Europlanet Research Infrastructure

IDIS

SEVENTH FRAMEWORK PROGRAMME

Europlanet-RI/IDIS: Finding information for planetary research

Walter Schmidt, FMI Helsinki

Maria Teresa Capria, INAF, Rome, Italy

Gérard Chanteur, LPP/CNRS, France

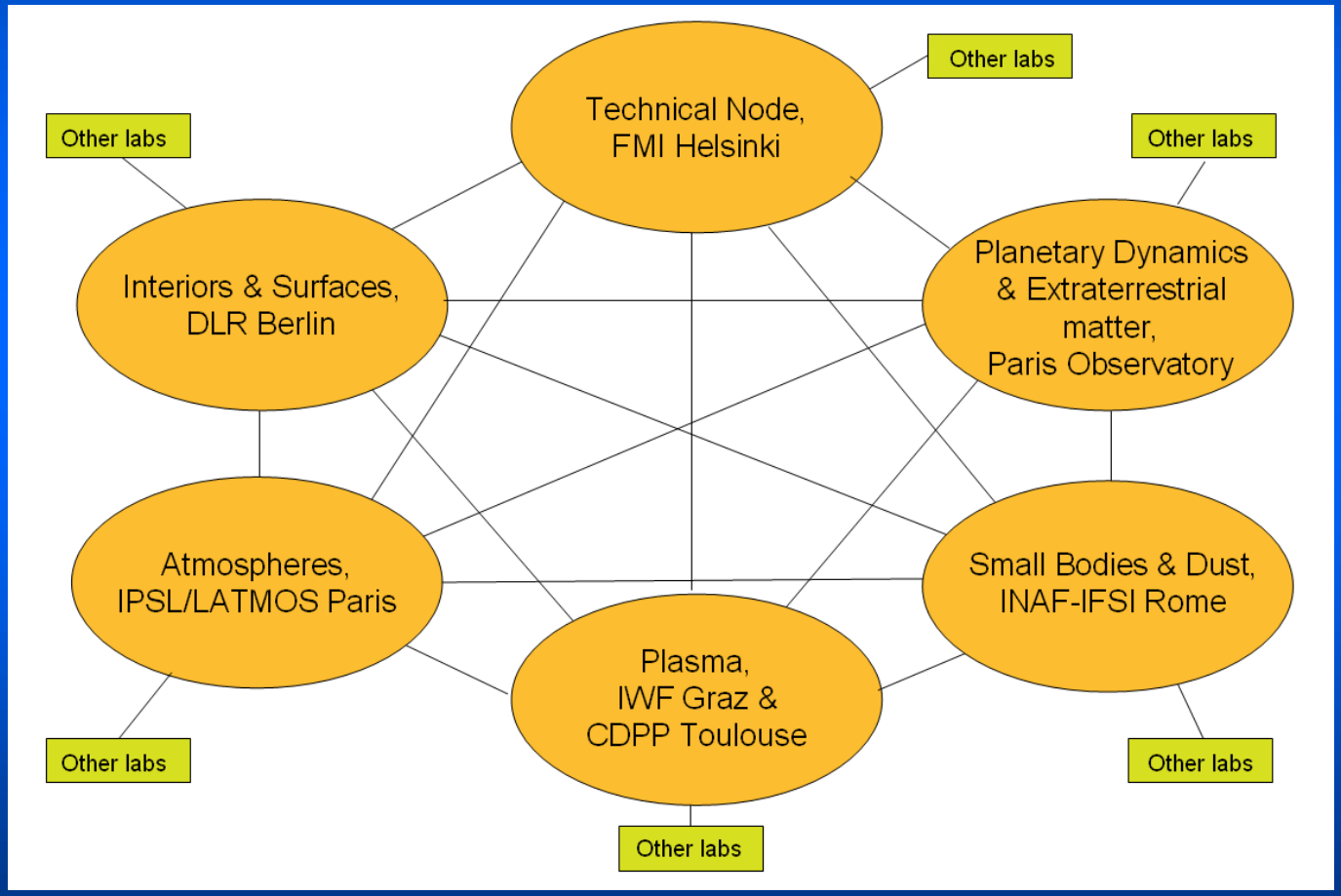
COSPAR 2010 / B09 22.07.2010

IDIS

Europlanet-RI Homepage

http://www.europlanet-ri.eu/

Structure of IDIS (Integrated and Distributed Information Service)



Europlanet Research Infrastructure

IDIS

SEVENTH FRAMEWORK PROGRAMME

What Can IDIS Do For You ?

- Locate experts for consultation or co-operation
- Locate institutes with expertise in certain fields
- Locate facilities or laboratories for analogies to help interprete planetary data
- Locate models or tools for data interpretation
- Locate data related to your field of planetary research
- Locate auxiliary data from related fields
- Access and combine data from a wide range of sources
- Make your own data / models / tools known to others
- Locate information for instrument development and testing

Functions of an IDIS Node

- Responsible for a Science Theme
  - Establish and keep contact with scientists
  - Maintain, update and expand links to related resources
  - Support connection of new resources
- Web Site Functionality
  - Access to theme-related resources / meta-data
  - Keyword-based search engine
  - Direct links to othe Europlanet-RI activities and Nodes
- Virtual Observatory Functionality
  - Support of VO-like access to related data where possible

IDIS

IDIS Technical Node

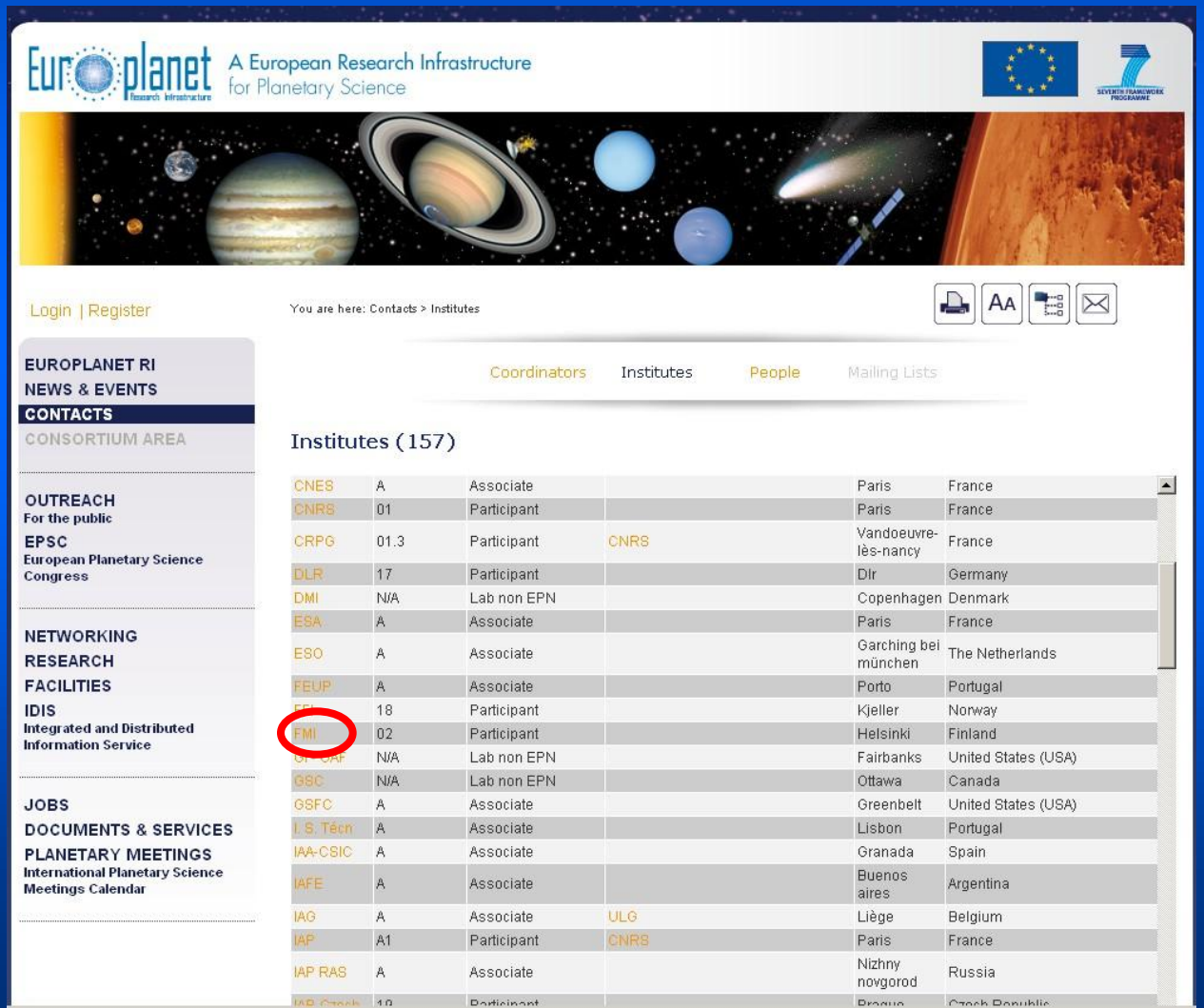
http://www.idis.europlanet-ri.eu/

IDIS

Search Strategies

IDIS

Search for *Institute information*



CNES	A	Associate		Paris	France
CNRS	01	Participant		Paris	France
CRPG	01.3	Participant	CNRS	Vandoeuvre-lès-nancy	France
DLR	17	Participant		Dlr	Germany
DMI	N/A	Lab non EPN		Copenhagen	Denmark
ESA	A	Associate		Paris	France
ESO	A	Associate		Garching bei münchen	The Netherlands
FEUP	A	Associate		Porto	Portugal
	18	Participant		Kjeller	Norway
FMI	02	Participant		Helsinki	Finland
	N/A	Lab non EPN		Fairbanks	United States (USA)
GSC	N/A	Lab non EPN		Ottawa	Canada
GSFC	A	Associate		Greenbelt	United States (USA)
I. S. Técn	A	Associate		Lisbon	Portugal
IAA-CSIC	A	Associate		Granada	Spain
IAFE	A	Associate		Buenos aires	Argentina
IAG	A	Associate	ULG	Liège	Belgium
IAP	A1	Participant	CNRS	Paris	France
IAP RAS	A	Associate		Nizhny novgorod	Russia

IDIS

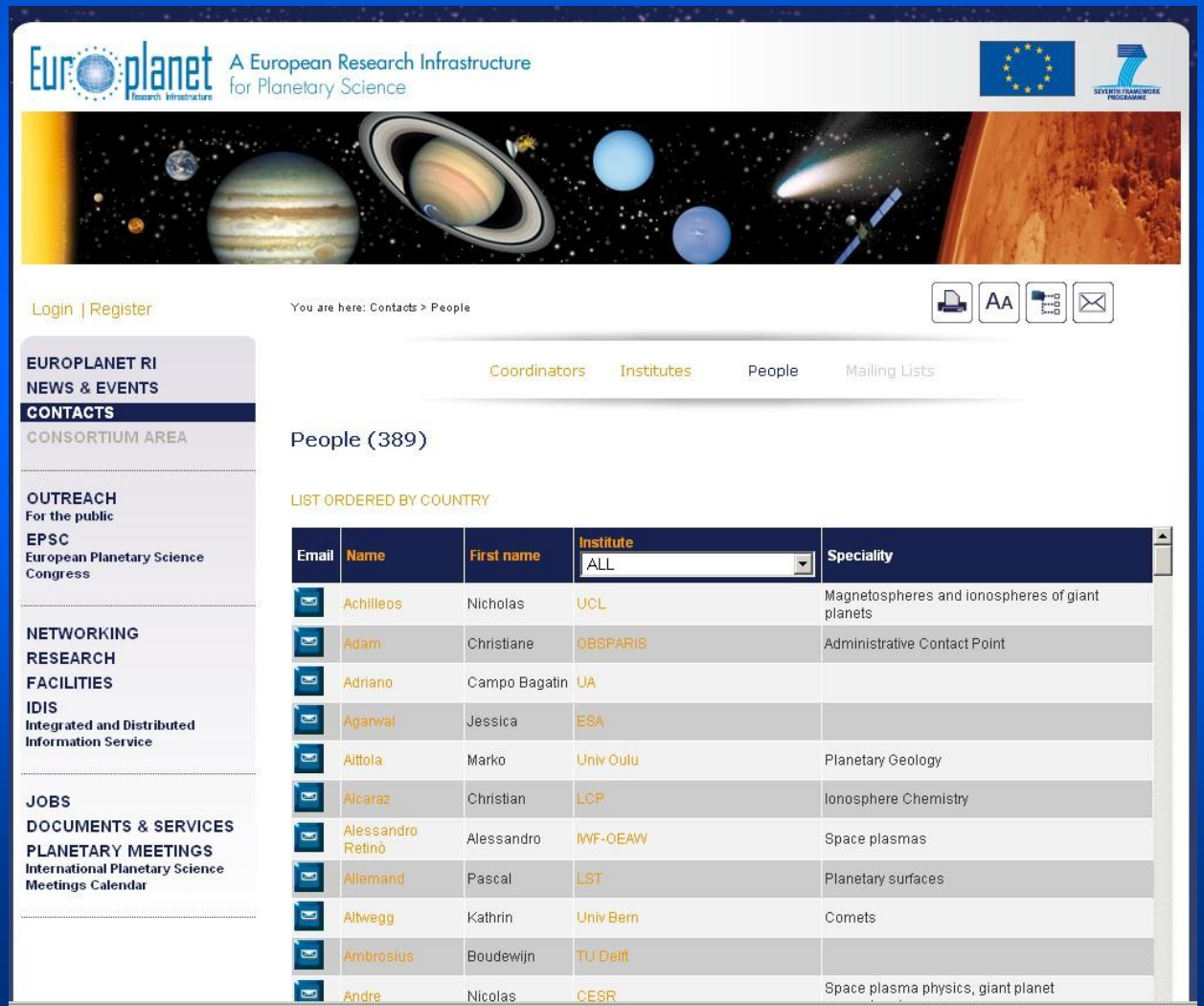
Search for *Institute information*

IDIS

Search Strategies: *Persons*

IDIS

Search for *Persons' information*



IDIS

Search for *Persons' information*

Login | Register

You are here: Contacts > People

EUROPLANET RI
NEWS & EVENTS
CONTACTS
CONSORTIUM AREA

OUTREACH
For the public
EPSC
European Planetary Science Congress

NETWORKING
RESEARCH
FACILITIES
IDIS
Integrated and Distributed Information Service

