



Heliophysics Event Catalogue



HEC User Guide

M. Messerotti (INAF-OATs, Trieste, Italy)

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HEC User Guide

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Introduction



What is HEC

The Heliophysics Event Catalogue (HEC) is a HELIO service based on a data base management system, which allows to place complex searches about heliophysics events stored in a series of indexed catalogues relevant to heliophysics events.

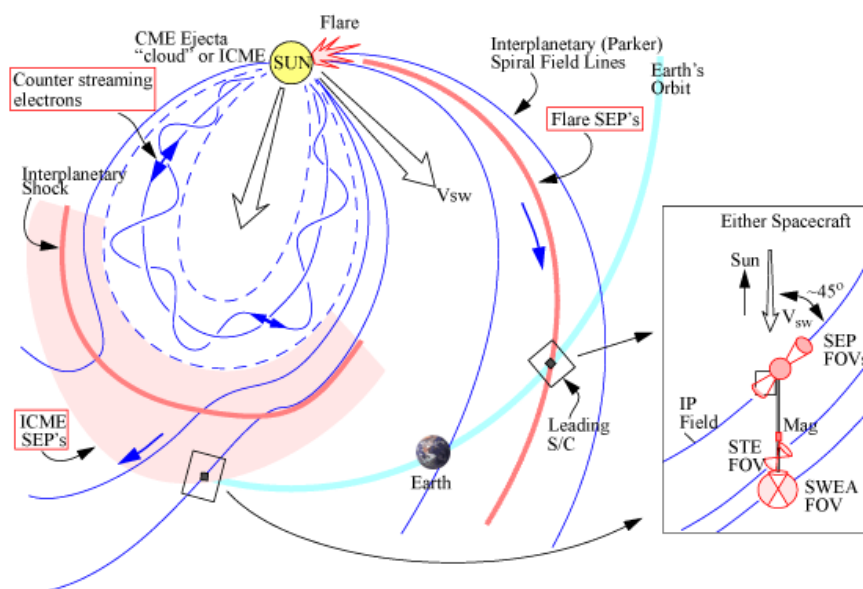
The catalogues have been generated and maintained by data providers like:

- organisations that operate ground- and space-based instruments (e.g. NASA, ESA);
- organisations that process data for specific purposes (e.g. for space weather as NOAA/SWPC);
- individuals for research goals.

"Heliophysics events" are a large variety of phenomena that:

- occur on or are originated at the Sun (e.g. solar flares, CMEs-Coronal Mass Ejections);
- propagate through the Interplanetary Medium (ICMEs-Interplanetary Coronal Mass Ejections);
- interact with the geospace and the planetary analogs (Solar Energetic Particles, Solar Wind shocks, ICMEs).

A Sample Heliophysics Event



The Figure depicts a sample heliophysics event e.g. the propagation of an Interplanetary Coronal Mass Ejection (ICME) and related solar energetic particles (SEP) through the heliosphere. (Courtesy of the STEREO Team - NASA)

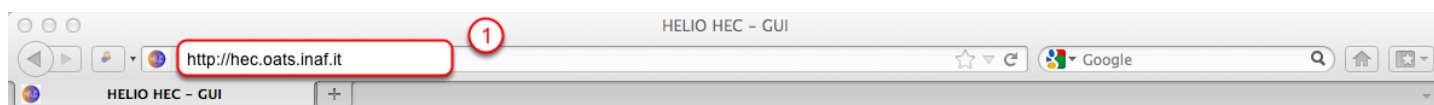


How to Access HEC

HEC can be accessed both at human-level via a web-based Graphical User Interface and at machine-level via a web-service.

The HEC homepage is available at the URL: <http://hec.oats.inaf.it>

Accessing HEC via Web



Enter the HEC URL in the address window of the browser (1).

Browser Compatibility

Browser	Operating System					
	Ubuntu 11.04		Mac OS X 10.7.0		Windows 7	
	Version	Status	Version	Status	Version	Status
Camino	-	-	2.0.7	OK	-	-
Firefox	5.0	OK	5.0.1	OK	5.0	OK
Chrome	13.0.782.107	OK	13.0.782.107	OK	13.0.782.107	OK
Internet Explorer	-	-	-	-	9.0.1	*
Opera	11.50.1074	OK	11.50.1074	OK	11.50.1074	**
Safari	-	-	5.1	OK		
SeaMonkey	2.0.13	OK	2.2	OK	2.2	OK
[OK] No issues [*] Minor issues [**] Major issues [-] Not available						
Last Tested: 06 August 2011						

The HEC GUI is compatible with most browsers under most operating systems.



The Graphical User Interface



Structure of the GUI

The HEC GUI is organised in sections related to the relevant functionalities provided.

Functional Sections of the GUI

The screenshot shows the Heliophysics Event Catalogue (HEC) GUI. The interface includes a header with the HELIO and CAPACITIES logos. Below the header, there is a 'Recent Changes' section. The main search area is divided into several sections:

- 1**: Search time interval, with dropdown menus for year (2012), month (January), and day (4), and another set for year (2012), month (February), and day (4).
- 2**: Event characterisation, including radio buttons for Event type (CME, Flare, Solar Wind, Particle), Location (Solar, IPS, Geo, Planet), and Obs. type (In situ, Remote, All). There is also a 'Reset' button and a 'Catalogue title search' field.
- 3**: A table displaying the results of the search, with columns for Select, Catalogue Description, Type, Status, Source, From, To, and Info.
- 4**: Catalogues matching selection, with a 'Submit search' button.
- 5**: Free SQL search, with a 'Browser Compatibility' link.

At the bottom of the page, it says 'Designed and maintained by INAF-TRIESTE ASTRONOMICAL OBSERVATORY' and includes logos for 'mon.itor.us/Tools' and 'IT'.

1. TIME INTERVAL SEARCH: allow entering start and end date for event searching.
2. EVENT CHARACTERISATION: allow restricting the search by specifying event categories.
3. CATALOGUE LIST DISPLAY AND SELECT: show the list of event catalogues matching the categories selected in (2), provide information on each catalogue and allow selecting the required ones from the displayed list.
4. SEARCH SUBMIT: submit search.
5. FREE SQL SEARCH: go to a page where it is possible to enter a custom SQL string.



Help System

The Help System is organised as (a) hovering windows, that appear when the mouse pointer is positioned on the relevant icons, and/or (b) hyperlinks that open external web pages when they are clicked.

Help System Icons and Hyperlinks

The screenshot shows the HELIO HEC GUI interface. The browser address bar displays 'festung1.oats.inaf.it/hec/hec_gui.php'. The page title is 'HELIO HEC - GUI'. The main content area features the HELIO logo and 'Heliophysics Event Catalogue' header. Below the header, there are several sections with numbered callouts:

- (1) Recent Changes icon
- (2) Search time interval icon
- (3) Event characterisation icon
- (4) Catalogues matching selection icon
- (5) Status icon in the table header
- (6) Catalogue title search icon
- (7) Show all catalogues icon
- (8) Browser Compatibility link
- (9) mon.torus/Tools link

Select	Catalogue Description	Type	Status	Source	From	To	Info
--------	-----------------------	------	--------	--------	------	----	------

- (1), (2), (3), (4), (5), (6) are icons that activate hovering help windows.
- (1), (6), (7), (8), (9) are hyperlinks that open external help web pages.



