SSHADE Users Newsletter - June 2023

Dear SSHADE users,

After a 2-years break due to limited manpower, the SSHADE newsletters starts again!

In addition to information on newly developed tools, each user newsletter will focus on one database of one of our partners, to help you to discover new data and to explore the wide range of samples and spectra covered by SSHADE (over 5500 public spectra and 1500 in preparation). We will also continue to give you tips to facilitate your data search, visualization and export.

General info

The SSHADE team has recently grown:

- Zélia Dionnet has been hired at IAS as an associate astronomer with a service task on SSHADE to support data providers and Users. Please, don't hesitate to contact us if you have any question about SSHADE and its data or if you would like to give us constructive feedback on the data or tools (contact@sshade.eu).
- Etienne Dode, a young software engineer, has been awarded a contract at OSUG (UGA, Grenoble) to work on the development of new or improved tools for users and data providers. You will

This 'SSHADE user newsletter' introduces the IAS DAYSY database and explains how to customize your export preferences to obtain spectra that are directly comparable with your data.

Focus on DAYSY

With the recruitment of Zélia Dionnet at IAS this database is set to grow rapidly in the coming years.

The <u>DAYSY database</u> concerns visible and infrared spectroscopy laboratory data measured by the "Astrochemistry group" of the IAS laboratory in Orsay (France). You can find data concerning:

- Extraterrestrial samples: laboratory characterization of meteorites, interstellar dust particles (IDPs) and samples from sample return missions. These data will help to understand the complexity of the processes impacting celestial bodies by describing small-scale heterogeneity. As an example, you can find in DAYSY recently added data concerning Mid-Infrared transmission measurements of crushed interplanetary dust particles (IDPs): <u>EXPERIMENT ZeD 20230519 01</u>
- Results of laboratory experiments designed to simulate space processes: irradiation
 of minerals or meteorites to reproduce the solar wind and better understand the
 space weathering, irradiation of ices to study chemical properties of small ice bodies
 in our Solar System, and films produced by induced plasma. You can find, for
 instance, data on the effects of irradiation by He+ ions on the Far-infrared spectrum of
 carbonaceous chondrite pellets: EXPERIMENT ZeD 20230127_01

Useful tips for users: customize your exports

To make it easier to compare SSHADE data with your own data, a tool allows you to customize your export parameters once or for all your exports.

Access your user 'Dashboard' by clicking on "Profile and setting" (top right-hand menu), then select "User settings" (bottom left-hand panel) to choose your personalized settings. You can, for example, choose the spectral unit (cm⁻¹, nm, micron, eV, GHz, ...) in which the data will be exported (SSHADE handles conversion), the spectral range you are interested in, and the format of the recovered files.

SHADE Spectrum 🗢 Write your keywords her	e (Q				📒 Help 👻	e Bernard Schmitt 👻	
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nttps://www.sshade.eu/user/profile	For simple and complex data type	Spectrum with column name 🛩					

By taking a few minutes to optimize these settings for your needs, you'll save time and be more efficient each time you need to export new spectra to compare data.

These settings can be adjusted for each download with the ●●● button on top right of each spectrum or experiment page (next to the download button).

Have fun with SSHADE data!

The SSHADE Team

All previous user newsletters are stored in the dedicated 'News' page of the SSHADE Wiki

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