JOBS
DOCUMENTS & SERVICES
PLANETARY MEETINGS
International Planetary Science Meetings Calendar

Coordinators Institutes People Mailing Lists

Person Detailed View

Name: Schmidt
First name: Walter
Institute: FMI
Department (or team, or group) : Earth Observation Division
Speciality: Planetary atmospheres, comets
Position: Research manager
Email: Walter.Schmidt(_at_)fmi.fi
Institute Representative: NO

EPN-RI Scientific domain(s) (2):

Small bodies and origins
Terrestrial planets

EPN-RI Scientific expertise(s) (3):

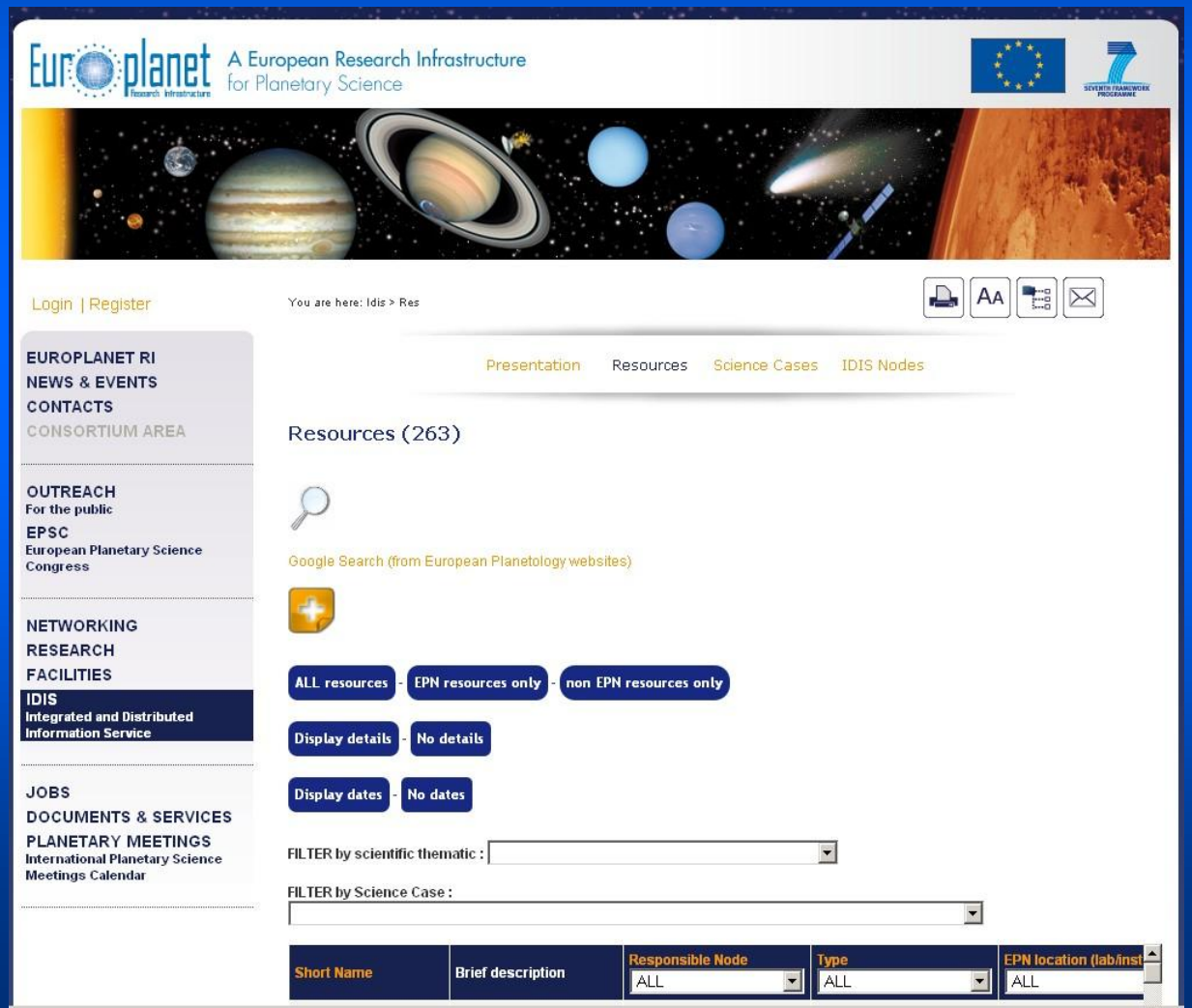
Database
Modelling, simulation, and theory
Space based instruments & observations

Activitie(s) (4):

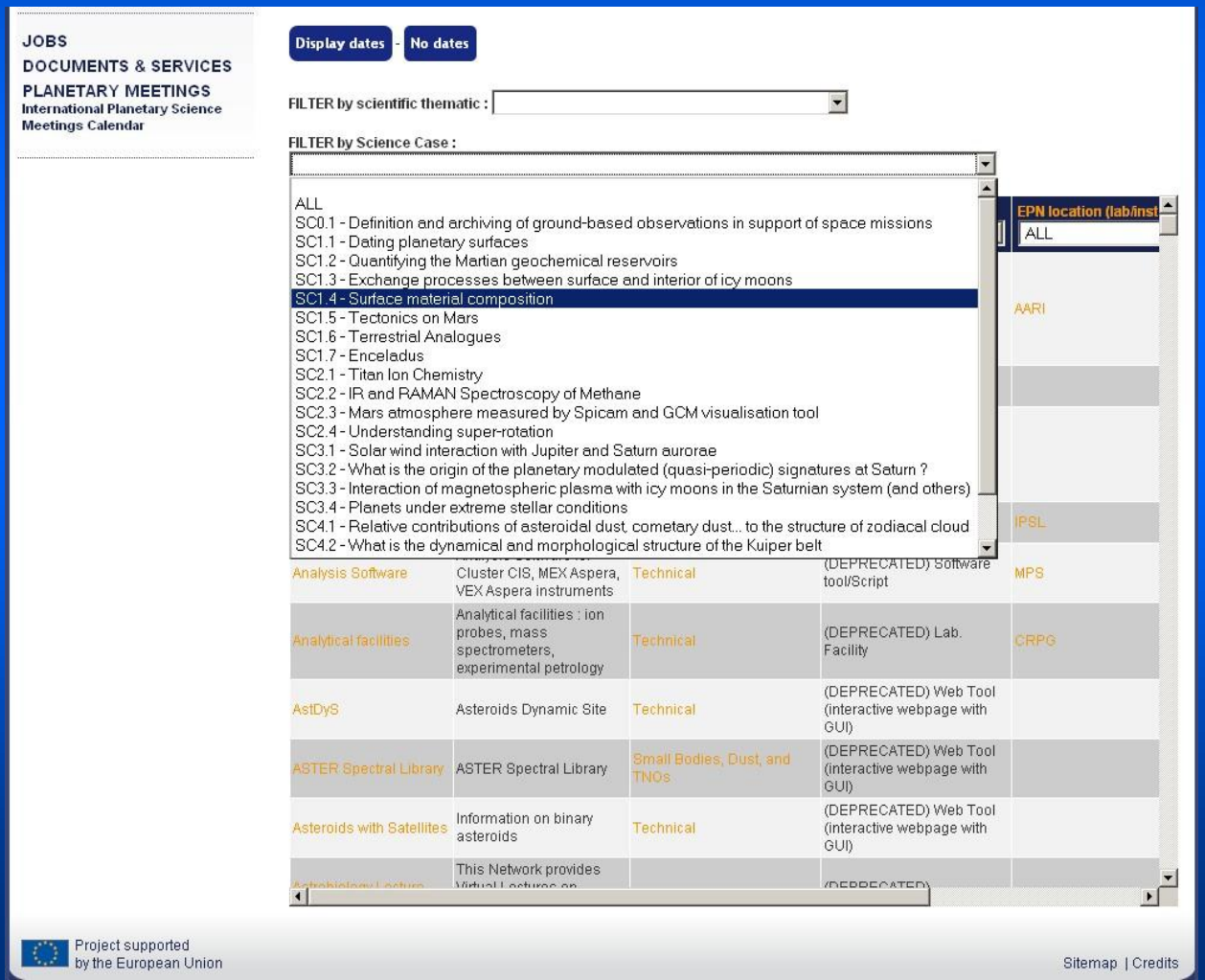
NA2 - Science Networking (Task Leader)
JRA3 - European Modelling and Data Analysis Facilities (Expert)
JRA-IDIS - Integrated and Distributed Information Service (IDIS) (Technical Manager)
SA-IDIS - Integrated and Distributed Information Service (IDIS) (Technical Manager)