Heliophysics Event Catalogue



Help on HEC (Hovering Window)




Heliophysics Event Catalogue



Recent Changes 

CDAW Blog topic on the HEC

Search time interval 

2012 January 4 To 2012 February 4



Hovering window icon (1)

Help on HEC (Hyperlink to Blog)



HELIO CDAW

Showing posts with label **HEC**. [Show all posts](#)

SUNDAY, 10 APRIL 2011

HEC Basic Information

The following links provide basic information on the Heliophysics Event Catalogue, such as:

- [What is HEC?](#)
- [What can I do by HEC?](#)
- [How do I use HEC?](#)
- [What do I get from HEC?](#)
- [I want more from HEC](#)

More information will be added as long as the service will evolve and will be used for specific use cases.

Posted by M. Messerotti at 22:29 0 comments



Recommend this on Google

Labels: [HEC](#)

TOPICS

- [Context Service](#)
- [Data Provider Access Service](#)
- [Heliophysics Event Catalogue](#)
- [Heliophysics Feature Catalogue](#)
- [Instrument Capabilities Service](#)
- [Instrument Location Service](#)
- [Unified Observing Catalogue](#)


LABELS

- [CXS \(2\)](#)
- [DPAS \(2\)](#)
- [HEC \(3\)](#)
- [HFC \(1\)](#)
- [ICS \(2\)](#)
- [IDL \(2\)](#)
- [ILS \(2\)](#)
- [UOC \(1\)](#)
- [Updates \(4\)](#)

Hyperlink (1) to Blog





Help on Search Time Interval

Search time interval  2012 January 4 To 2012 February 4

Specify event time span for searching catalogues

Hovering window icon (2)

Help on Event Characterisation

Event characterisation  Event type: CME Flare Solar Wind Particle 

Specify event characteristics to restrict search


Coronal Mass Ejection Solar Flare IPS GEM Planet

Obs. type: In situ Remote All

Show all catalogues Catalogue title search:

Hovering window icon (3)

Help on Catalogue Matching Selection

Catalogues matching selection 

Select catalogues to get events from and fetch data

Select	Catalogue	Description	Type	Status	Source	From	To	Info
--------	-----------	-------------	------	--------	--------	------	----	------

Hovering window icon (4)



Help on Catalogue Status

Catalogues matching selection Submit search

Select	Catalogue Description	Type	Status	Source	From	To	Info
			Closed				The catalogue updating has been definitively stopped and will not be resumed
			Active				The catalogue has been updated either on a routinary or on an irregular basis
			Inactive				The catalogue has not been updated either on the provider side or on the HEC service side
			Static				The catalogue has not been updated because the development of an automatic procedure on the HEC service side has been still in progress

Hovering window icon (5)

Help on Time Coverage of Ingested Catalogues (Hovering Window)

Recent Changes 🔍

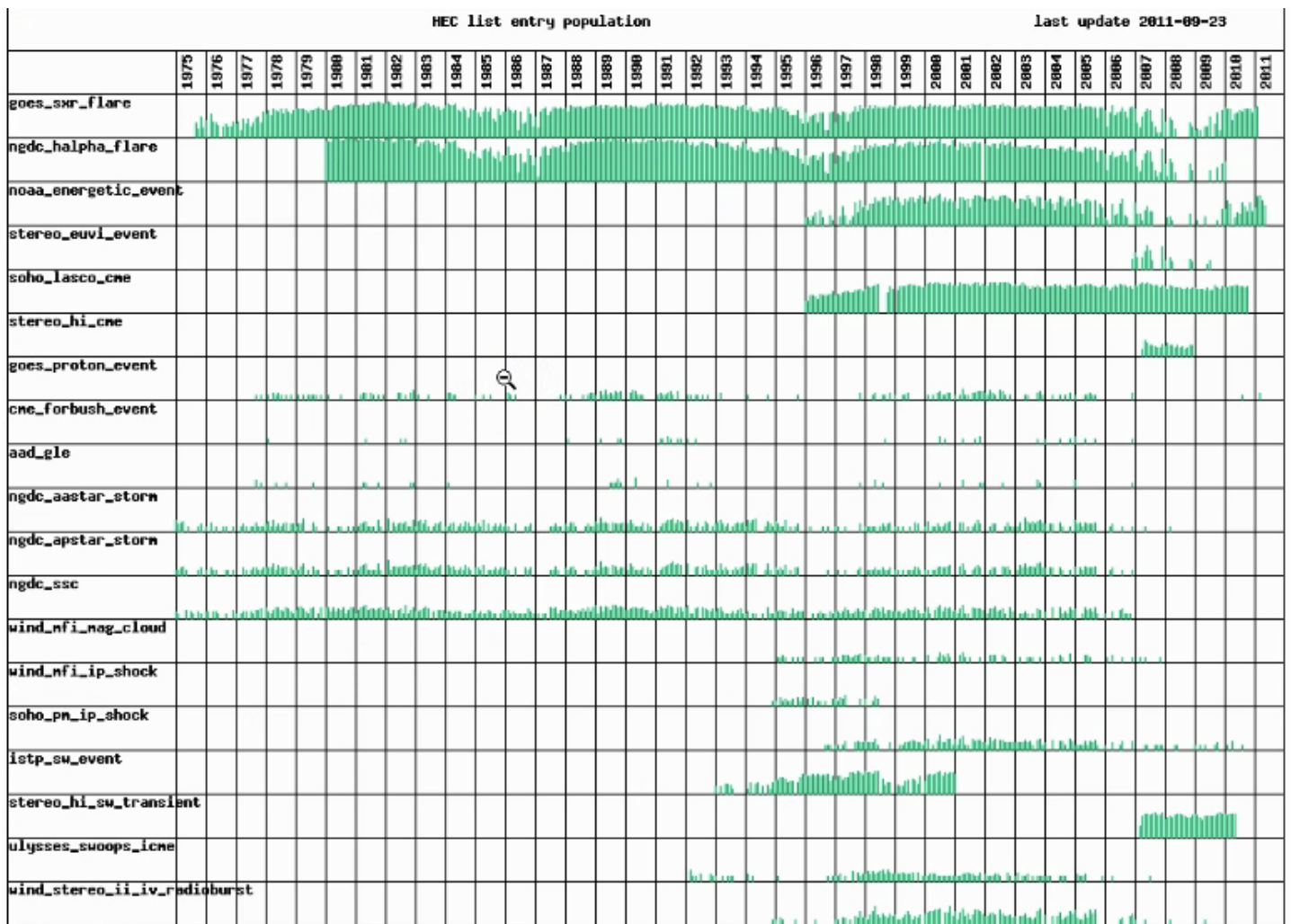
Search time interval 📅 2012 📅 January 📅 4 📅 To 2012 📅 February 📅 4 📅

📄 Catalogue time coverage

Hovering window icon (6)



Help on Time Coverage of Ingested Catalogues (External Web Page)



Click on hyperlink (6) to go to an external web page, that reports a graph with the time coverage of the ingested catalogues (i.e., the dates of available data) which is updated on a routine basis.



Help on Categories of Ingested Catalogues (External Web Page)

Description	Flare	CME	Solar Wind	Particle	In situ/Remote	Solar	IPS	GEO	Planet
GOES Soft X-ray Flare List	•				R	•			
NGDC H-alpha Flare List	•				R	•			
NOAA Solar Energetic Event List	•				R	•			
STEREO/SECCHI/EUVI Event List	•	•			R	•			
SOHO/LASCO CME Event List		•			R	•			
STEREO Heliospheric Imager CME Event List [R. Harrison]		•			R		•		
GOES Proton Event List				•	I			•	
CME-related Forbush Decrease Event List [E. Eroshenko]				•	I			•	
AAD Ground Level Enhancement List				•	I			•	
NGDC AA* Major Magnetic Storm			•		I			•	
NGDC Ap* Major Magnetic Storm			•		I			•	
NGDC Storm Sudden Commencement List			•		I			•	
WIND/MFI Magnetic Cloud List			•		I				
WIND/MFI Interplanetary Shock List			•		I				
SOHO/CELIAS/MTOF/PM Interplanetary Shock List			•		I				
ISTP Solar Wind Candidate Event List			•		I			•	
STEREO/HI Solar Wind Transient List			•		R		•		
Ulysses/SWOOPS Interplanetary CME List [Ebert et al.,2009]		•			I		•		
WIND and STEREO Candidate Type II and IV Radio Burst List					R		•		
Type II Radio Burst (WIND) and Associated CME (SOHO) List		•			R		•		

Click on hyperlink (7) to go to an external web page, which displays a table reporting the characterisation of catalogue events according to a set of main event categories.



