



- i. TIME: Date/time/timestep selector
- ii. IMAGES: Instrument selector
- iii. SOLAR FEATURES & EVENTS: selection of specific solar feature (ignore)
- iv. Main display page
- v. HELIOVIEWER PROJECT NEWS: updates on helioviewer
- vi. Youtube USER GENERATED MOVIES: Movies recently generated using helioviewer.org

<http://www.slideshare.net/helioviewer/a-quick-introduction-to-helioviewerorg-11373665>

i	TIME: Date/time/timestep selector	Allows simple navigation in time. Select a date and time to center your movie on.
ii	IMAGES: Instrument selector	<p>Add, change and overlay images.</p> <p>[Add]: pops up a new "opened" window underneath the current overlay list allowing the selection of new images.</p> <p> : open/close toggle for the instrument + measurement image layer shown.</p> <p> : toggle visibility of the given instrument + measurement image layer.</p> <p> : remove the image layer from the viewer window.</p> <p>Opacity : dynamically vary the opacity of the image layer in the viewer window.</p> <p>Observatory : select an observatory.</p> <p>Instrument : select an instrument operates at the selected observatory.</p> <p>Detector : select a detector that is part of the selected instrument.</p> <p>Measurement : select a measurement made by the selected detector.</p> <p> : download the full grey-scale JPEG2000 file corresponding to this image.</p> <p> : show the FITS and Helioviewer Project header information for this image layer.</p> <p>The observation time is color-coded: green/<i>italic</i> indicates that the data was observed close to the requested date/time, yellow/bold indicates that the time difference between the data and the requested date/time is a little bit larger. Red indicates that the time difference between the requested date/time and the data is very large.</p>
iii	SOLAR FEATURES & EVENTS: selection of specific solar feature	
iv	VIEWER WINDOW including ZOOM tool	<p>Display the selected images.</p> <p>This part of the web page is used to display the selected images. The view can be dragged around inside the viewer window by clicking in the viewer window, holding down the click, and dragging the mouse.</p>

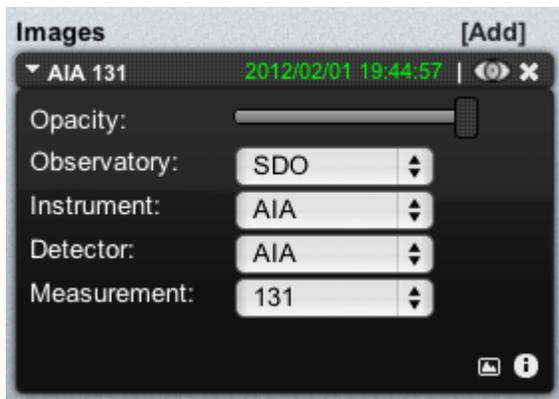
		<p>center : re-center the field of view by moving the center of the Sun to the center of the viewer window.</p> <p>+ : zoom in. Zooming in can also be done by moving the bar closer to the '+'. - : zoom out. Zooming out can also be done by moving the bar closer to the '-'.</p>
v	HELIOVIEWER PROJECT NEWS: updates on helioviewer	<p>News from the Helioviewer Project.</p> <p>Links to the three most recent news articles from the Helioviewer Project blog are shown. The More button goes directly to the blog.</p>
vi	Youtube USER GENERATED MOVIES: Movies recently generated using helioviewer.org	<p>Thumbnail links to movies uploaded to YouTube from Helioviewer.org.</p> <p> : find more recent movies.  : find less recent movies.</p>
vii	Help and further resources	<p>Help: jump to the Helioviewer.org User Guide (this web page). Glossary: a visual glossary of solar and heliospheric related features, events, science, missions and instruments. About: Information on the Helioviewer Project team. Usage tips: Keyboard and mouse shortcuts are shown. Wiki: Go to the Helioviewer Project wiki at http://wiki.helioviewer.org . Blog: Go to the Helioviewer Project blog at http://blog.helioviewer.org . JHelioviewer: Go to the JHelioviewer page at http://www.jhelioviewer.org . API: Open a new browser tab pointing to a description of the Helioviewer API at http://www.helioviewer.org/api . Contact: Send an email to the Helioviewer Project team. Report problem: Report a problem to the Helioviewer Project (via Launchpad).</p>
viii	Movie generation tools	
	Link	<p>Create a link to the current view in the viewer window.</p> <p>Clicking the 'link' button (a) generates a url link that describes the current view in the viewer window. The link appears in a highlighted box (b) for copying and pasting into other applications. A shortened version can be optionally generated using bit.ly.</p>