IDIS

Search for *Resources*

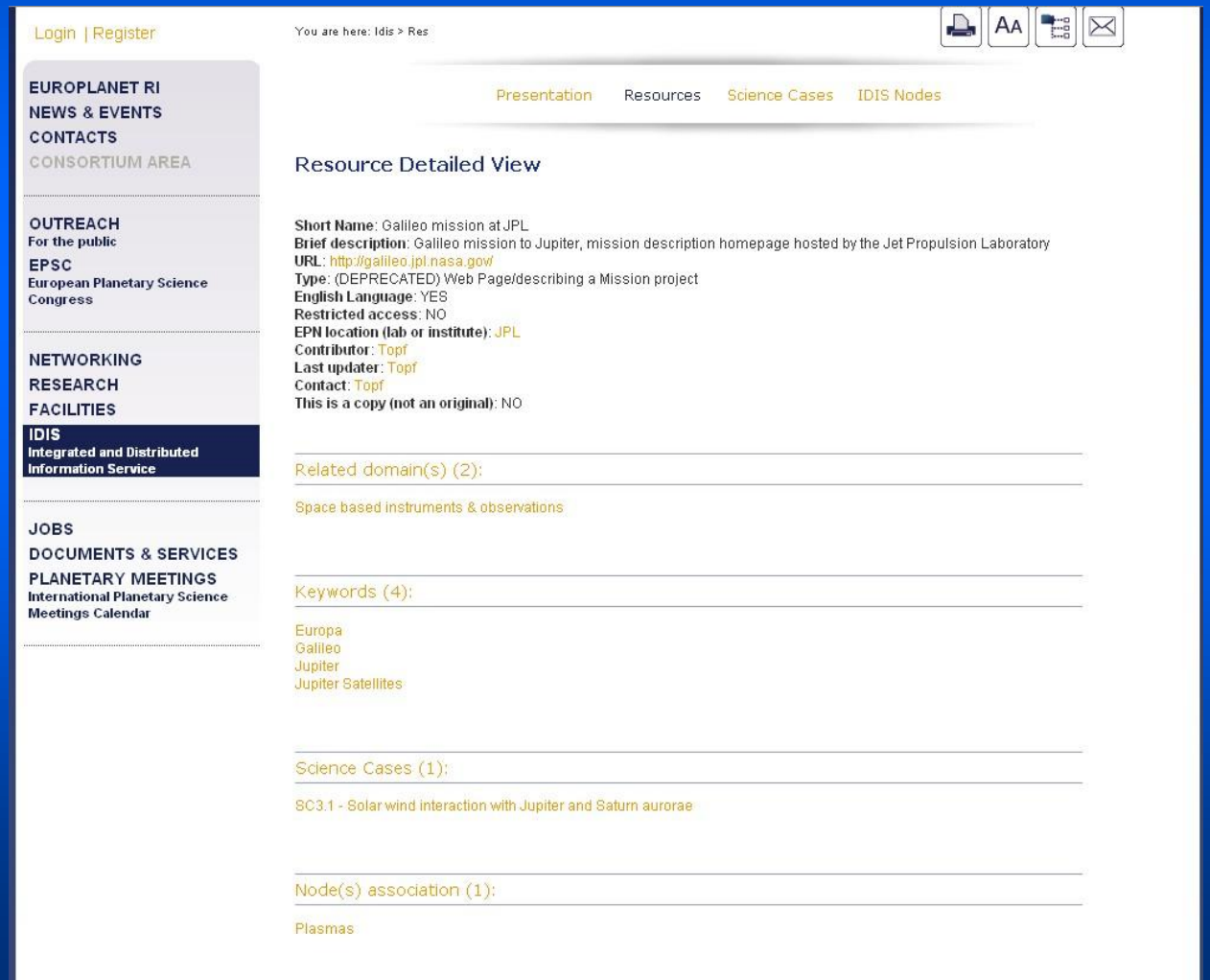


Search for *Resources / filtered*



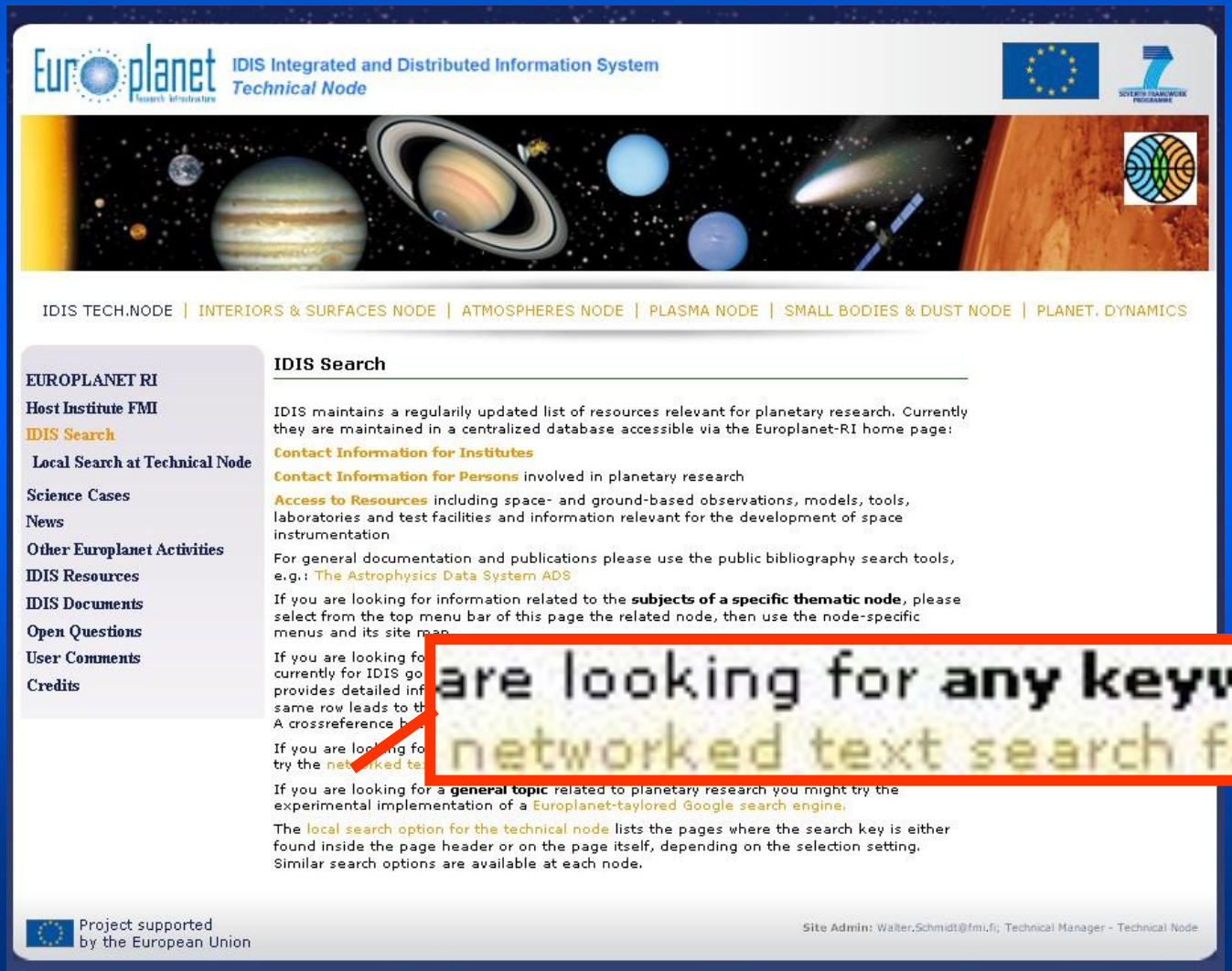
IDIS

Search for *Resources* / *Details*



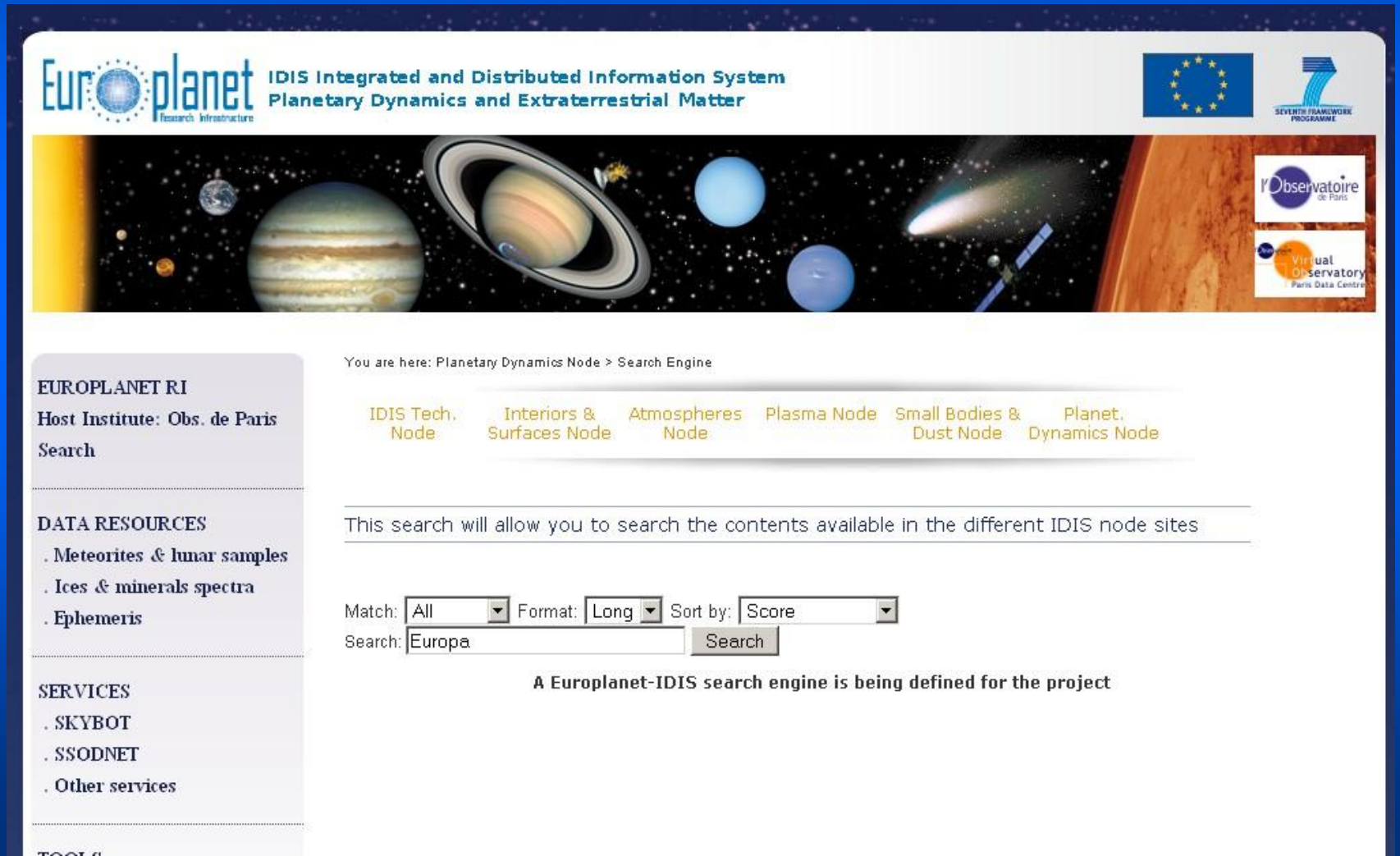
IDIS

Search Strategies



IDIS

Search for *Keywords*



Search for *Keywords*

ht://Dig Search results for 'europa'

Match: All Format: Long Sort by: Score

Refine search: Europa Search

Documents 1 - 2 of 2 matches. More ☆'s indicate a better match.

EuroPlaNet IDIS - Integrated and Distributed Information Service: Web-based data catalogues ☆☆☆☆

. . . ://www.srl.utu.fi/erne_data/carrot/ ERNE, Helium Intensities for Carrington Rotation plots (since 1906) * http://www.math.washington.edu/~greenber/**Europa**.html Information- and linklist-homepage dedicated to Jupiter's moon **Europa**. * http://exoplanet.eu/ Extrasolar Planets Encyclopaedia. European interactive . . .

http://europlanet-plasmanode.oeaw.ac.at/index.php?id=93 01/04/10, 11750 bytes

EuroPlaNet IDIS - Integrated and Distributed Information Service: Satellite influences on aurorae ☆

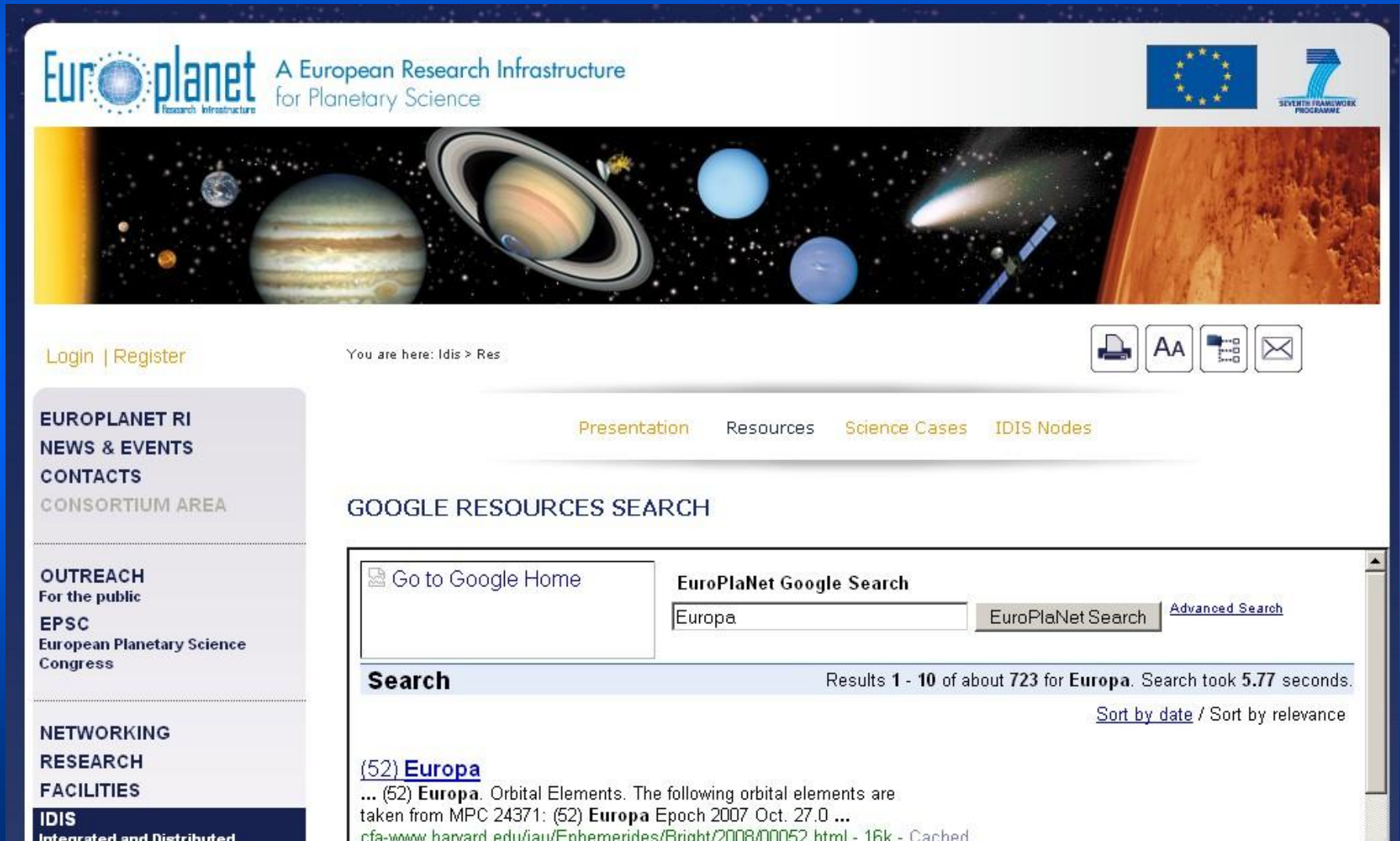
. . . the energetic particles deposit their energy. This shows up as bright spots of aurora at the location of the foot points of the moon flux tubes. **Europa** and Ganymede show up as bright points in the diffuse aurora region, whereas Io shows up as a bright spot with tail below the main auroral oval. The . . .