Help on Browser Compatibility

Browser Compatibility

Browser	Operating System					
	Ubuntu 11.04		Mac OS X 10.7.0		Windows 7	
	Version	Status	Version	Status	Version	Status
Camino	-	-	2.0.7	OK	-	-
Firefox	5.0	OK	5.0.1	OK	5.0	OK
Chrome	13.0.782.107	OK	13.0.782.107	OK	13.0.782.107	OK
Internet Explorer	-	-	-	-	9.0.1	*
Opera	11.50.1074	OK	11.50.1074	OK	11.50.1074	**
Safari	-	-	5.1	OK		
SeaMonkey	2.0.13	OK	2.2	OK	2.2	OK
[OK] No issues [*] Minor issues [**] Major issues [-] Not available						
Last Tested: 06 August 2011						

Designed and maintained by [INAF-TRIESTE ASTRONOMICAL OBSERVATORY](#)

Click on hyperlink (8) to go to an external web page, which reports a table with the browser compatibility tests.



Accessibility Monitor

An external free monitoring service ('mon.itor.us': <http://www.monitor.us>) is used to test the availability of HEC multiple instances.

Help on HEC Service Availability

The screenshot displays the mon.itor.us monitoring interface. It features a blue header with the 'mon.itor.us' logo and a 'Tools' section. The main content area is divided into three panels:

- External Snapshot:** A table showing test results for various instances.
- Test HTTP festung1.oats.inaf.it_http:** A line graph showing performance metrics over time, with a peak at 04:00. Summary statistics: Up=100%, Down~0, Avg=181ms.
- Report EU INAF-Basovizza 1:** A table showing uptime and response times for three consecutive days.

TestName	Time	Response(...)	Status
festung1.oats...	10:04	47	OK
festung4.oato...	22:22	0	NOK
festung3.oats...	10:04	48	OK
festung2.oats...	21:52	0	NOK

Day	Uptime(...)	Avg(ms)	OK	NOK
1	100	58.069	28	0
2	97.92	77.427	47	1
3	100	60.637	40	0

Click on hyperlink (9) at the bottom right of the HEC GUI to go to an external web page, which reports the outcome of a continuous monitoring of the HEC multiple instances (access time, uptime percentage, etc.).



Sample Workflow



How to Use HEC

In heliophysics research, one can be interested in finding observations relevant to:

- a stationary event that occurred at a specific time and location;
- an event propagating through the heliosphere;
- a set of stationary and propagating events that can be correlated on a physical basis.

By means of HEC, it is possible to identify such observations by:

- interactively setting the properties that characterise the related events
- submitting the search to the HEC search engine, which will apply the search through the catalogues and will provide the list of existing observations.

Specifically, the following steps have to be carried out:

1. select date and time range of the events you are looking for;
2. characterise the events by selecting the event type and domain to optimise the search;
3. select from displayed list one or more catalogues to be searched for;
4. submit the search by clicking on the green button.

When the mouse pointer is moved over an "i"(nfo) icon, a hovering label appears to help understanding the aim of the selection blocks.

Furthermore, detailed information about each catalogue are provided in a pop-up window when clicking on the "Info" button associated with each catalogue in the displayed list.



Select Search Time Interval

The primary parameters for searching events are the start and end dates, which the user has to select.

Select Start Year

Recent Changes ⓘ

Search time interval ⓘ 2012 January 5 To 2012 February 5

Event characterisation ⓘ

1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012

Submit search

Select	Catalogue Description	Type	Status ⓘ	Source	From	To	Info
--------	-----------------------	------	----------	--------	------	----	------

Click on the arrows (1) to display the drop-down menu (2), and click on the selected start year (3). E.g. '2001'.

Select Start Month

Recent Changes ⓘ

Search time interval ⓘ 2001 January 5 To 2012 February 5

Event characterisation ⓘ

January
February
March
April
May
June
July
August
September
October
November
December

Submit search

Select	Catalogue Description	Type	Status ⓘ	Source	From	To	Info
--------	-----------------------	------	----------	--------	------	----	------

Click on the arrows (1) to display the drop-down menu (2), and click on the selected start month (3). E.g. 'November'.

Select Start Day

Click on the arrows (1) to display the drop-down menu (2), and click on the selected start day (3). E.g. '17'.

Select End Year

Click on the arrows (1) to display the drop-down menu (2), and click on the selected end year (3). E.g. '2001'.



Select End Month

Recent Changes

Search time interval 2001 November 17 To 2001 February 5

Event characterisation

Event type: CME Flare Solar Wind Particle

Location: Solar IPS Geo Planet

Obs. type: In situ Remote All

Show all catalogues

Catalogues matching selection

Select	Catalogue Description	Type	Status	Source	From	To	Info
--------	-----------------------	------	--------	--------	------	----	------

Click on the arrows (1) to display the drop-down menu (2), and click on the selected end month (3). E.g. 'November'.

Select End Day

Recent Changes

Search time interval 2001 November 17 To 2001 November 5

Event characterisation

Event type: CME Flare Solar Wind Particle

Location: Solar IPS Geo Planet

Obs. type: In situ Remote All

Show all catalogues

Catalogues matching selection

Select	Catalogue Description	Type	Status	Source	To	Info
--------	-----------------------	------	--------	--------	----	------

Click on the arrows (1) to display the drop-down menu (2), and click on the selected end year (3). E.g. '20'.



Characterise Event to Be Searched

It is advisable to restrict the search only to catalogues that contain events relevant to the specific scientific goal. This can be achieved by characterising the searched events based on pre-selected event categories.

Select Event Type

Recent Changes

Search time interval 2001 ▾ November ▾ 17 ▾ To 2001 ▾ November ▾ 20 ▾

Event characterisation Event type: CME Solar Wind Particle

Location: Solar IPS Geo Planet

Obs. type: In situ Remote All

Show all catalogues Catalogue title search:

Catalogues matching selection

Select	Catalogue Description	Type	Status	Source	From	To	Info
--------	-----------------------	------	--------	--------	------	----	------

Click on the relevant event type toggle icon(s) (1) to select one or more types, location and observation type (2). E.g. 'CME' and 'All'.



