SOLID: WHATISTHIS.

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SOLID: First European Comprehensive SOLar Irradiance Data exploitation

- 3 years FP7 project, started in dec2012, 10+1 partners, money for hiring people.

- analyse and merge the complete set of European irradiance data, complemented by archive data that include data from non-European missions

- provide uniform data sets of modelled and observed solar irradiance data from the beginning of the space era to the present including proper error and uncertainty estimates. Main user: climate community
time series with (time dependent) error bars
How?

**SOLID**

ESA Observations (SOHO, ENVISAT, PROBA2, PICARD) + NASA missions and ground-based observations

**WP1:** Management

**WP2:** Irradiance data exploitation

**WP3:** Solar Image Analysis

**WP4:** SSI Modeling based on observed proxies

**WP5:** SSI Modeling based on modelled proxies

**WP6:** Interaction with user communities

**WP7:** Scientific and Technical Management

**WP8:** Dissemination

Scientific community workshops

**SOLID**

First European Comprehensive SOLar Irradiance Data Exploitation
WP2: Collect, quality assess, and inter-compare available solar spectral irradiances data and solar proxies.

WP3: exploitation of large sets of solar images and new SSI proxies.

WP4: develop and improve models and tools needed for reconstructing the SSI from solar proxies, using empirical and semi-empirical modelling.

WP5: Reconstruct a time series of total and spectral solar irradiance variability over the last century by employing magnetograms simulated with a surface flux transport model.

WP6: Interaction with user communities

WP7: Scientific and Technical Management

WP8: Dissemination

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WHO?

- Bradford: images processing, filling factor
- Cambridge: EUV irradiance, CDS
- Imperial: SSI semi-empirical modelling
- CNRS LPC2E&LATMOS: SSI analysis and empirical modelling, SOLSPEC data
- Bremen: SSI data & analysis (SCHIAMAC HY, GOME)
- PMOD: SSI semi-empirical modelling and data (SOHO, PICARD)
- MPS: SSI semi-empirical modelling
- ROME: SSI semi-empirical modelling and Archives images
- ROB: Images processing, proxy, SSI data (LYRA)
- Thessalonikis: interface with user communities
- LASP: SSI data
What SOLID is not

• A private club pretending to solve long standing problems.
What SOLID can be

• An accelerator for international collaborations of this topic.
WP2 Tasks

- Task 2.1: Collection of space era SSI data and relevant solar proxies
- Task 2.2: SSI data analysis and quality checking
- Task 2.3: Ground-based proxies for SSI
- Task 2.4: EUV spectral irradiances
- Task 2.5: UV spectral irradiance composite
- Task 2.6: Recommendation for space-based SSI and proxy time series.
SOLID-EUVWG collaboration?

- Next Joint meeting?
  - at the SORCE meeting, somewhere else in Europe?