http://europlanet-plasmanode.oeaw.ac.at/index.php?id=266 01/04/10, 14979 bytes

ht://Dig 3.2.0b6

IDIS

Google-Search for Planetary Science Keywords

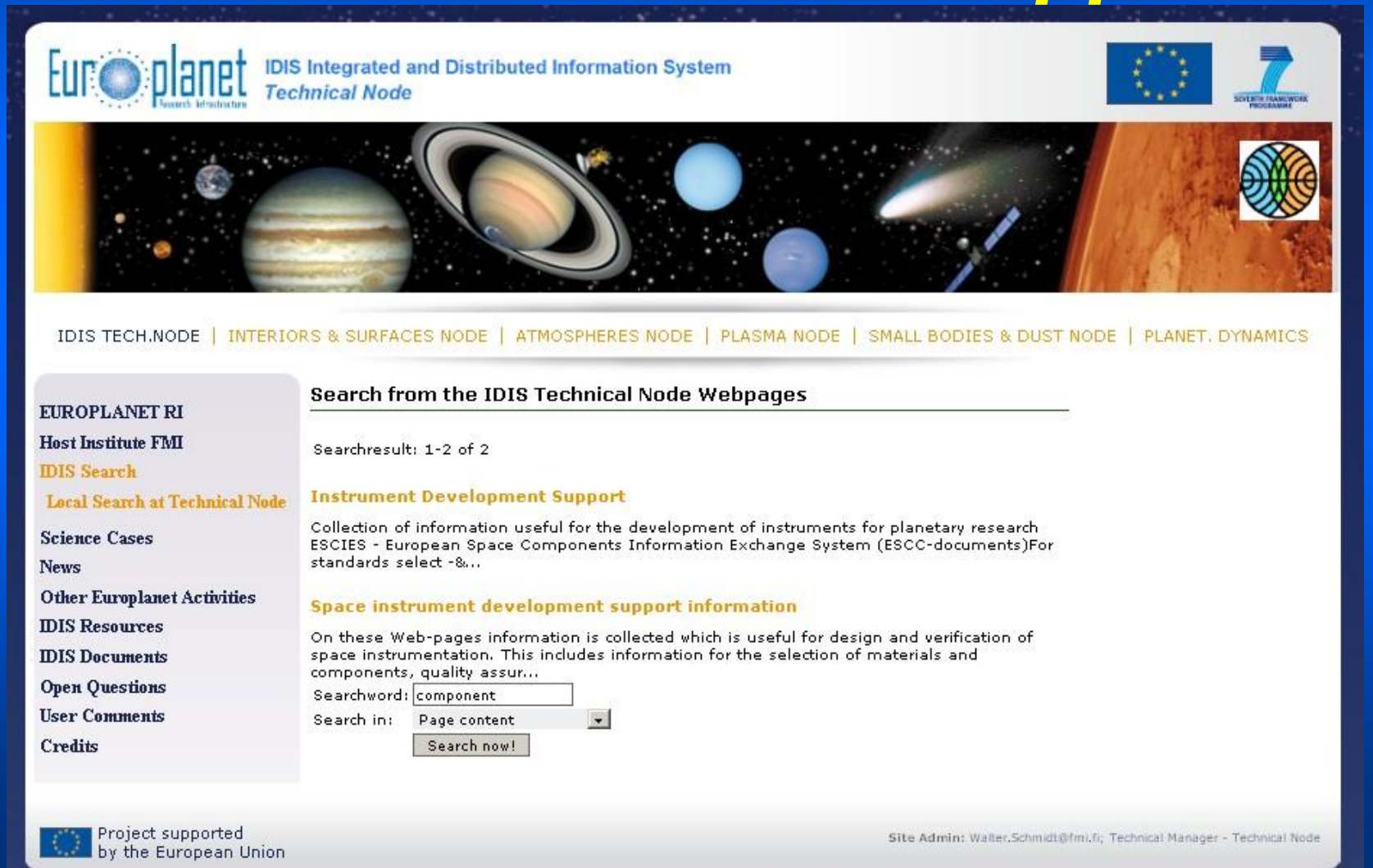


IDIS

Search for *Instrument Support*

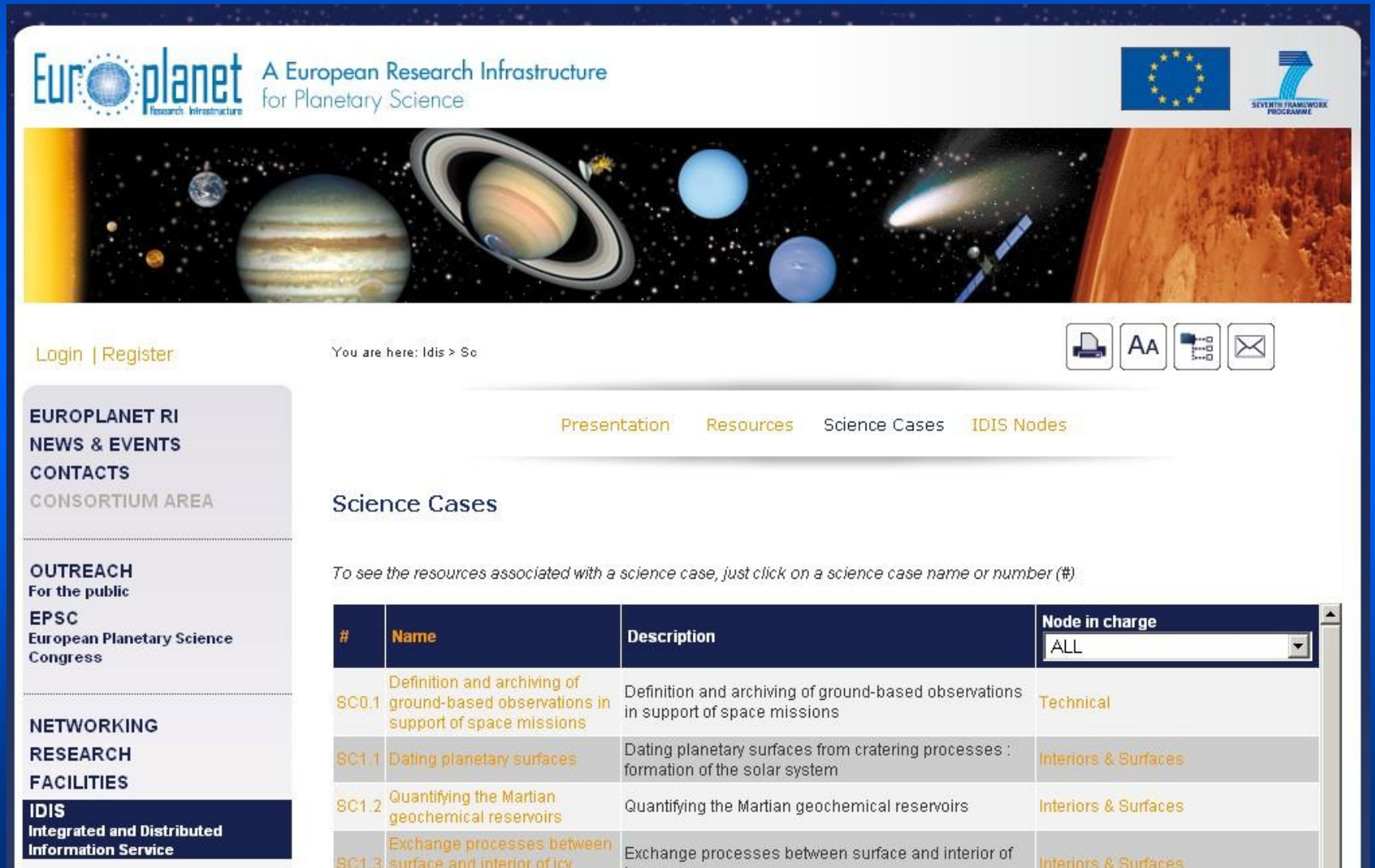
IDIS

Search for *Instrument Support*



IDIS

Science Cases Database



IDIS

Science Cases Crossreference

March 27, 2008
Author: W.Schmidt, FMI

Current Science Case numbering as published in the User Requirements Document

FP6-SC	Title / Description	NA2-WG
SC1	Venus super-rotation	3
SC2	Titan Ion Chemistry	1+3
SC3	Solar wind interaction with Jupiter and Saturn aurorae	1+4
SC4	Internally driven electrodynamic phenomena in giant planets' magneto-plasmas	1
SC5	Investigation of the interaction of magnetospheric plasma with icy moons in the Saturnian system an other giant planet systems	1+4
SC6	Definition and archiving of ground-based observations in support of space missions	1-5
SC7	Methane spectroscopy	3
SC8	Dating planetary surfaces from cratering processes: formation of the solar system	3
SC9	Quantifying the Martian geochemical reservoirs	3
SC10	Exchange processes between surface and interior of icy moons	2+3
SC11	Relative contribution to zodiacal cloud	2
SC12	What is the dynamical and morphological structure of the Kuiper belt	2
SC13	Gas and Dust emission of comet C-G during Rosetta mission	2
SC14	Solar wind-comet surface interaction	2+4
SC15	Surface material composition	3
SC16	Distant activity, outbursts, splitting and disruption of cometary nuclei	2
SC17	Planets under extreme stellar conditions	5
SC18	Tectonics on Mars	3
SC19	Terrestrial analogues in studies of the Martian surface	3
SC20	Enceladus	1+3
SC21	Mars global climate	3
-	Titan and its Tholins (aerosols)	1+3
-	Gas giant planetary atmospheres and exospheres	1,3,5
-	Gas giant planetary ionospheres, magnetospheres	1,4,5
-	Surfaces of small comets and asteroids	2
-	Dust in the solar system	2
-	Interaction between solar wind and magnetospheres/exospheres (space weather)	4
-	Dynamo properties of planetary interior	4
-	Exoplanets and other planetary systems	5