Get List of Relevant Catalogues

Event characterisation Event type: CME Flare Solar Wind Particle

Location: Solar IPS Geo Planet

Obs. type: In situ Remote All

Show all catalogues Catalogue title search:

Catalogues matching selection

Select	Catalogue Description	Type	Status	Source	From	To	Info
<input type="checkbox"/>	STEREO/SECCHI/EUVI Event List	event	closed	URL	2006-12-04	2009-07-08	<input type="button" value="Info"/>
<input type="checkbox"/>	SOHO/LASCO CME Event List	event	inactive	URL	1996-01-11	2011-09-30	<input type="button" value="Info"/>
<input type="checkbox"/>	STEREO Heliospheric Imager CME Event List [R. Harrison]	event	closed	URL	2007-03-31	2008-12-07	<input type="button" value="Info"/>
<input type="checkbox"/>	Ulysses/SWOOPS Interplanetary CME List [Ebert et al.,2009]	event	closed	URL	1992-03-10	2007-07-04	<input type="button" value="Info"/>
<input type="checkbox"/>	Type II Radio Burst (WIND) and Associated CME (SOHO) List	event	static	URL	1997-04-01	2008-04-26	<input type="button" value="Info"/>
<input type="checkbox"/>	CACTus SOHO/LASCO CME List	event	static	URL	1997-05-17	2011-12-31	<input type="button" value="Info"/>
<input type="checkbox"/>	CACTus STEREO-A/COR CME List	event	static	URL	2007-03-03	2012-01-01	<input type="button" value="Info"/>
<input type="checkbox"/>	CACTus STEREO-B/COR CME List	event	static	URL	2007-03-18	2011-12-11	<input type="button" value="Info"/>
<input type="checkbox"/>	CACTus SOHO/LASCO Flow List	event	static	URL	1997-05-06	2011-12-31	<input type="button" value="Info"/>
<input type="checkbox"/>	CACTus STEREO-A/COR Flow List	event	static	URL	2007-03-07	2011-12-30	<input type="button" value="Info"/>

The selection of event type(s), location(s), and observation type results in the display of a list of relevant catalogues (1).

The table reports the data type (2) (e.g. 'event'), the catalogue status (3) (e.g. 'closed'), the source data URL ('URL') (4), the start date of the catalogue ('From') (5), the end date of the catalogue ('To') (6), a hyperlink button that points to an external web page with detailed information on the catalogue ('Info') (7).



Select Catalogues to Be Searched

According to criteria relevant to the scientific goal, a subset of catalogues can be selected from the list in order to optimise the search.

Display Catalogue Source Data

Catalogues matching selection Submit search

4

Select	Catalogue Description	Type	Status	Source	From	To	Info
<input type="checkbox"/>	STEREO/SECCHI/EUVI Event List	event	closed	URL	2006-12-04	2009-07-08	Info
<input type="checkbox"/>	SOHO/LASCO CME Event List	event	inactive	URL	1996-01-11	2011-09-30	Info
<input type="checkbox"/>	STEREO Heliospheric Imager CME Event List [R. Harrison]	event	closed	URL	2007-03-31	2008-12-07	Info
<input type="checkbox"/>	Ulysses/SWOOPS Interplanetary CME List [Ebert et al.,2009]	event	closed	URL	1992-03-10	2007-07-04	Info
<input type="checkbox"/>	Type II Radio Burst (WIND) and Associated CME (SOHO) List	event	static	URL	1997-04-01	2008-04-26	Info
<input type="checkbox"/>	CACTus SOHO/LASCO CME List	event	static	URL	1997-05-17	2011-12-31	Info
<input type="checkbox"/>	CACTus STEREO-A/COR CME List	event	static	URL	2007-03-03	2012-01-01	Info
<input type="checkbox"/>	CACTus STEREO-B/COR CME List	event	static	URL	2007-03-18	2011-12-11	Info
<input type="checkbox"/>	CACTus SOHO/LASCO Flow List	event	static	URL	1997-05-06	2011-12-31	Info
<input type="checkbox"/>	CACTus STEREO-A/COR Flow List	event	static	URL	2007-03-07	2011-12-30	Info

Click on the relevant hyperlink (4) to display the source data.



Examine Catalogue Source Data

CACTus CME Homepage

sidc.oma.be/cactus/

Google

HELIO HEC - GUI

CACTus CME Homepage

CACTUS

A software package for 'Computer Aided CME Tracking'

CACTUS autonomously detects coronal mass ejections (CMEs) in image sequences from LASCO. The output of our software is a list of events, similar to the classic catalogs, with principle angle, angular width and velocity estimation for each CME. In contrast to catalogs assembled by human operators, these CME detections by software can be faster, which is especially important in the context of space weather, and possibly also more objective, as the detection criterion is written explicitly in a program.

The CME list is automatically generated by CACTus. There is no human intervention or supervision at this stage. Therefore we ask to use caution when using the data for statistical purposes.

When any of this data is used, please cite one of the following publications:

- [Astronomy and Astrophysics 425 \(2004\)](#)
- [Astrophysical Journal 691 \(2009\)](#)

(Near) real time output:

- [Latest CME detections](#) (updated every six hours)
- [Difference movie of latest c2 images](#)
- [Halo CME detection email-alert](#)

CACTus COR2 CME list:

- The CACTus COR2 CME list is updated daily and posted [here](#).
- Beacon COR2 CME speed calculator [here](#)

CACTus LASCO CME catalog:

- [Online Catalog \(version 2: CACTus version 2.5.0\)](#): from April 1997 until now (updated every 5 days)
- [Online Catalog \(version 1\)](#): from April 1997 until March 2007
- [Composition of the catalog](#)
- [Acknowledgement](#)

Catalogue source data are displayed in a separate tab/window.



Select Catalogue Info

Catalogues matching selection

Submit search

7

Select	Catalogue Description	Type	Status	Source	From	To	Info
<input type="checkbox"/>	STEREO/SECCHI/EUVI Event List	event	closed	URL	2006-12-04	2009-07-08	Info
<input type="checkbox"/>	SOHO/LASCO CME Event List	event	inactive	URL	1996-01-11	2011-09-30	Info
<input type="checkbox"/>	STEREO Heliospheric Imager CME Event List [R. Harrison]	event	closed	URL	2007-03-31	2008-12-07	Info
<input type="checkbox"/>	Ulysses/SWOOPS Interplanetary CME List [Ebert et al.,2009]	event	closed	URL	1992-03-10	2007-07-04	Info
<input type="checkbox"/>	Type II Radio Burst (WIND) and Associated CME (SOHO) List	event	static	URL	1997-04-01	2008-04-26	Info
<input type="checkbox"/>	CACTus SOHO/LASCO CME List	event	static	URL	1997-05-17	2011-12-31	Info
<input type="checkbox"/>	CACTus STEREO-A/COR CME List	event	static	URL	2007-03-03	2012-01-01	Info
<input type="checkbox"/>	CACTus STEREO-B/COR CME List	event	static	URL	2007-03-18	2011-12-11	Info
<input type="checkbox"/>	CACTus SOHO/LASCO Flow List	event	static	URL	1997-05-06	2011-12-31	Info
<input type="checkbox"/>	CACTus STEREO-A/COR Flow List	event	static	URL	2007-03-07	2011-12-30	Info

Click on the relevant hyperlink button (7) to display catalogue info.

Examine Catalogue Info

CACTus SOHO/LASCO CME List

Purpose:
This list contains parameters describing coronal mass ejections (CMEs) autonomously detected by CACTus in image sequences from SOHO/LASCO.

Description
The CACTus software package (Computer Aided CME Tracking) was developed by the Solar Influences Data Center (SIDC) of the Royal Observatory of Belgium; the project was co-funded by ESA (16913/03/NL/LvH).

Caveats
The CME list is automatically generated by CACTus; there is no human intervention or supervision at this stage. Caution should be used when employing the data for statistical purposes. See URLs <http://www.sidc.be/cactus/> and <http://secchi.nrl.navy.mil/cactus/> Some information (such as position angle) depends on the observatory location.

Acknowledgement/References
When any CACTus data are used please cite one of the following publications: <http://adsabs.harvard.edu/abs/2004A%26A...425.1097R> <http://adsabs.harvard.edu/abs/2009ApJ...691.1222R>
<http://www.sidc.be/cactus/>

Parameters:

HEC_id HEC id (1>Unitless)
Event Identification number (HEC internal number)
(UCD: meta.record, UTYPE:)

sat_id ()
The identifier of the spacecraft to which the list applies. The format of the ID follows the naming convention from the HELIO Instrument Catalogue Service (ICS).
(UCD: meta.id;instr.obsty, UTYPE:)

r_hcl AU (1.496E+11>m) HCl
The heliocentric distance of the observatory (satid) from which the information is provided

Catalogue info is displayed in an external web page.