	Movie	Create a movie, download it, upload it YouTube, share it via social media networks. (see below for further explanation)
	Screenshot	Takes a screenshot of the current contents of the viewer window. (see below for further explanation)

i. **TIME: Date/time/timestep selector**

- **Date:** can be selected by clicking on the calendar icon () and using the pop-up calendar window. Also, a new date can be entered manually in *yyyy/mm/dd* format in the dialog box. On clicking return, the viewer window is updated with data closest to the new date/time.
- **Time:** enter a time in *hh:mm:ss* format. On clicking return, the viewer window is updated with data closest to the new date/time.
- **Time-step:** Pick a time-step from a drop down menu. On clicking the left and right arrows the observation date/time changes by the time-step and the viewer window is updated with data closest to the new date/time.
- **Latest:** the viewer window is updated with data closest to the current time

- ii. Click right pointing arrow  to expand “Images” panel to add images and instruments to the image.



[Add]: (top right) Adds a new layer to the image.

: toggle on/off the given instrument image layer.

: remove the image layer from the viewer window.

Opacity : dynamically vary the opacity of the

image layer in the viewer window.

Observatory : select an observatory.

Instrument : select an instrument operates at the selected observatory.

Detector : select a detector that is part of the selected instrument.

Measurement : select a measurement made by the selected detector.

: download the full grey-scale JPEG2000 file corresponding to this image.

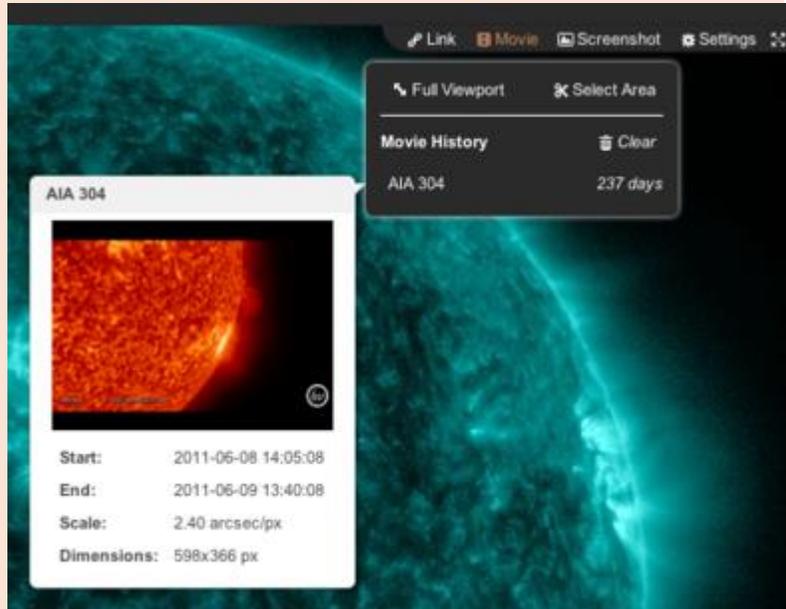
: show the FITS and Helioviewer Project header information for this image layer.

The observation time is color-coded: green/*italic* indicates that the data was observed close to the requested date/time, yellow/**bold** indicates that the time difference between the data and the requested date/time is a little bit larger. Red indicates that the time difference between the requested date/time and the data is very large.

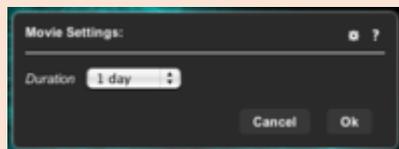
Movie

Movie

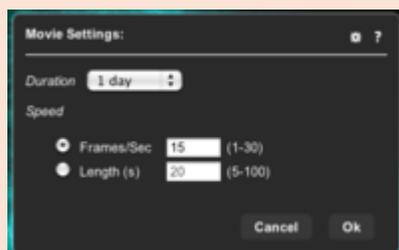
(a) Open the movie dialog.