Correlation matrix between FP6 numbering and IDIS Implementation

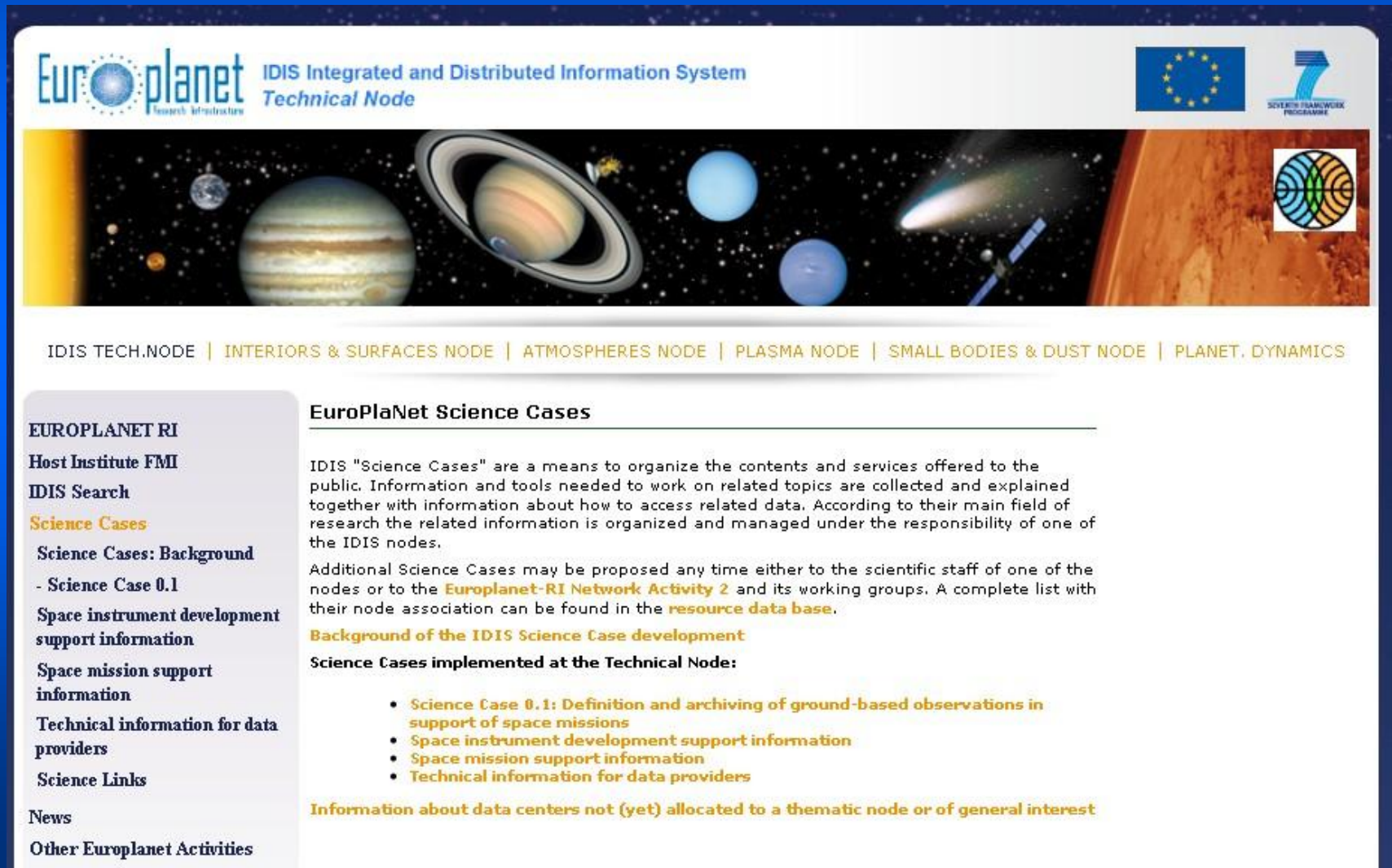
Responsible Node:	Interiors	Atmospheres	Plasma	Small Bodies	Planet.Dyn.	Techn.node
SC1		SC2.4				
SC2		SC2.1				
SC3		*	SC3.1			
SC4			SC3.2			
SC5	*		SC3.3			
SC6	*	*	*	*	*	SC0.1
SC7		SC2.2				*
SC8	SC1.1					
SC9	SC1.2	*				
SC10	SC1.3					
SC11				SC4.1		
SC12				SC4.4	*	
SC13		*	*	SC4.2		
SC14	*		*	SC4.5		
SC15	SC1.4			*		
SC16				SC4.3	*	
SC17		*	SC3.4		*	
SC18	SC1.5					
SC19	SC1.6					
SC20	SC1.7					
SC21		SC2.3				
-		SC2.5				
-		*	*			
-			*			
-	*			*		
-				*	*	
-			*			
-	*		*			
-		*	*		*	

NA2-WG	Description	Responsible
1	Giant planet systems as templates of planetary systems	NORBERT KRUPP
2	Small bodies and origin of the solar system	WALTER SCHMIDT
3	Terrestrial planets and comparative planetology	KAROLY SZEGO
4	Magnetic worlds, the Sun-planet connection	ESA KALLIO
5	Exoplanets and other planetary systems	HELMUT LAMMER

implemented

IDIS

Science Case 0.1 (at TN)

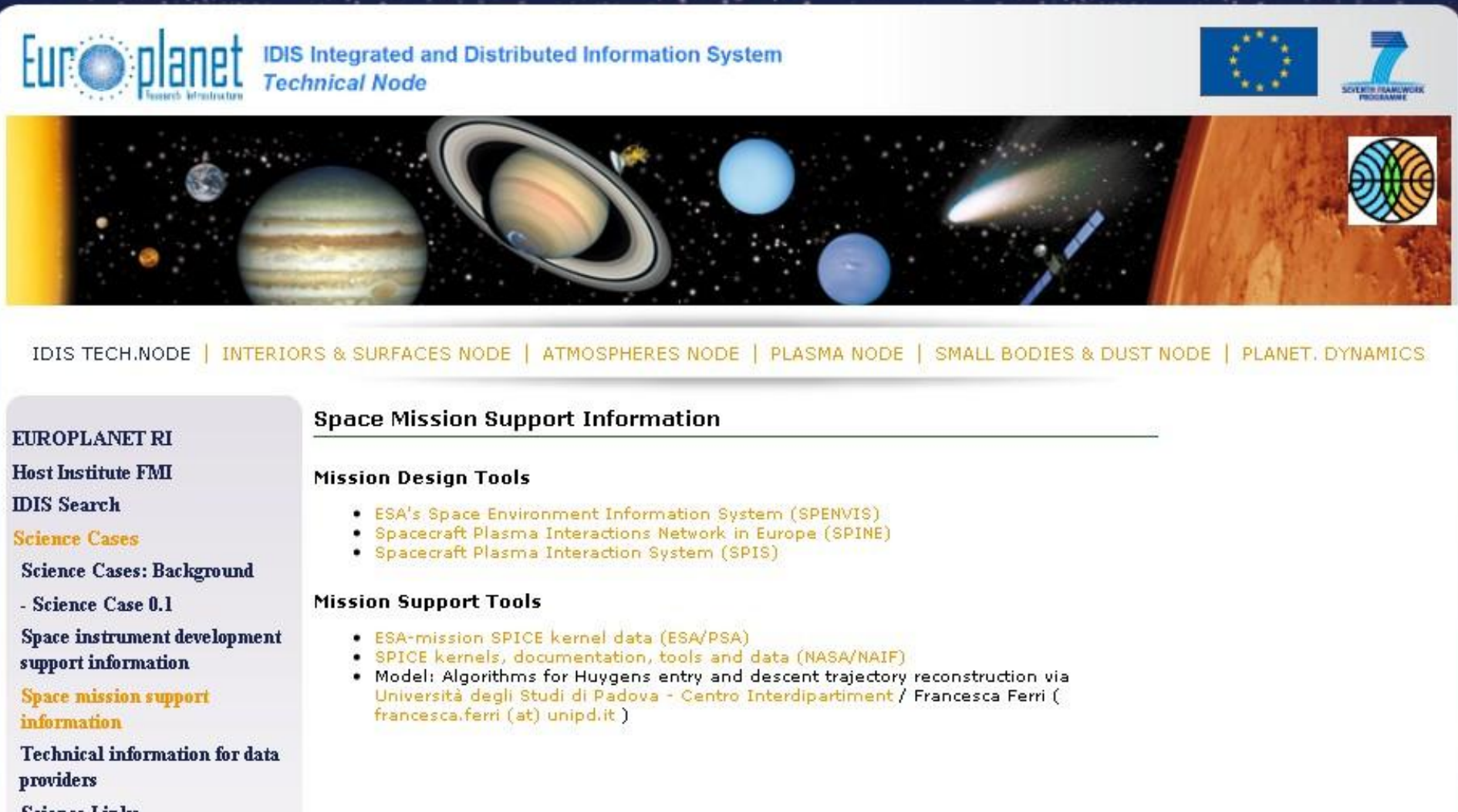


IDIS

TN: Instrument Development

IDIS

TN：Mission Support

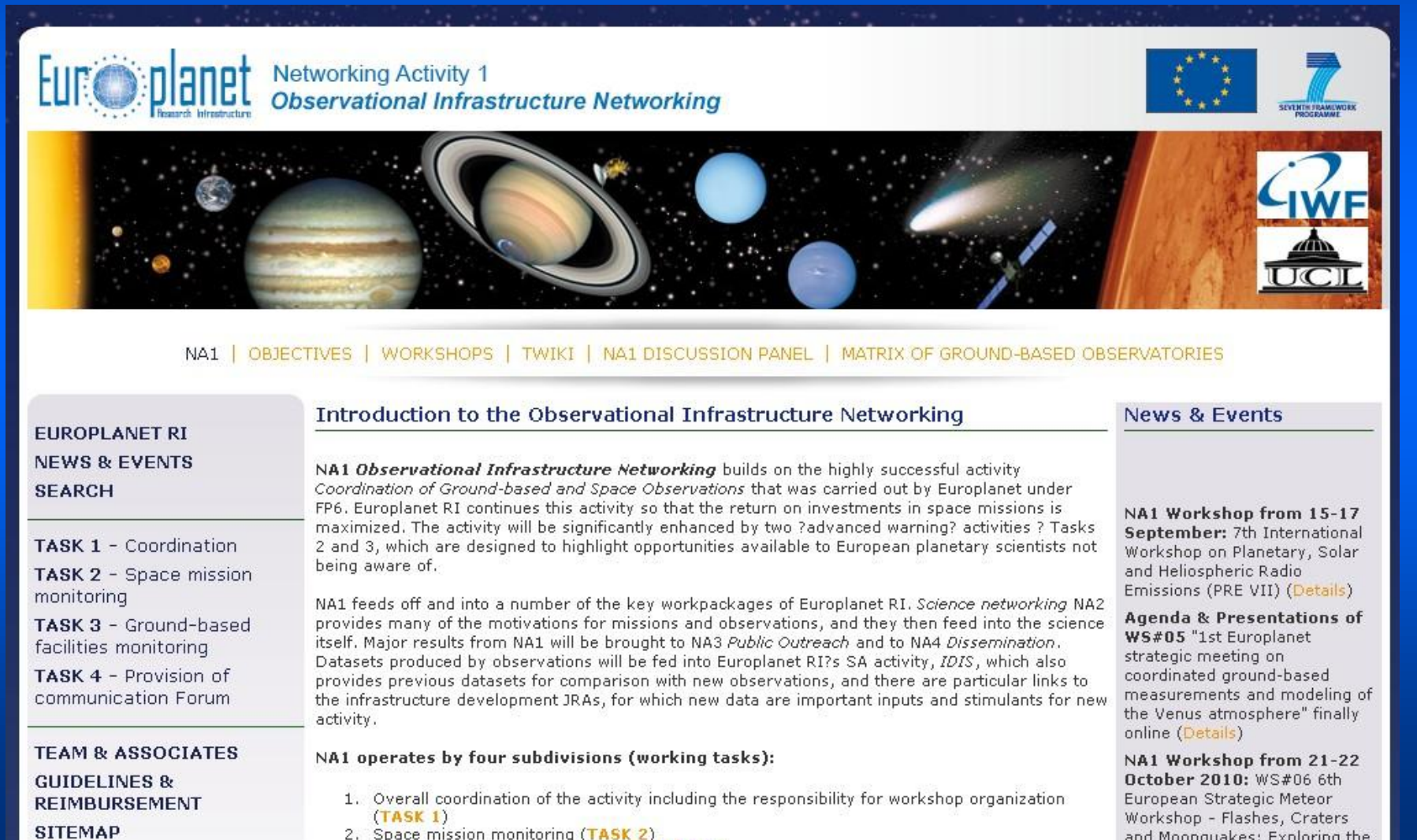


IDIS

TN : Support Observations

IDIS

TN / NA1 : Support Observations



Europlanet Research Infrastructure

Networking Activity 1
Observational Infrastructure Networking

NA1 | OBJECTIVES | WORKSHOPS | TWIKI | NA1 DISCUSSION PANEL | MATRIX OF GROUND-BASED OBSERVATORIES

EUROPLANET RI
NEWS & EVENTS
SEARCH

TASK 1 - Coordination
TASK 2 - Space mission monitoring
TASK 3 - Ground-based facilities monitoring
TASK 4 - Provision of communication Forum

TEAM & ASSOCIATES
GUIDELINES & REIMBURSEMENT
SITEMAP

Introduction to the Observational Infrastructure Networking

NA1 *Observational Infrastructure Networking* builds on the highly successful activity *Coordination of Ground-based and Space Observations* that was carried out by Europlanet under FP6. Europlanet RI continues this activity so that the return on investments in space missions is maximized. The activity will be significantly enhanced by two ?advanced warning? activities ? Tasks 2 and 3, which are designed to highlight opportunities available to European planetary scientists not being aware of.

NA1 feeds off and into a number of the key workpackages of Europlanet RI. *Science networking* NA2 provides many of the motivations for missions and observations, and they then feed into the science itself. Major results from NA1 will be brought to NA3 *Public Outreach* and to NA4 *Dissemination*. Datasets produced by observations will be fed into Europlanet RI?s SA activity, *IDIS*, which also provides previous datasets for comparison with new observations, and there are particular links to the infrastructure development JRAs, for which new data are important inputs and stimulants for new activity.

