

Integrating High Resolution Solar Physics

The SDO and SVO datacenters

••••

3rd-SOLARNET Forum for telescopes and databases 15/11/2021

Authors: R. Vansintjan (presented by Mats Carlsson)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824135.





Virtual Access from BE-WISSDOM

- BE-WISSDOM hosts the SDO data center and the Solar Virtual Observatory (SVO)
 - \odot The SDO data center provides easy access to AIA and HMI data from the SDO satellite
 - URL: <u>http://sdoatsidc.oma.be/</u>
 - The SVO lets you cross-search and download data from satellite and ground based solar observatories and search for data based on Solar events.
 - This helps researchers to discover and access solar datasets from synoptic observations as well as data taken during short observation campaigns
 - URL: <u>https://solarnet.oma.be/</u>





The SDO data center

- The SDO data center provides:
 - 4k by 4k AIA and HMI data through our Web interface, IDL and Python
 - \odot The latest 24h AIA quick look data in movie format
 - A 1 hour synoptic set of AIA and HMI data through ftp
 - A 2 min synoptic set of 1k by 1k AIA
 94Å and 211Å data through ftp

Select search criteria	🧹 S	earc	h res	ults		
Start date 2010-03-29 00:00:00				Date	Wavelength	Qual
End date 2010-05-15 00:00:00		±		2010-05-12 23:59:59	1600.0	
		*		2010-05-13 00:00:00	193.0	
Cadence second(s) ~		±		2010-05-13 00:00:02	94.0	
Best quality 🗆 ?		±		2010-05-13 00:00:03	335.0	
94Å		*		2010-05-13 00:00:05	171.0	
Wavelengths		*		2010-05-13 00:00:06	211.0	
° 1/1A		±		2010-05-13 00:00:08	304.0	
193Å		±		2010-05-13 00:00:09	131.0	
P Search data		±		2010-05-13 00:00:11	1600.0	
> Scarch data			2010-05-13 00:00:12	193.0		
		±		2010-05-13 00:00:14	94.0	
		±		2010-05-13 00:00:15	335.0	
			< 2 E	✓ Select all × Unsel xport data □ Expc	ect all	•1

<section-header>Jates SDO/AIA images in near real time.Image: SDO/AIA images in near real time.<





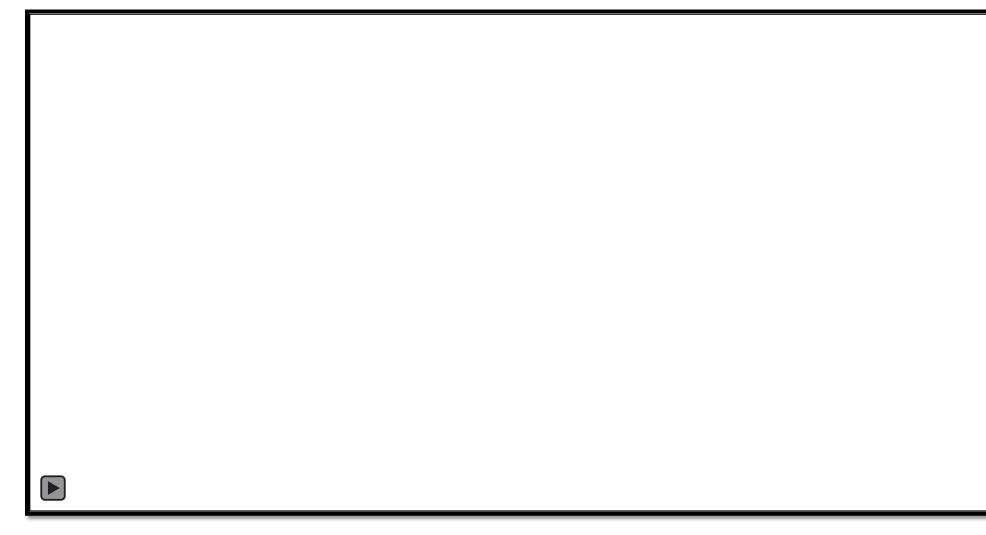
SVO: Dataset specific searches and quick-look







SVO: Cross data searches







SVO: Search by solar events





SVO: Data selection







Thank you For your attention