Select Catalogues to Be Searched

8 Catalogues matching selection [i](#) [Submit search](#)

Select	Catalogue Description	Type	Status	Source	From	To	Info
<input type="checkbox"/>	Type II Radio Burst (WIND) and Associated CME (SOHO) List	event	static	URL	1997-04-01	2008-04-20	Info
<input checked="" type="checkbox"/>	CACTus SOHO/LASCO CME List	event	static	URL	1997-05-17	2011-12-31	Info
<input type="checkbox"/>	CACTus STEREO-A/COR CME List	event	static	URL	2007-03-03	2012-01-01	Info
<input type="checkbox"/>	CACTus STEREO-B/COR CME List	event	static	URL	2007-03-18	2011-12-11	Info
<input type="checkbox"/>	CACTus SOHO/LASCO Flow List	event	static	URL	1997-05-06	2011-12-31	Info
<input type="checkbox"/>	CACTus STEREO-A/COR Flow List	event	static	URL	2007-03-07	2011-12-30	Info
<input type="checkbox"/>	CACTus STEREO-B/COR Flow List	event	static	URL	2007-03-01	2012-01-01	Info
<input checked="" type="checkbox"/>	SOHO/LASCO Halo CME with Associated Flare and Magnetic Storm List	list	closed	URL	1996-04-29	2005-12-07	Info
<input type="checkbox"/>	CACTus SOHO & STEREO CME & Flow List	event	static	URL	1997-05-06	2012-01-01	Info
<input checked="" type="checkbox"/>	Mars Earth ICME [Falkenberg et al.]	event	static	URL	2001-04-04	2003-11-21	Info
<input type="checkbox"/>	Catalogue of Interplanetary Coronal Mass Ejections from STEREO	event	static	URL	2006-10-14	2010-10-07	Info

Identify the catalogues of interest by scrolling the catalogue list window, and select/deselect them by clicking on the leftmost toggle buttons (8).



Submit Search

The search that has been internally built up via the selected GUI options has to be submitted to the HEC search engine to be processed.

Activation of the HEC Search Engine

Catalogues matching selection 1

Select	Catalogue Description	Type	Status	Source	From	To	Info
<input type="checkbox"/>	CACTus STEREO-B/COR Flow List	event	static	URL	2007-03-01	2012-01-01	<input type="button" value="Info"/>
<input checked="" type="checkbox"/>	SOHO/LASCO Halo CME with Associated Flare and Magnetic Storm List	list	closed	URL	1996-04-29	2005-12-07	<input type="button" value="Info"/>
<input type="checkbox"/>	CACTus SOHO & STEREO CME & Flow List	event	static	URL	1997-05-06	2012-01-01	<input type="button" value="Info"/>
<input checked="" type="checkbox"/>	Mars Earth ICME [Falkenberg et al.]	event	static	URL	2001-04-04	2003-11-21	<input type="button" value="Info"/>
<input type="checkbox"/>	Catalogue of Interplanetary Coronal Mass Ejections from STEREO IMPACT/PLASTIC	event	static	URL	2006-12-14	2010-12-27	<input type="button" value="Info"/>
<input type="checkbox"/>	Catalogue of Interplanetary Shocks from STEREO-A IMPACT/PLASTIC	event	static	URL	2007-01-14	2010-12-14	<input type="button" value="Info"/>
<input type="checkbox"/>	Catalogue of Interplanetary Shocks from STEREO-B IMPACT/PLASTIC	event	static	URL	2007-01-14	2010-12-29	<input type="button" value="Info"/>
<input type="checkbox"/>	Near-Earth Interplanetary Coronal Mass Ejections During Solar Cycle 23	event	static	URL	1996-05-27	2009-12-19	<input type="button" value="Info"/>
<input type="checkbox"/>	CMEs in the Inner Heliosphere	event	static	URL	1998-10-15	2004-07-25	<input type="button" value="Info"/>
<input type="checkbox"/>	SEEDS CME Catalogue for SOHO/LASCO	event	static	URL	2011-01-02	2011-03-31	<input type="button" value="Info"/>

Click on the 'Submit Search' button (1) to submit search to the HEC search engine.



Get Search Results

Search results are provided in a variety of formats.

Tabular Format on an External Web Page

1. Download as [STILTS VoTable](#) or [STILTS CSV](#) or HELIO Service [HelioQueryInterface VoTable](#) (or go to [prev](#) /[next](#) table header in case of multiple selection)
 select * from cactus_soho_cme where time_start>='2001-11-17 00:00:00' AND time_start<='2001-11-20 23:59:59'

hec_id	sat_id	r_hci	long_hci	lat_hci	time_start	duration	pa	pa_width	v	dv	v_min	v_max	flag_halo	cme_number	event_detail
4567	SOHO	0.9784	-20.72	2.54	2001-11-17 00:30:00.0	1	96	10	548	238	452	1041		200111-CME0087	[URL]
4568	SOHO	0.9784	-20.51	2.51	2001-11-17 05:30:00.0	6	144	360	880	317	267	1561	H4	200111-CME0088	[URL]
4569	SOHO	0.9784	-20.51	2.51	2001-11-17 05:30:00.0	2	85	60	420	241	138	1040		200111-CME0089	[URL]
4570	SOHO	0.9783	-20.45	2.51	2001-11-17 06:54:00.0	1	126	30	652	216	459	1251		200111-CME0090	[URL]
4571	SOHO	0.9783	-20.27	2.49	2001-11-17 11:06:00.0	1	0	62	238	24	190	282		200111-CME0091	[URL]
4572	SOHO	0.9783	-20.27	2.49	2001-11-17 11:06:00.0	1	13	24	278	19	242	294		200111-CME0092	[URL]
4573	SOHO	0.9783	-20.17	2.47	2001-11-17 13:31:00.0	3	301	56	262	52	154	372		200111-CME0093	[URL]
4574	SOHO	0.9783	-20.1	2.47	2001-11-17 15:06:00.0	1	226	14	458	197	315	820		200111-CME0094	[URL]
4575	SOHO	0.9783	-19.99	2.45	2001-11-17 17:54:00.0	2	9	16	289	196	188	664		200111-CME0095	[URL]
4576	SOHO	0.9783	-19.9	2.44	2001-11-17 19:54:00.0	2	15	8	252	11	244	271		200111-CME0096	[URL]
4577	SOHO	0.9782	-19.73	2.42	2001-11-18 00:06:00.0	1	19	8	286	35	231	321		200111-CME0097	[URL]
4578	SOHO	0.9781	-18.83	2.32	2001-11-18 21:30:00.0	5	232	202	744	116	473	1041	H3	200111-CME0098	[URL]
4579	SOHO	0.9781	-18.83	2.32	2001-11-18 21:30:00.0	1	197	20	318	4	315	326		200111-CME0099	[URL]
4580	SOHO	0.9781	-18.78	2.31	2001-11-18 22:30:00.0	2	36	94	1157	358	452	1736	H2	200111-CME0100	[URL]
4581	SOHO	0.978	-18.01	2.22	2001-11-19 16:54:00.0	2	308	26	224	98	133	381		200111-CME0101	[URL]
4582	SOHO	0.9779	-17.89	2.2	2001-11-19 19:54:00.0	2	70	74	288	44	221	354		200111-CME0102	[URL]
4583	SOHO	0.9779	-17.52	2.16	2001-11-20 04:30:00.0	1	314	14	571	291	329	1115		200111-CME0103	[URL]
4584	SOHO	0.9779	-17.36	2.14	2001-11-20 08:30:00.0	3	313	20	144	32	110	209		200111-CME0104	[URL]

