

# FESTIVAL\_GLOBAL\_RESULTS OBJECT

## 1/ DESCRIPTION

The FESTIVAL\_GLOBAL\_RESULTS object is .

The application has only one instance of FESTIVAL\_GLOBAL\_RESULTS running.

No GUI is associated to this object.

The main functionalities of the FESTIVAL\_GLOBAL\_RESULTS are :

- to contain all SearchResult objects concerning the current queries of all probes,
- to sort them by date and instrument for their display in the FESTIVAL\_SELECTION\_GUI table,
- to determine the previous SearchResult of a given one (of the same probe and of the same instrument) : this function is used when a difference data is needed,
- to determine the previous and next date to be used as current date in global and/or link mode (when the user clicks on the previous or next button in the VISU\_GUI object)
- to determine the set of SearchResults corresponding to a given date in global mode

## 2/ SUPERCLASSES

### 3/ PROPERTIES

Preliminary : a few constants are defined for this object in FESTIVAL\_DATA\_TYPES :

**Nb\_Probes** = 3 (STEREO\_A, STEREO\_B, SOHO)

**STEREO\_A\_index** = 0

**STEREO\_B\_index** = 1

**SOHO\_index** = 2

**MaxNb\_of\_instruments** = 5 (STEREO A and B have 5 instruments, SOHO has 4 instruments)

**EUVI\_index** = 0

**COR1\_index** = 1

**COR2\_index** = 2

**HI1\_index** = 3

**HI2\_index** = 4

**EIT\_index** = 0

**C1\_index** = 1

**C2\_index** = 2

**C3\_index** = 3

Properties :

- **VISU\_GUI\_of\_probe[Nb\_Probes]** : array of references to the FESTIVAL\_VISU\_GUI object of the 3 probes.

### 4/ METHODS

#### 4.1/ *FESTIVAL\_GLOBAL\_RESULTS::INIT*

**Syntax :**

Result = Obj->[FESTIVAL\_GLOBAL\_RESULTS::]Init ()

**Description :**

The FESTIVAL\_GLOBAL\_RESULTS::INIT function method constructs a FESTIVAL\_GLOBAL\_RESULTS object.

**Return Value :**

The FESTIVAL\_GLOBAL\_RESULTS::INIT function method returns 1 if initialization was successful, or 0 otherwise.

**Arguments :**

**Keywords :**

#### **4.2/ FESTIVAL\_GLOBAL\_RESULTS::ADD**

**Syntax :**

Obj->[FESTIVAL\_GLOBAL\_RESULTS::]Add, oFestivalSearchResult

**Description :**

The FESTIVAL\_GLOBAL\_RESULTS::Add procedure method adds a FESTIVAL\_SEARCH\_RESULT object to the appropriate container, depending on the FESTIVAL\_SEARCH\_RESULT associated probe.

**Arguments :**

oFestivalSearchResult :

A valid FESTIVAL\_SEARCH\_RESULT object to be added.

**Keywords :**

None.

#### **4.3/ FESTIVAL\_GLOBAL\_RESULTS::SORT**

**Syntax :**

Obj->[FESTIVAL\_GLOBAL\_RESULTS::]Sort  
[,SOHO=soho][,STEREOA=stereoA][,STEREOB=stereoB]

**Description :**

The FESTIVAL\_GLOBAL\_RESULTS::Sort procedure method sorts a FESTIVAL\_PROBE\_RESULTS container.

**Arguments :**

none

**Keywords :**

SOHO : set this keyword to a non-zero value to indicate that the SOHO FESTIVAL\_PROBE\_RESULTS object should be sorted.

STEREOA : set this keyword to a non-zero value to indicate that the STEREOA FESTIVAL\_PROBE\_RESULTS object should be sorted..

STEREOB : set this keyword to a non-zero value to indicate that the STEREOB FESTIVAL\_PROBE\_RESULTS object should be sorted.

#### **4.4/ FESTIVAL\_GLOBAL\_RESULTS::EMPTY**

**Syntax :**

Obj->[FESTIVAL\_GLOBAL\_RESULTS::]Empty  
[,SOHO=soho][,STEREOA=stereoA][,STEREOB=stereoB]

**Description :**

The FESTIVAL\_GLOBAL\_RESULTS::Empty procedure method empties a FESTIVAL\_PROBE\_RESULTS container.

**Arguments :**

none

**Keywords :**

SOHO : set this keyword to a non-zero value to indicate that the SOHO FESTIVAL\_PROBE\_RESULTS object should be emptied.

STEREOA : set this keyword to a non-zero value to indicate that the STEREOA FESTIVAL\_PROBE\_RESULTS object should be emptied..

STEREOB : set this keyword to a non-zero value to indicate that the STEREOB FESTIVAL\_PROBE\_RESULTS object should be emptied.

## **4.5/ FESTIVAL\_GLOBAL\_RESULTS::GET\_NEXT\_DATE**

**Syntax :**

Result = Obj->[FESTIVAL\_GLOBAL\_RESULTS::]Get\_Next\_Date (Probe, current\_date  
[,LINK\_MODE=link\_mode])

**Description :**

The FESTIVAL\_GLOBAL\_RESULTS::Get\_Next\_Date function is called in compact mode in order to compute the date of the next available data (of the specified probe or among all probes if the keyword LINK\_MODE is set).

