SPICE for ESA missons

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Tasks of the ESA SPICE Service

➢ The main tasks of the ESA SPICE Service:

- Mission-specific SPICE Kernels Preparation
- Auxiliary Data Conversion System Development and Maintenance
- SPICE Archive Generation
- Auxiliary Data Handling Technical Support and Consultancy
- SPICE Training and Community Capacity Building
- Scientific Geometry Data Analysis and Exploitation Services

➢ The projects that fund the ESA SPICE Service are:

- ExoMars 2016
- BepiColombo
- JUICE
- Solar Orbiter
- MEX/VEX

➢ Nevertheless all ESA Solar System Exploration projects get support from the Service but with less priority that the beforementioned ones.

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Support and Announcements

➢ Classical approach: send me an e-mail:

- marc.costa@esa.int / mcosta@sciops.esa.int

- esa_spice@sciops.esa.int

- Note that you can also contact the SGS of the mission that you are working on, although Cc the Service is always a good idea.

➢ Moden approach: join the OpenPlanetary community in Slack and mention me in the #spice channel or send me a private message.

- bit.ly/join-op

➢ SPICE Service announcements are currently only being announced internally at ESAC and within the Instrument Teams of the supported Missions. If you are interested on receiving announcements for a particular missions let me know

➢ Suggestions of an open channel in where those announcements could be made is always welcome.

- Announcement in the web? Twitter? Slack? Mail list?

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The ESA Home for SPICE

- ➢ General Information on SPICE

- ➢ Mission-specific SPICE information

- ➢ Access to operational an archived kernels

- ➢ WebGeoCalc for ESA missions

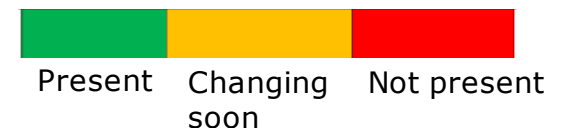- ➢ Cosmographia instances for ESA missions

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SPICE Operational Kernels

➢ Operational kernels as opposed to Archived kernels are kernels which are used by the Project SGS and Instrument Teams in their operational pipelines and routine work.

Kernel Dataset	spiftp server	ssols01 server	NAIF server	Mission status	Kernel status for ESS
ExoMars 2016	🟩	🟨	🟩	Operational	Almost stable
Rosetta	🟨	🟩		Operational	Consolidated*
Mars Express	🟨	🟩	🟩	Operational	Consolidated**
Venus Express	🟨	🟩	🟩	Post Operations	Final Review
BepiColombo	🟨	🟨	🟥	Studies	In development
JUICE	🟩	🟨	🟥	Studies	Almost stable
Solar Orbiter	🟨	🟥	🟥	Studies	Early development
SMART-1	🟨	🟩	🟩	Legacy	Not reviewed
Chandrayaan-1	🟨	🟩	🟩	Legacy	Not reviewed
AIM	🟥	🟥	🟥	Early studies	Aware of existence

🟩 Present 🟨 Changing soon 🟥 Not present

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Training Close-out

➢ Feedback form can be found at:

  • http://www.cosmos.esa.int/web/spice/training-class-september-2016

➢ Feedback is very important for us and we would like to ask you to put some effort filling it.

➢ Tutorials have been updated: 25, 36 you can download them form the FTP

➢ You will receive a "Certificate" at the beginning of next week along with the group photo.

Diploma of *SPICE* Training

**Somebody
From Somewhere**

has completed a training class
in the development of
SPICE-based applications
supporting space science research

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Charles Acton, NAIF Manager

September 15, 2016

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Thank You!

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