NA1 operates by four subdivisions (working tasks):

1. Overall coordination of the activity including the responsibility for workshop organization (TASK 1)
2. Space mission monitoring (TASK 2)

News & Events

NA1 Workshop from 15-17 September: 7th International Workshop on Planetary, Solar and Heliospheric Radio Emissions (PRE VII) (Details)

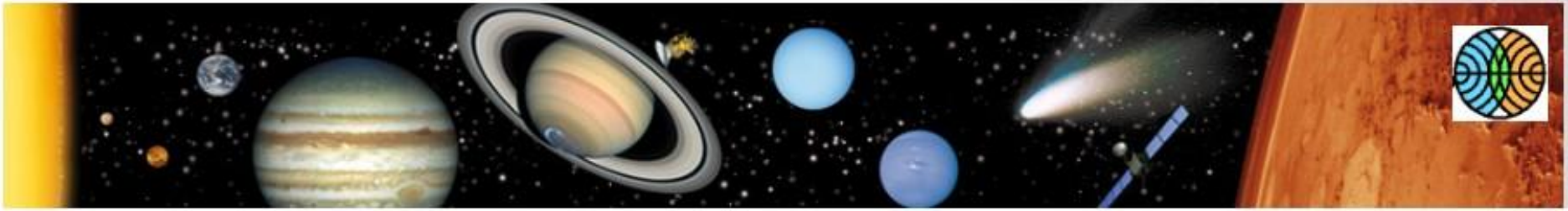
Agenda & Presentations of WS#05 "1st Europlanet strategic meeting on coordinated ground-based measurements and modeling of the Venus atmosphere" finally online (Details)

NA1 Workshop from 21-22 October 2010: WS#06 6th European Strategic Meteor Workshop - Flashes, Craters and Moonquakes: Exploring the

IDIS

TN : Simulation Facilities

IDIS Integrated and Distributed Information System
Technical Node



IDIS TECH.NODE | INTERIORS & SURFACES NODE | ATMOSPHERES NODE | PLASMA NODE | SMALL BODIES & DUST NODE | PLANET. DYNAMICS

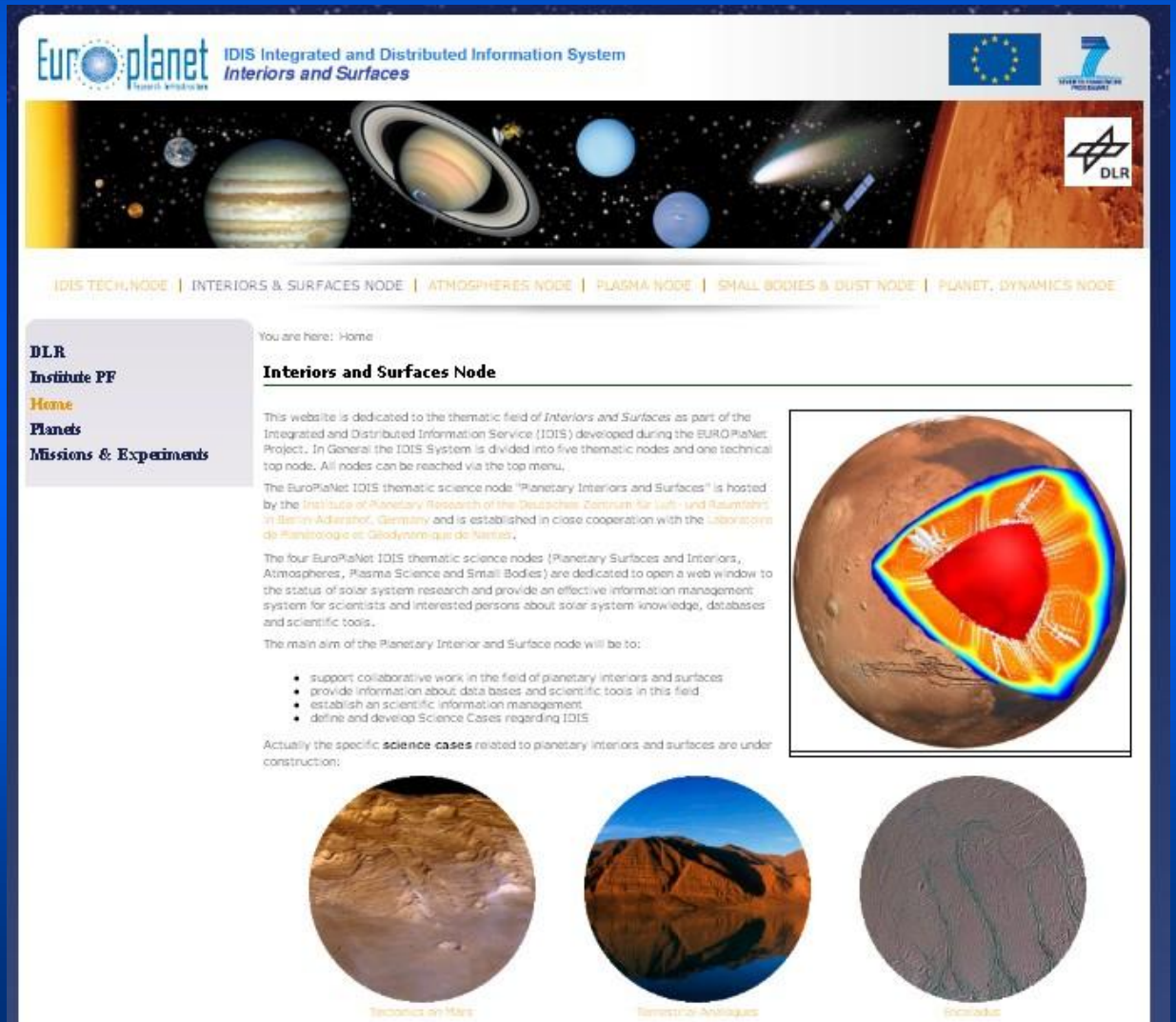
Simulation Facilities for Planetary Conditions

Simulation and Test Facilities for planetary Conditions

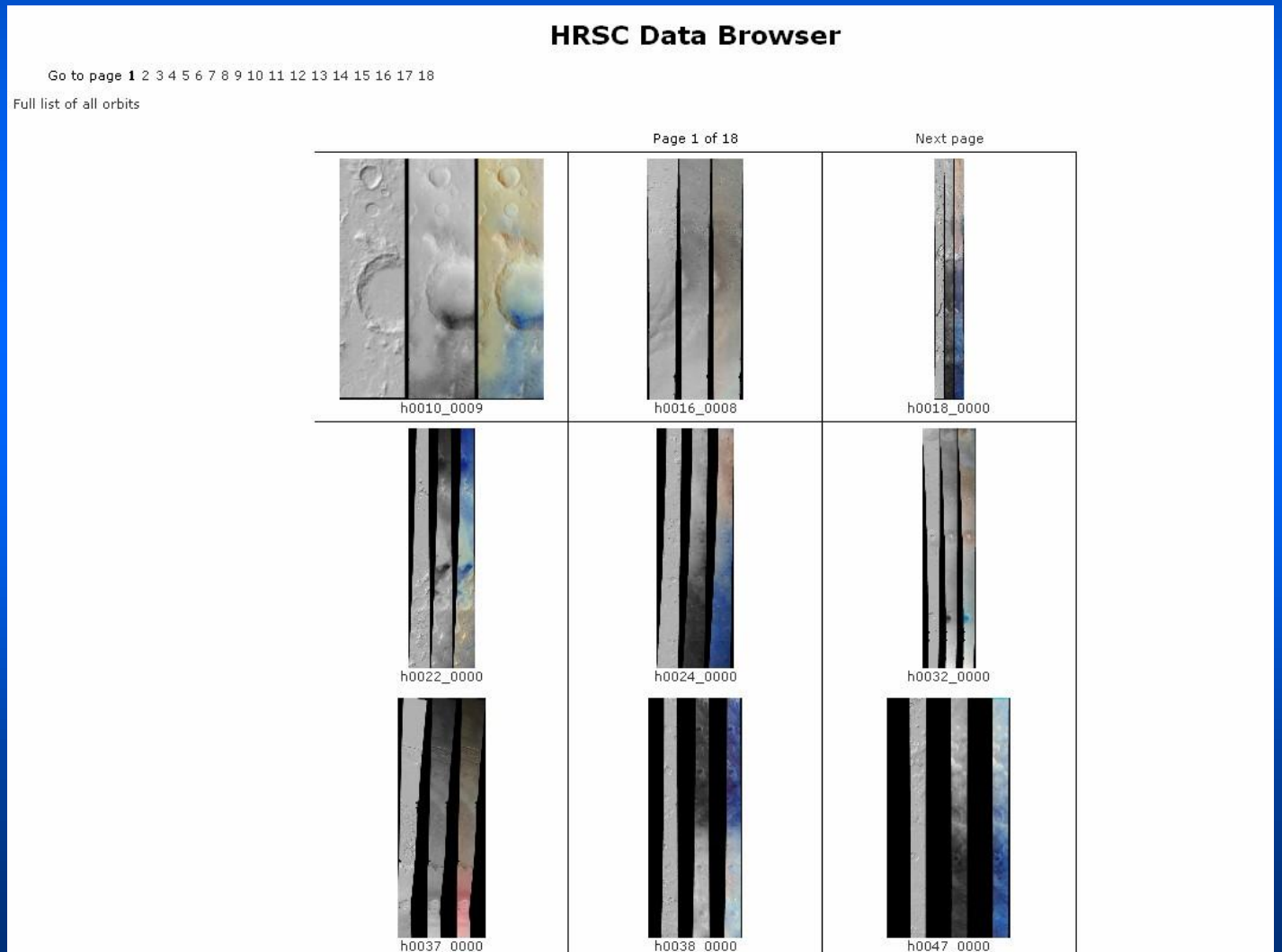
- TNA1: Field analogue for desert environment
- TNA1: Planetary field analogue for active volcanoes
- TNA1: Field analogue for ground ice and permafrost mapping
- TNA1: Acidic ecosystem, test site for extreme environmental conditions
- TNA1: Field analogue for extremely harsh temperature, dust and chemical environment
- TNA2: Mars Wind Tunnel Simulation Facility
- Mars Wind Tunnel at Oxford University
- Mars Simulation Laboratory Wind Tunnel at Aarhus University, Denmark
- TNA2: Planetary Atmosphere Simulation chamber
- TNA2: Martian Atmosphere Simulation Facility
- TNA2: Simulation chamber for planetary high density atmospheres and surfaces
- TNA2: Simulation chamber for planetary low density atmospheres and surfaces
- TNA2: Titan atmosphere simulation facility for physical and chemical conditions
- TNA2: Planetary Analogue Terrain Laboratory Aberystwyth

IDIS

Node: Surfaces & Interiors / Berlin

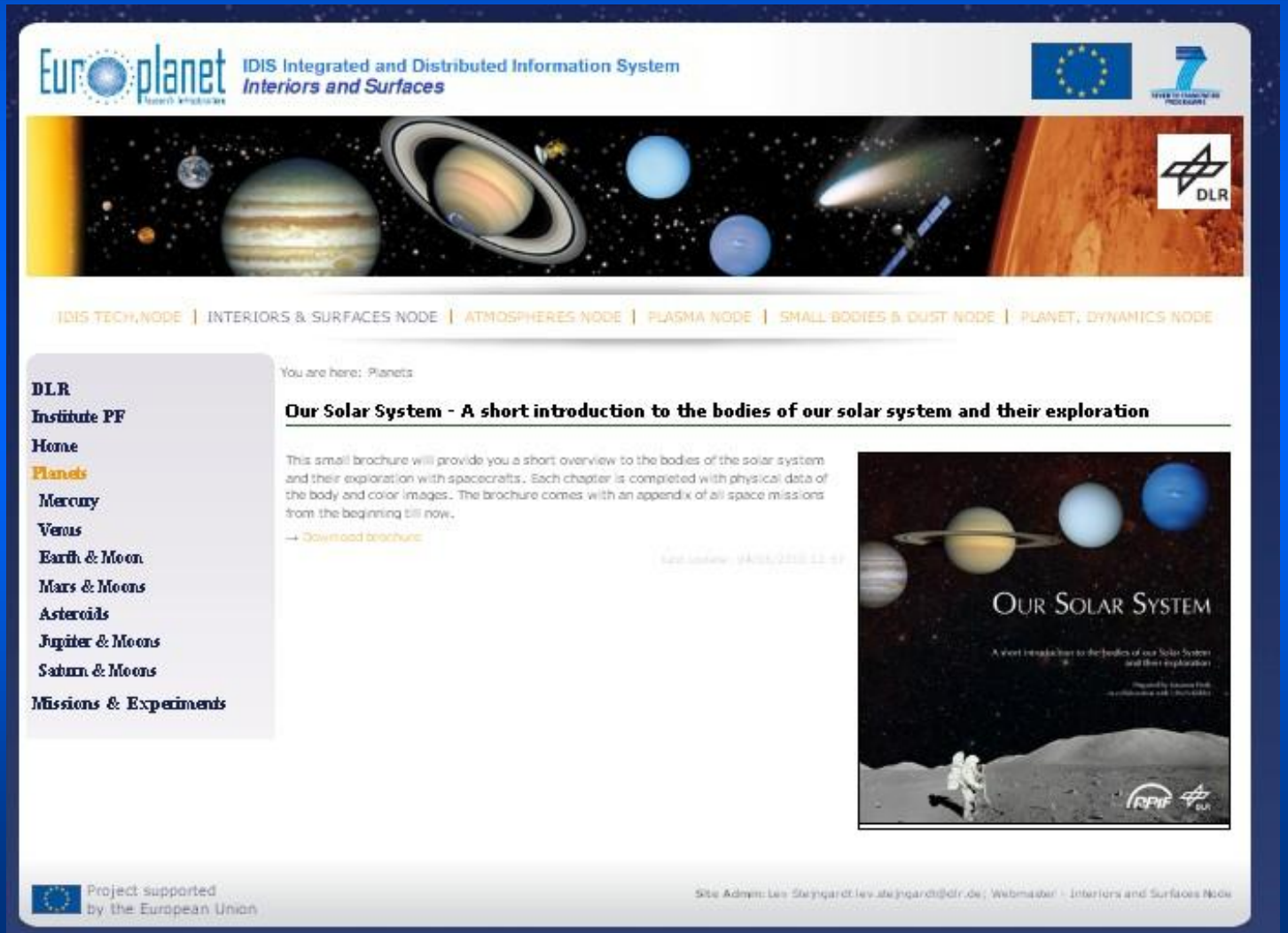


Mars HRSC Data Browser



IDIS

Planet Summary



Planet Summary: Mercury

DLR
Institute PF
Home
Planets
Mercury
Venus
Earth & Moon
Mars & Moons
Asteroids
Jupiter & Moons
Saturn & Moons
Missions & Experiments

You are here: Planets » Mercury

Mercury

Mercury is the innermost planet in our Solar System. Because it is so close to the Sun, it can be observed from Earth for only about two hours before sunrise and two hours after sunset, and then only if the ecliptic is very steeply inclined to the horizon. Within 217 years, observers on Earth may watch Mercury passing as a black dot before the bright disk of the Sun on twenty occasions in November and on nine occasions in May. The next transit will be on 9 May 2016.

