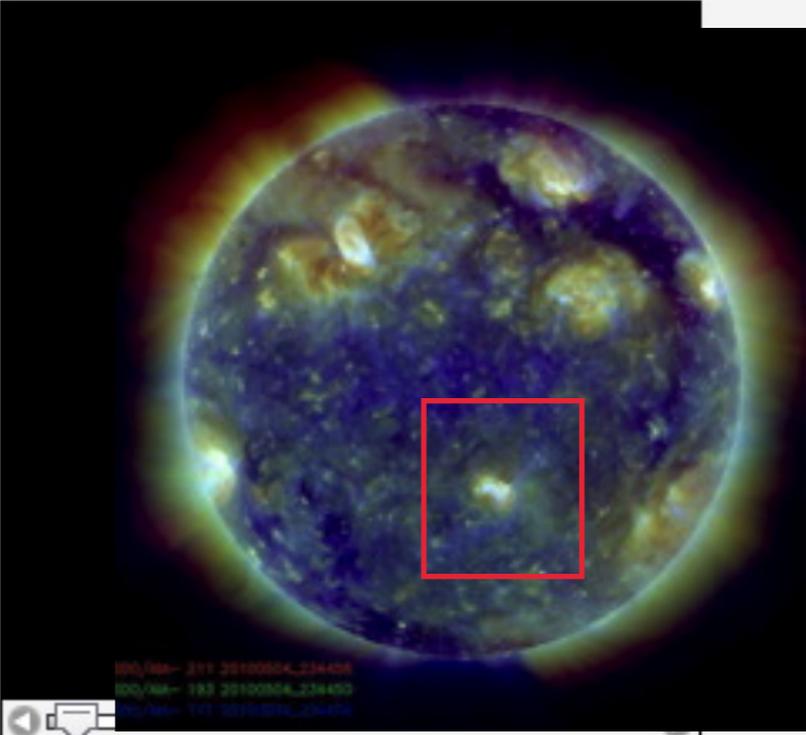
Stop Date: 2010-05-21

Stop Time: 00:00  [Open time picker](#)

Instrument: AIA

Wavelength: 131

xCen, yCen



Drag cursor to define xCen and yCen bounds.  
[move box tool](#) [clear bounding box](#)  
[set start date](#) [set stop date](#)  
xCenMin=-662, xCenMax=32, yCenMin=-620, YCenMax=-105

Carr Long

Carr Lat

Width: 694

Height: 515

Carr Rot

iSolve Search Tutorial <<https://www.lmsal.com/helio-informatics/hpkb/isolvesearch/isolvesearch.html%23>> (quicktime video)