2. Download as [STILTS VoTable](#) or [STILTS CSV](#) or HELIO Service [HelioQueryInterface VoTable](#) (or go to [prev](#) /[next](#) table header in case of multiple selection)
 select * from halo_cme_flare_magnetic_storm where time_start>='2001-11-17 00:00:00' AND time_start<='2001-11-20 23:59:59'

hec_id	cme_id	time_start	cme_speed	pa_measure	lat_hg	long_hg	long_carr	pos_flag	time_flare	xray_class	time_storm	dst
187	187	2001-11-17 05:30:00.0	1379.0	58.0	-13.0	-42.0	267.67		2001-11-17 04:49:00.0	M2.8	2001-11-19 15:00:00.0	-48.0
188	188	2001-11-18 21:30:00.0	888.0	225.0				B?			2001-11-23 02:00:00.0	-42.0

3. Download as [STILTS VoTable](#) or [STILTS CSV](#) or HELIO Service [HelioQueryInterface VoTable](#) (or go to [prev](#) /[next](#) table header in case of multiple selection)
 select * from mars_earth_icme where time_start_mars>='2001-11-17 00:00:00' AND time_start_mars<='2001-11-20 23:59:59'

hec_id	event_id	time_start_mars	p_dyn_mars	counts_max_mars	time_start_earth	p_dyn_earth	v_max_earth	density_max_earth	counts_max_goes	long_hci_sepn
5	5	2001-11-20 03:35:00.0	12.0	2500	2001-11-19 18:15:00.0	7.5	622	20.0	0.2	-55.94

The results matching the selected search parameters are displayed on an external web page, organised in separate sections (1)-(2)-(3) for each catalogue that can be easily navigated by means of the navigation hyperlinks 'prev'(ious) (4) and 'next' (5), located at the top of each catalogue section.

Results in **VoTable** (Virtual Observatory Table) format can be obtained via **STILTS** (Starlink Tables Infrastructure Library Tool Set) by clicking on hyperlink (6) and via **HQI** (HELIO Query Interface) by clicking on hyperlink (8) at the top of each catalogue result section. Similarly, Results in **CSV** (Comma Separated Values) can be obtained via STILTS by clicking on hyperlink (7).



Get Results in VOTable Format Via STILTS

```

- <VOTABLE version="1.1" xsi:schemaLocation="http://www.ivoa.net/xml/VOTable/v1.1 http://www.ivoa.net/xml/VOTable/v1.1">
  - <!--
    ! VOTable written by STIL version 2.9-3x (uk.ac.starlink.votable.VOTableWriter)
    ! at 2012-02-05T16:56:03
    !
  -->
- <RESOURCE>
  - <TABLE>
    <FIELD datatype="int" name="hec_id"/>
    <FIELD arraysize="*" datatype="char" name="sat_id"/>
    <FIELD datatype="float" name="r_hci"/>
    <FIELD datatype="float" name="long_hci"/>
    <FIELD datatype="float" name="lat_hci"/>
    <FIELD arraysize="*" datatype="char" name="time_start"/>
  - <FIELD datatype="int" name="duration">
    <VALUES null="-2147483648"/>
  </FIELD>

```

Click on hyperlink (6) for Catalogue no. 1.

Get Results in CSV Format Via STILTS

```

hec_id,sat_id,r_hci,long_hci,lat_hci,time_start,duration,pa,pa_width,v,dv,v_min,v_max,flag_halo,cme_number,event_detail
00:30:00.0,1,96,10,548,238,452,1041,,200111-CME0087,http://sidc.oma.be/cactus/catalog/LASCO/2_5_0/2001/11/CME0087/CME.html
05:30:00.0,6,144,360,880,317,267,1561,H4,200111-CME0088,http://sidc.oma.be/cactus/catalog/LASCO/2_5_0/2001/11/CME0088/CME.html
4569,SOHO,0.9784,-20.51,2.51,2001-11-17 05:30:00.0,2,85,60,420,241,138,1040,,200111-CME0089,http://sidc.oma.be/cactus/catalog/LASCO/2_5_0/2001/11/CME0089/CME.html
4570,SOHO,0.9783,-20.45,2.51,2001-11-17 06:54:00.0,1,126,30,652,216,459,1251,,200111-CME0090,http://sidc.oma.be/cactus/catalog/LASCO/2_5_0/2001/11/CME0090
/CME.html
4571,SOHO,0.9783,-20.27,2.49,2001-11-17 11:06:00.0,1,0,62,238,24,190,282,,200111-CME0091,http://sidc.oma.be/cactus/catalog/LASCO/2_5_0/2001/11/CME0091
/CME.html
4572,SOHO,0.9783,-20.27,2.49,2001-11-17 11:06:00.0,1,13,24,278,19,242,294,,200111-CME0092,http://sidc.oma.be/cactus/catalog/LASCO/2_5_0/2001/11/CME0092
/CME.html
4573,SOHO,0.9783,-20.17,2.47,2001-11-17 13:31:00.0,3,301,56,262,52,154,372,,200111-CME0093,http://sidc.oma.be/cactus/catalog/LASCO/2_5_0/2001/11/CME0093
/CME.html
4574,SOHO,0.9783,-20.1,2.47,2001-11-17 15:06:00.0,1,226,14,458,197,315,820,,200111-CME0094,http://sidc.oma.be/cactus/catalog/LASCO/2_5_0/2001/11/CME0094
/CME.html
4575,SOHO,0.9783,-19.99,2.45,2001-11-17 17:54:00.0,2,9,16,289,196,188,664,,200111-CME0095,http://sidc.oma.be/cactus/catalog/LASCO/2_5_0/2001/11/CME0095
/CME.html
4576,SOHO,0.9783,-19.9,2.44,2001-11-17 19:54:00.0,2,15,8,252,11,244,271,,200111-CME0096,http://sidc.oma.be/cactus/catalog/LASCO/2_5_0/2001/11/CME0096
/CME.html
4577,SOHO,0.9782,-19.73,2.42,2001-11-18 00:06:00.0,1,19,8,286,35,231,321,,200111-CME0097,http://sidc.oma.be/cactus/catalog/LASCO/2_5_0/2001/11/CME0097
/CME.html
4578,SOHO,0.9781,-18.83,2.32,2001-11-18 21:30:00.0,5,232,202,744,116,473,1041,H3,200111-CME0098,http://sidc.oma.be/cactus/catalog/LASCO/2_5_0/2001/11
/CME0098/CME.html
4579,SOHO,0.9781,-18.83,2.32,2001-11-18 21:30:00.0,1,197,20,318,4,315,326,,200111-CME0099,http://sidc.oma.be/cactus/catalog/LASCO/2_5_0/2001/11
/CME0099/CME.html
4580,SOHO,0.9781,-18.78,2.31,2001-11-18 22:30:00.0,2,36,94,1157,358,452,1736,H2,200111-CME0100,http://sidc.oma.be/cactus/catalog/LASCO/2_5_0
/2001/11/CME0100/CME.html
4581,SOHO,0.978,-18.01,2.22,2001-11-19 16:54:00.0,2,308,26,224,98,133,381,,200111-CME0101,http://sidc.oma.be/cactus/catalog/LASCO/2_5_0
/2001/11/CME0101/CME.html
4582,SOHO,0.9779,-17.89,2.2,2001-11-19 19:54:00.0,2,70,74,288,44,221,354,,200111-CME0102,http://sidc.oma.be/cactus/catalog/LASCO/2_5_0
/2001/11/CME0102/CME.html
4583,SOHO,0.9779,-17.52,2.16,2001-11-20 04:30:00.0,1,314,14,571,291,329,1115,,200111-CME0103,http://sidc.oma.be/cactus/catalog/LASCO
/2_5_0/2001/11/CME0103/CME.html
4584,SOHO,0.9779,-17.36,2.14,2001-11-20 08:30:00.0,3,313,20,144,32,110,209,,200111-CME0104,http://sidc.oma.be/cactus/catalog/LASCO
/2_5_0/2001/11/CME0104/CME.html

```

Click on hyperlink (7) for Catalogue no. 1.