As Mercury's orbit is highly elliptical, its distance to the Sun differs greatly between aphelion and perihelion. At perihelion, the planet approaches the Sun to 46 million kilometers, counting from the Sun's center, while its distance grows to 70 million kilometers at aphelion. Because of its relative closeness to the Sun, it is fairly easy to demonstrate that the rotation of Mercury's perihelion is partly due to relativistic influences: it is the gravity pull of the Sun and, to a lesser extent, that of other planets that causes Mercury's perihelion to rotate slowly to the right around the center of gravity it shares with the Sun, so that in the long run the shape of its path around the Sun resembles a rosetta.

Mercury's rotation and orbital periods are linked, for it circles the Sun twice while it rotates three times around its axis. Consequently, a day/night period on Mercury extends over 176 terrestrial days. During that cycle, surface temperatures fluctuate between -180 and + 430 degrees centigrade.

The smallest planet in the Solar System, Mercury is smaller even than the Jovian moon Ganymed and the Saturnian moon Titan. Nevertheless, its mean density is comparable to that of Earth, which leads scientists to assume that Mercury must have a relatively extensive and heavy core of iron and nickel. Measurements show that the strength of Mercury's magnetic field is about one percent of Earth's.

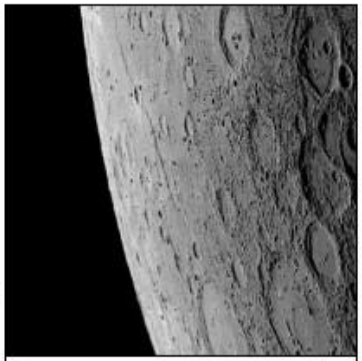
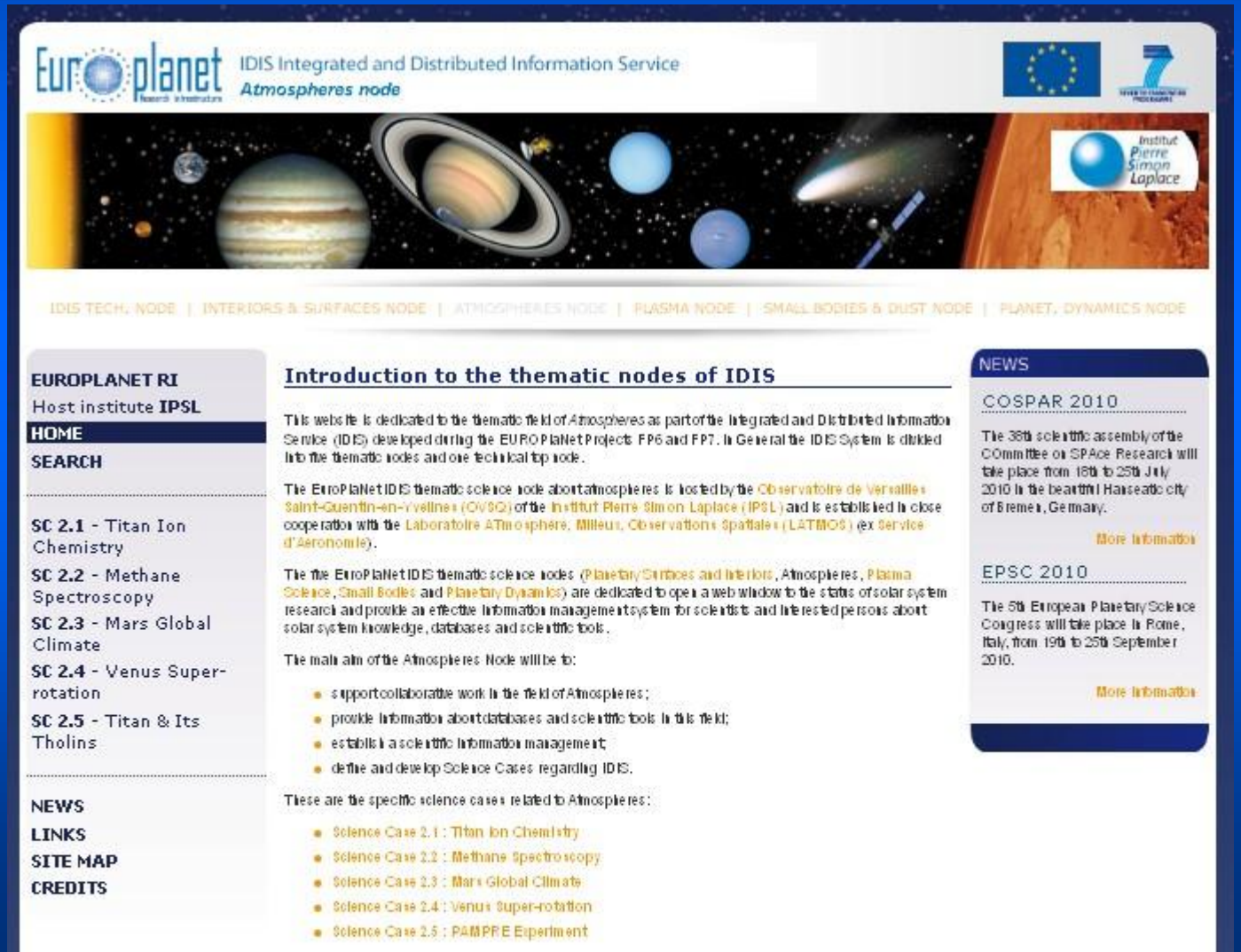


Figure 1: Picture: View to the limb of Mercury. Prominent towards the horizon is a long cliff face extending for more than 400 kilometers. This scarp is a result of contraction due to the planet's cooling. (© NASA/JHUAPL/Carnegie Institution of Washington)

Mass	3.302×10^{23} kg
Radius	2,439.7 km
Density	5.427 g/cm^3
Rotation period	58.65 days
Orbital period	88 days
Mean Distance from the Sun	57.91×10^6 km