**Return Value :**

The FESTIVAL\_GLOBAL\_RESULTS::Get\_Next\_Date function method returns the next compact date if successful, or 0 if no next date is available (probably because the end of the list of data has been reached).

**Arguments :**

Probe :

Index of the probe that has asked for a new set of data and is in compact mode.

Current\_date :

Value of the current compact date for this probe.

**Keywords :**

LINK\_MODE :

Keyword that can be set when the program is in linked mode. In this case, the returned date is the next date where a probe has a new data available. This may be a date where the input probe has no new data

(in which case another probe has a data at this date).

#### **4.6/ FESTIVAL\_GLOBAL\_RESULTS::GET\_PREVIOUS\_DATE**

**Syntax :**

Result = Obj->[FESTIVAL\_GLOBAL\_RESULTS::]Get\_Previous\_Date (Probe, current\_date, LINK\_MODE=link\_mode)

**Description :**

The FESTIVAL\_GLOBAL\_RESULTS::Get\_Previous\_Date function is called in compact mode in order to compute the date of the previous available data (of the specified probe or among all probes if the keyword LINK\_MODE is set).

**Return Value :**

The FESTIVAL\_GLOBAL\_RESULTS::Get\_Previous\_Date function method returns the previous compact date if successful, or 0 if no previous date is available (probably because the beginning of the list of data has been reached).

**Arguments :**

Probe :

Index of the probe that has asked for a new set of data and is in compact mode.

Current\_date :

Value of the current compact date for this probe.

**Keywords :**

LINK\_MODE :

Keyword that can be set when the program is in linked mode. In this case, the returned date is the previous date where a probe has a new data available. This may be a date where the input probe has no new data (in which case another probe has a data at this date).

#### **4.7/ FESTIVAL\_GLOBAL\_RESULTS::GET\_COMPACT\_SEARCHRESULTS**

**Syntax :**

Result= Obj->[FESTIVAL\_GLOBAL\_RESULTS::]Get\_Compact\_SearchResults (Probe, current\_date, visualized\_SearchResult)

**Description :**

The FESTIVAL\_GLOBAL\_RESULTS::Get\_Compact\_SearchResults function is called in compact mode in order to compute the set of compact data that is associated to the input probe at the input current\_date.

**Return Value :**

The FESTIVAL\_GLOBAL\_RESULTS::Get\_Compact\_SearchResults function method returns the array of object references to the new set of SearchResults.

**Arguments :**

Probe :

Index of the probe that has asked for a new set of data and is in compact mode.

Current\_date :

Value of the current compact date for this probe.

Visualized\_SearchResults:

Array of the visualized SearchResult references (used to know which instruments to include in the output SearchResults).

**Keywords :**

#### **4.8/ FESTIVAL\_GLOBAL\_RESULTS:: GET\_OLDEST\_DATE\_OF\_SELECTION**

**Syntax :**

Result=        Obj->[FESTIVAL\_GLOBAL\_RESULTS::]Get\_Oldest\_Date\_of\_Selection        (Probe, visualized\_SearchResult)

**Description :**

The FESTIVAL\_GLOBAL\_RESULTS::Get\_Oldest\_Date\_of\_Selection function is called when entering the compact mode in order to compute the oldest date of the current visualized searchresults.

**Return Value :**

The FESTIVAL\_GLOBAL\_RESULTS::Get\_Oldest\_Date\_of\_Selectionfunction method returns the oldest date of the current visualized searchresults of the input probe.

**Arguments :**

Probe :

Index of the probe that has asked for a new set of data and is in compact mode.

Visualized\_SearchResults:

Array of the visualized SearchResult references.

**Keywords :**

#### **4.9/ FESTIVAL\_GLOBAL\_RESULTS:: GET\_SEARCHRESULTS\_WHEN\_SELECTING\_RESULT**

**Syntax :**

Result = Obj -> [FESTIVAL\_GLOBAL\_RESULTS::] Get\_SearchResults\_When\_Selecting\_Result  
(visualized\_SearchResults, Selected\_SearchResult)

**Description :**

The FESTIVAL\_GLOBAL\_RESULTS::Get\_SearchResults\_When\_Selecting\_Result function is called outside compact mode in order to compute the set of data that will have to be visualized after the user has clicked on a line in the SELECTION\_GUI. If the selected instrument was not visualized yet, it is added in the output list of soon visualized SearchResults. If the instrument was visualized but at another date, the input Searchresult is added and the previously visualized one is deselected.

**Return Value :**

The FESTIVAL\_GLOBAL\_RESULTS::Get\_SearchResults\_When\_Selecting\_Result function method returns the array of object references to the new set of SearchResults.

**Arguments :**

visualized\_SearchResults :

Currently visualized results (the one that are highlighted in the SELECTION\_GUI).

selected\_SearchResult :

Reference to the SearchResult that has been clicked by the user in the SELECTION\_GUI.

**Keywords :**