Get Results in VOTable Format Via HQI

```
-<VOTABLE version="1.1">
- <RESOURCE>
  <DESCRIPTION>Helio HEC time based query V1.17.53</DESCRIPTION>
  <INFO name="QUERY_STATUS" value="OK"/>
  <INFO name="EXECUTED_AT" value="2012-02-05 17:04:41"/>
  <INFO name="MAX_RECORD_ALLOWED" value="20000"/>
- <INFO name="QUERY_STRING">
  SELECT
  cactus_soho_cme.HEC_id,cactus_soho_cme.time_start,cactus_soho_cme.duration,cactus_soho_cme.pa,cactus_soho_cme.pa_width,cactus_soho_cme.v,cactus_soho_cme.dv
  FROM cactus_soho_cme WHERE time_start>='2001-11-17 00:00:00' AND time_start<='2001-11-20 23:59:59' LIMIT 20000
</INFO>
- <INFO name="QUERY_URL">
  http://festung1.oats.inaf.it:8080/helio-hec/HelioQueryService?STARTTIME=2001-11-17 00:00:00&ENDTIME=2001-11-20 23:59:59&FROM=cactus_soho_cme
</INFO>
- <INFO name="TABLE_NAME" value="cactus_soho_cme"/>
- <TABLE name="hec-cactus_soho_cme">
  - <FIELD datatype="int" name="hec_id" ucd="meta.record">
    <DESCRIPTION>Event Identification number (HEC internal number)</DESCRIPTION>
  </FIELD>
  - <FIELD arraysize="*" datatype="char" name="time_start" ucd="time.start" utype="helio:time_period.time_start" xtype="iso8601">
    <DESCRIPTION>Onset time, earliest indication of liftoff</DESCRIPTION>
  </FIELD>
```

Click on hyperlink (8) for Catalogue no. 1.



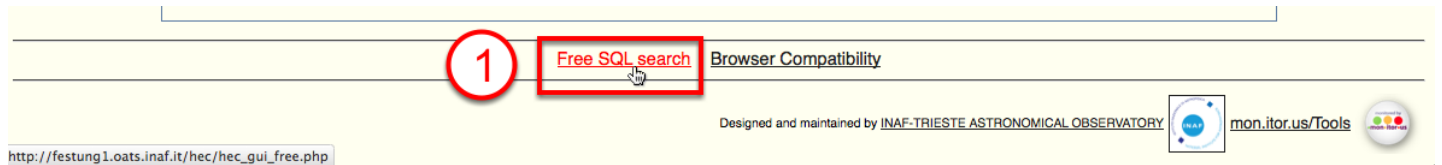
Advanced Features



Free SQL Search

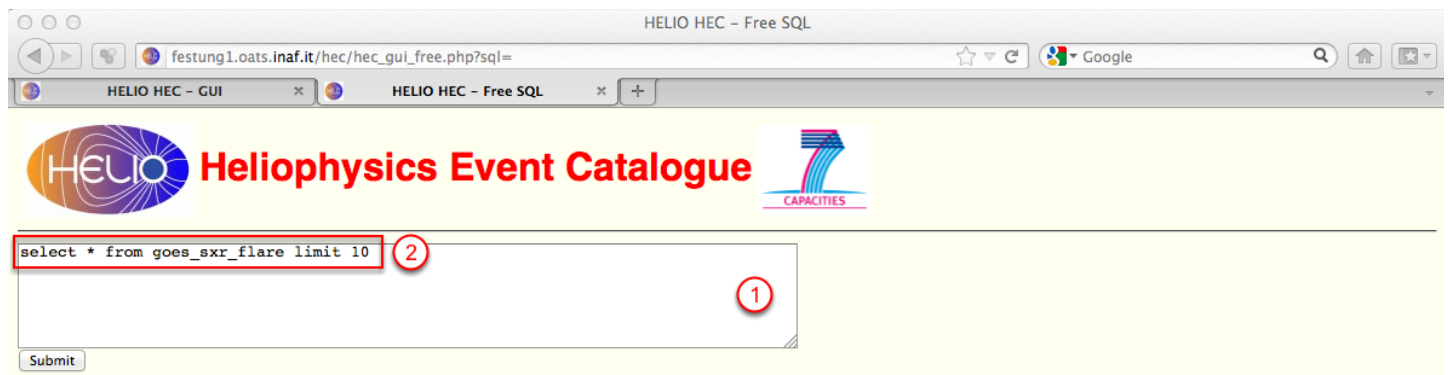
Advanced users who know SQL can place complex searches by entering SQL strings via the "Free SQL Search" GUI.

Access the Free SQL Search GUI from the HEC Homepage



Click on the "Free SQL Search" hyperlink (1) at the bottom of the HEC homepage.

Enter an SQL string



Click on the text window (1) and enter a valid SQL string as (2) in the Figure. This sample SQL string launches a search ('select') of all entries ('*') from ('from') the SXR GOES catalogue ('goes_sxr_flare') and limits ('limit') the output to 10 results ('10').



Submit the Search

HELIO HEC - Free SQL

festung1.oats.inaf.it/hec/hec_gui_free.php?sql=

HELIO HEC - GUI HELIO HEC - Free SQL

HELIO Heliophysics Event Catalogue CAPACITIES

```
select * from goes_sxr_flare limit 10
```

Submit (1)

Click on the "Submit" icon (1) to submit the search.

Get the Results

HELIO HEC - Free SQL

festung1.oats.inaf.it/hec/hec_gui_free.php?sql=

HELIO HEC - GUI HELIO HEC - Free SQL

HELIO Heliophysics Event Catalogue CAPACITIES

```
select * from goes_sxr_flare limit 10
```

Submit (3)

Download as [VoTable](#) or [CSV](#) (3)

select * from goes_sxr_flare limit 10 (1)

hec_id	time_start	time_peak	time_end	nar	lat_hg	long_hg	long_carr	xray_class	optical_class
1	1975-09-01 15:12:00.0	1975-09-01 15:12:00.0	1975-09-01 15:19:00.0	633	3.0	-54.0	255.13	C0.0	sn
2	1975-09-01 19:33:00.0	1975-09-01 19:35:00.0	1975-09-01 19:45:00.0	633	7.0	-47.0	259.74	C0.0	sf
3	1975-09-02 09:25:00.0	1975-09-02 09:25:00.0	1975-09-02 09:38:00.0	633	6.0	-39.0	260.11	C0.0	sn
4	1975-09-03 21:15:00.0	1975-09-03 21:15:00.0	1975-09-03 21:15:00.0	633	8.0	-22.0	257.39	C0.0	sf
5	1975-09-04 13:02:00.0	1975-09-04 13:19:00.0	1975-09-04 13:46:00.0	635	5.0	-10.0	260.7	C0.0	sf
6	1975-09-08 02:01:00.0	1975-09-08 02:05:00.0	1975-09-08 02:21:00.0	633	9.0	37.0	260.94	C0.0	sf
7	1975-09-09 01:45:00.0		1975-09-09 01:50:00.0	644	-12.0	-40.0	170.88	C0.0	sf
8	1975-09-10 14:16:00.0	1975-09-10 14:21:00.0	1975-09-10 14:34:00.0	633	8.0	75.0	265.79	C0.0	sf
9	1975-09-11 20:17:00.0	1975-09-11 20:18:00.0	1975-09-11 20:19:00.0	644	-10.0	-5.0	169.27	C0.0	sf
10	1975-09-18 13:51:00.0	1975-09-18 13:53:00.0	1975-09-18 14:15:00.0	649	8.0	2.0	87.39	C0.0	sf

(2)

mon.itor.us/Tools (5)

Designed and maintained by INAF-TRIESTE ASTRONOMICAL OBSERVATORY

The SQL search string is displayed in bold font (1), and the search results are displayed in tabular format (2).