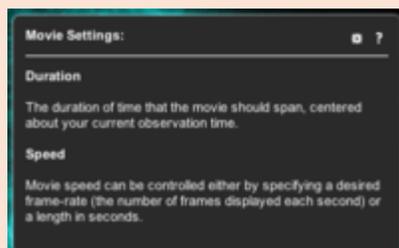
(b) Area selection and movie history.



(c) Movie settings dialog.



(d) Advanced movie settings.



Create a movie, download it, upload it YouTube, share it via social media networks.

(a) Open the movie dialog.

(b) Movie options.

Full viewport : make a movie using the full viewport.

Select Area : make a movie of a selected area in the current viewport.

A list of movies made (or in progress) is also shown, ordered by when they were made.

The list can be cleared using the **Clear History** button.

Pointing the mouse over the movie titles pops up a short description of the movie and a thumbnail image. Clicking on the movie title brings up an in-browser movie player.

(c) Movie settings dialog.

Choose the duration of the movie. The movie is centered on the time given in the time-selector with the chosen duration.

Advanced settings (⚙️, d) and help (❓, e) also available.

(e) Help for movie settings.



(f) In-browser movie player.

(d) Advanced movie settings.

Change parameters of the movie. The movie frame rate can be changed, and since the maximum number of frames is fixed, the duration of the movie can be changed by this. Alternatively, the duration of the movie can be set by the user, which fixes the frame rate.

(e) Help for movie settings.

A help dialog for the Advanced movie settings.

(f) In-browser movie player.



: download a high quality version of the movie.



: upload movie to YouTube. If you are not already logged in to YouTube, you will be asked to log in. On logging in to YouTube, www.helioviewer.org provides a short form that has been pre-filled with information about the movie. You have the option to share it with other users of www.helioviewer.org. If you choose to share it, a link to the movie will eventually appear in

the "Movies uploaded to YouTube from Helioviewer.org" element (see 13).



: provides a link to the movie. Pasting this link in a browser will point it to <http://www.helioviewer.org> and launch the movie player, and start playing the movie.



: enables the user to share the movie over many different social media networks and websites.

 Screenshot

(a) Open the screenshot dialog.

Takes a screenshot of the current contents of the viewer window.

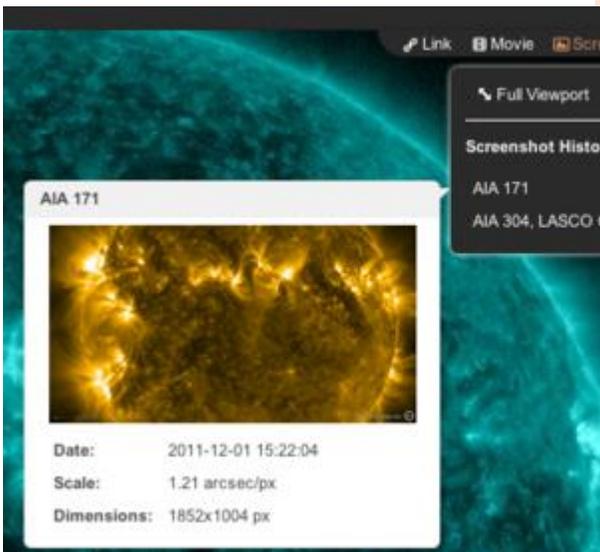
(a) Open the screenshot dialog.

(b) Screenshot options.

Full viewport : take a screenshot of the full viewport.

Select Area : take a screenshot of a selected area in the current viewport.

A list of screenshots made is also shown, ordered by when they were made. The list can be cleared using the **Clear** button. Pointing the mouse over the screenshot titles pops up a short description of the screenshot and a thumbnail image. Clicking on the screenshot title creates and downloads the screenshot.



(b) Area selection and screenshot history.

Keyboard shortcuts

<i>Keyboard and mouse shortcuts</i>	
shortcut	action
c	Center the screen.
d	Display detailed feature/event labels.
f	Toggle fullscreen display.
m	Toggle mouse coordinates display.
+	Zoom-in once.
-	Zoom-out once.
←	Pan left.
↑	Pan upward.
→	Pan Right.
↓	Pan downward.
< or ,	Step backward in time.
> or .	Step forward in time.