The results can be obtained also in VOTable format by clicking on hyperlink (3), and in CSV (Comma Separated Values) format by clicking on hyperlink (4).



Examples of How to Use SQL in a Free SQL Search

SQL Examples for the EGSO SEC Server

sec.ts.astro.it/sec_idiots_sql.html

EGSO SEC - GUI

Examples of how to use SQL on the EGSO SEC Server

The EGSO SEC Server is implemented as a PostgreSQL database. There is a [Tutorial](#) available - you might find the [List of PostgreSQL Commands](#) useful for the examples below, particularly the page on using [SELECT](#).

Time Specification

The following time specifications are known to work for SQL:

```
1994-01-01 00:00:00
1994-Jan-01 00:00:00
01-Jan-1994 00:00:00
```

There are two ways (more?) of specifying a time range:

```
WHERE time_start>='2002-02-12 00:00:00' AND time_start<='2002-02-16 23:59:59'
and
WHERE time_start BETWEEN '2002-02-12 00:00:00' AND '2002-02-16 23:59:59'
```

Examples

Below we show some examples of how to use SQL in the EGSO SEC Server:

1. The simplest search of a list for a specific time interval

```
SELECT * FROM hessi_flare
WHERE time_start>='2002-02-12 00:00:00' AND time_start<='2002-02-16 23:59:59'
ORDER BY time_start
try here
```
2. A simple search, but only including some of the parameters in the output table

```
SELECT time_start,time_end,nar,latitude,longitude,xray_class FROM sgas_event
WHERE time_start BETWEEN '1999-12-05 00:00:00' AND '2000-01-01 23:59:59'
ORDER BY time_start
try here
```
3. A simple search looking for a particular NOAA Active Region No. (9393) and only reporting certain parameters. This example also demonstrates how to define and use of the a short name for the list (in this case "sg" for "sgas_event"):

```
SELECT sg.time_start,sg.time_peak,sg.nar FROM sgas_event sg WHERE sg.nar=9393
```
4. Select events for a range of NOAA Active Region No.; refine search to only include events that have an X-ray class > M1 and a location in the north-west quadrant of the solar disk. The results are ordered by X-ray class (just for fun):

```
SELECT * FROM sgas_event WHERE nar>9500 AND nar<9700
AND xray_class >'C6' AND latitude>0 AND longitude>0
```

A basic tutorial about the use of SQL for Free SQL Search is available for the EGSO SEC (Solar Event Catalogue) server (the predecessor of HELIO HEC) at the URL:

http://sec.ts.astro.it/sec_idiots_sql.html

This tutorial will be updated to HELIO HEC as soon as possible.



Appendix



Appendix

Useful ancillary information.



List of HEC Catalogues

Description	Flare	CME	Solar Wind	Particle	In situ/Remote	Solar	IPS	GEO	Planet
GOES Soft X-ray Flare List	•				R	•			
NGDC H-alpha Flare List	•				R	•			
NOAA Solar Energetic Event List	•				R	•			
STEREO/SECCHI/EUVI Event List	•	•			R	•			
SOHO/LASCO CME Event List		•			R	•			
STEREO Heliospheric Imager CME Event List [R. Harrison]		•			R		•		
GOES Proton Event List				•	I			•	
CME-related Forbush Decrease Event List [E. Eroshenko]				•	I			•	
AAD Ground Level Enhancement List				•	I			•	
NGDC AA* Major Magnetic Storm			•		I			•	
NGDC Ap* Major Magnetic Storm			•		I			•	
NGDC Storm Sudden Commencement List			•		I			•	
WIND/MFI Magnetic Cloud List			•		I				
WIND/MFI Interplanetary Shock List			•		I				
SOHO/CELIAS/MTOF/PM Interplanetary Shock List			•		I				
ISTP Solar Wind Candidate Event List			•		I			•	
STEREO/HI Solar Wind Transient List			•		R		•		
Ulysses/SWOOPS Interplanetary CME List [Ebert et al.,2009]		•			I		•		
WIND and STEREO Candidate Type II and IV Radio Burst List					R		•		
Type II Radio Burst (WIND) and Associated CME (SOHO) List		•			R		•		
Yohkoh/HXT Hard X-ray Flare List [Sato et al.,2006]	•				R	•			
RHESSI Hard X-ray Flare List	•				R	•			
Kanzelhoehe Solar Observatory H-alpha Flare List	•				R	•			
Trieste Solar Radio System (TSRS) Solar Radio Event List					R	•			
SOHO/EIT Wave Transient List [B. J. Thompson and D. C. Myers,2009]					R	•			
CACTus SOHO/LASCO CME List		•			R	•			
CACTus STEREO-A/COR CME List		•			R	•			
CACTus STEREO-B/COR CME List		•			R	•			
CACTus SOHO/LASCO Flow List		•			R	•			
CACTus STEREO-A/COR Flow List		•			R	•			
CACTus STEREO-B/COR Flow List		•			R	•			
Ulysses/GRB X-ray Flare List [Tranquille et a.,2009]	•				R	•			
SOHO/LASCO Halo CME with Associated Flare and Magnetic Storm List	•	•			R	•		•	
CACTus SOHO & STEREO CME & Flow List		•			R	•			
NOAA/USAF Solar Active Region Summary List					R	•			
NOAA Daily Solar Data List					R	•			
Mars Earth ICME [Falkenberg et al.]		•			R	•	•	•	•
Stream Interaction Regions from Wind and ACE data [Jian et al.,2011]			•		I	•		•	
GOES strong flare and SEP list [Klein et al.,2011]	•			•	I	•		•	
TIMED-SEE Flare Catalog	•				R	•			
WIND/Waves Type III Radio Bursts (HELIO HFC)					R	•			
Ulysses Catalog of Solar Hard X-Ray Flares	•				R	•			
Ulysses Catalog of Solar Hard X-Ray Flares on the Far-side of the Sun	•				R	•			
GOES stong flare with no SEP radio and CME associations	•				R	•			
Catalogue of Interplanetary Coronal Mass Ejections from STEREO IMPACT/PLASTIC		•	•		I	•	•		
Catalogue of Stream Interaction Regions (SIRs) from STEREO-A IMPACT/PLASTIC			•		I	•	•		
Catalogue of Stream Interaction Regions (SIRs) from STEREO-B IMPACT/PLASTIC			•		I	•	•		
Catalogue of Interplanetary Shocks from STEREO-A IMPACT/PLASTIC		•	•		I	•	•		
Catalogue of Interplanetary Shocks from STEREO-B IMPACT/PLASTIC		•	•		I	•	•		
Near-Earth Interplanetary Coronal Mass Ejections During Solar Cycle 23		•			R	•			
CMEs in the Inner Heliosphere		•			R	•			
SEEDS CME Catalogue for SOHO/LASCO		•			R	•			

To date (5 Feb. 2012) 53 heliophysics event catalogues have been ingested into HEC. The Figure reports the full list that can be obtained by clicking the relevant icon in the main HEC GUI.