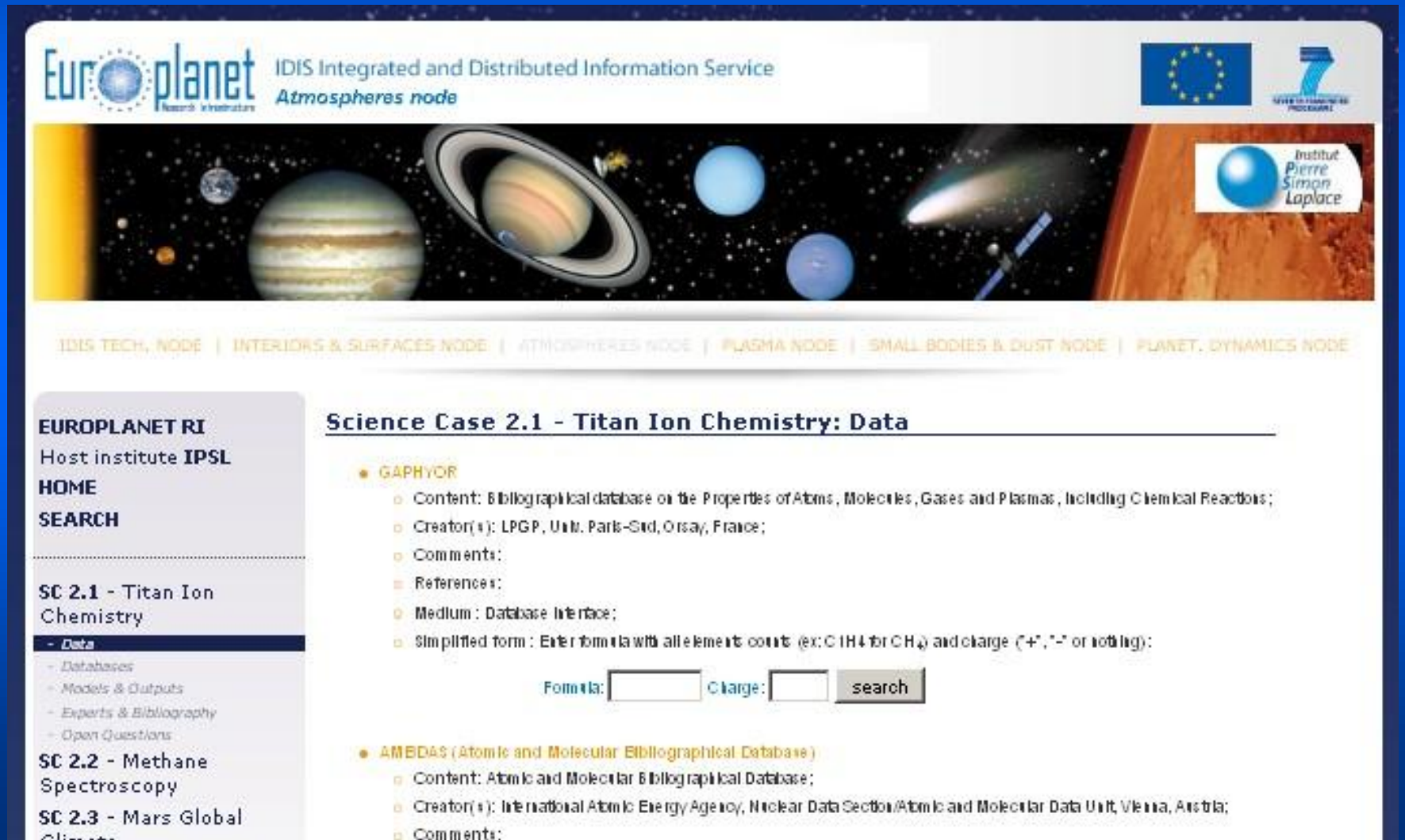
IDIS

Node: Atmospheres / Paris



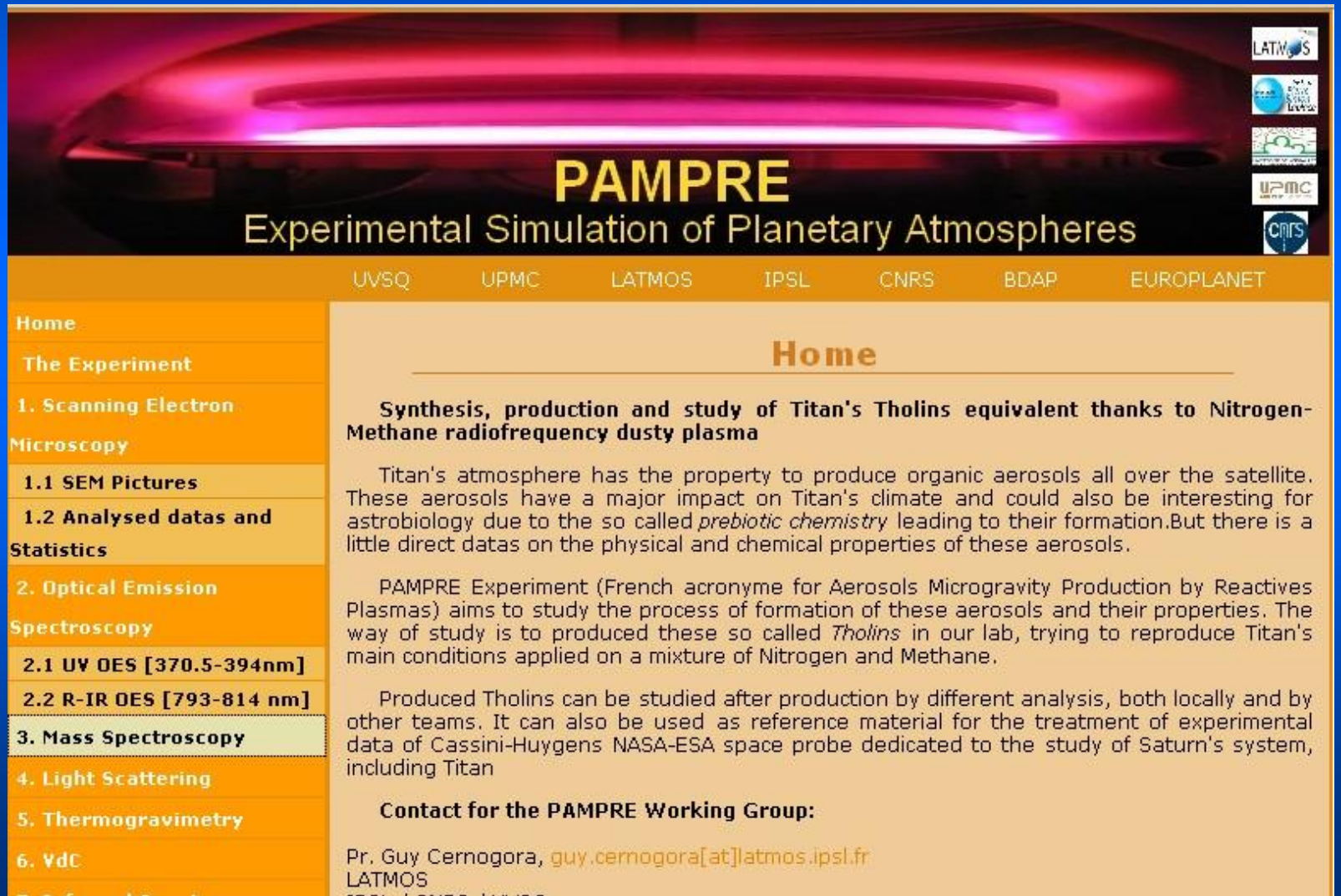
IDIS

Atmospheres: *Titan Ion Chemistries*



IDIS

Atmospheres: *Atmosphere Simulation*

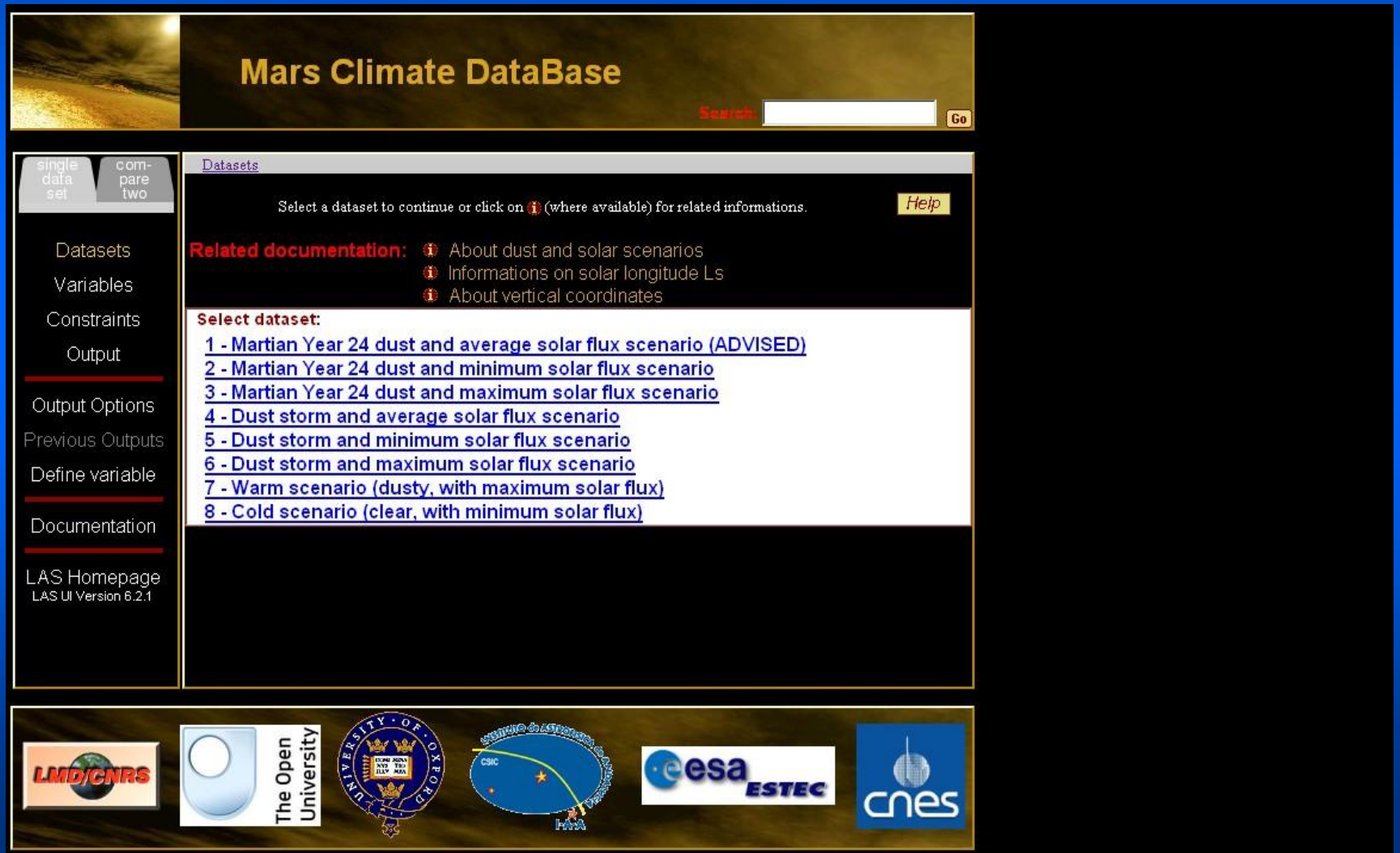


Europlanet Research Infrastructure

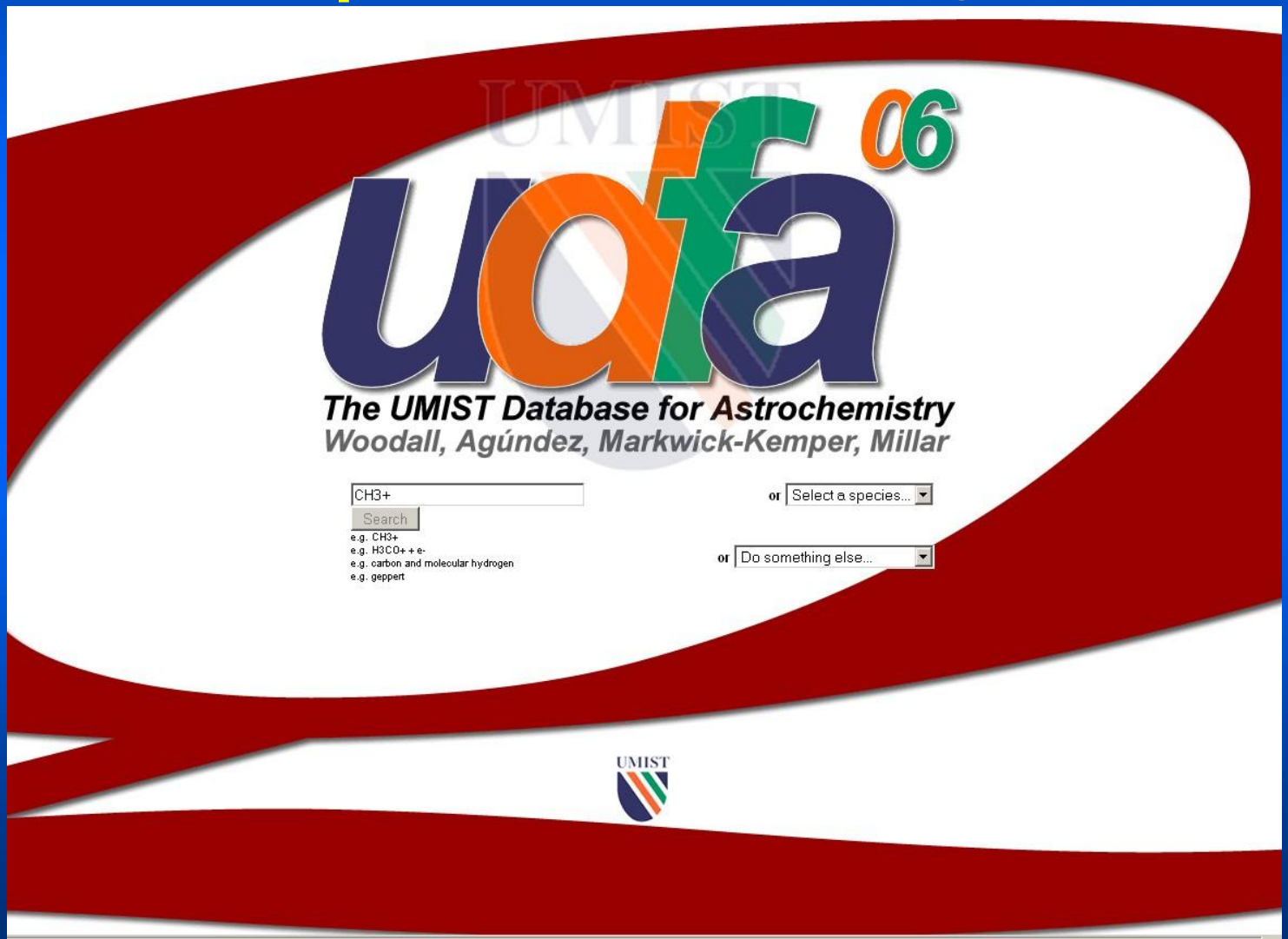
IDIS

SEVENTH FRAMEWORK PROGRAMME

Atmospheres: *Mars Climate DB*



Atmospheres: *Astrochemy DB*



Atmospheres: *Astrochemy DB*

udfa'16 CH3+ Search or Select a species... or Do something else...

Found 141 'CH3+' reactions, showing 1 - 50 next 50

	Reaction	α	β	γ	T_l - T_u (K)	Accuracy	Source
1	$C + CH_3^+ \rightarrow C_2H^+ + H_2$	1.20E-09	0.00	0.0	10 - 41000	factor 2	Lit. Search
2	$C^+ + CH_3OH \rightarrow HCO + CH_3^+$	2.08E-09	0.00 / -0.50	0.0	10 - 41000	within 25%	Measurement
3	$CH + CH_3^+ \rightarrow C_2H_2^+ + H_2$	7.10E-10	0.00 / -0.50	0.0	10 - 41000	factor 2	Lit. Search
4	$CH^+ + CH_3OH \rightarrow H_2CO + CH_3^+$	1.45E-09	0.00 / -0.50	0.0	10 - 41000	within 25%	Measurement
5	$CH^+ + H_2CO \rightarrow CO + CH_3^+$	9.60E-10	0.00 / -0.50	0.0	10 - 41000	within 25%	Measurement
6	$CH_2 + C_2H^+ \rightarrow C_2 + CH_3^+$	4.40E-10	0.00	0.0	10 - 41000	factor 2	Lit. Search
7	$CH_2 + CH_3^+ \rightarrow C_2H_3^+ + H_2$	9.90E-10	0.00	0.0	10 - 41000	factor 2	Lit. Search
8	$CH_2 + CH_5^+ \rightarrow CH_4 + CH_3^+$	9.60E-10	0.00	0.0	10 - 41000	factor 2	Lit. Search
9	$CH_2 + H_2CO^+ \rightarrow HCO + CH_3^+$	4.30E-10	0.00	0.0	10 - 41000	factor 2	Lit. Search
10	$CH_2 + H_2O^+ \rightarrow OH + CH_3^+$	4.70E-10	0.00	0.0	10 - 41000	factor 2	Lit. Search
11	$CH_2 + H_3O^+ \rightarrow H_2O + CH_3^+$	9.40E-10	0.00	0.0	10 - 41000	factor 2	Lit. Search
12	$CH_2 + HCN^+ \rightarrow CN + CH_3^+$	8.70E-10	0.00	0.0	10 - 41000	factor 2	Lit. Search
13	$CH_2 + HCNH^+ \rightarrow HNC + CH_3^+$	4.35E-10	0.00	0.0	10 - 41000	factor 2	Lit. Search
14	$CH_2 + HCNH^+ \rightarrow HCN + CH_3^+$	4.35E-10	0.00	0.0	10 - 41000	factor 2	Lit. Search
15	$CH_2 + HCO^+ \rightarrow CO + CH_3^+$	8.60E-10	0.00	0.0	10 - 41000	factor 2	Lit. Search

Atmospheres: *Bibliography DB*

AMBDAS

Atomic and Molecular Bibliographic Data System

Search | Clear

Available Reactant/Surface Codes	Reactant Code	Ion Charge
? Reactant 1	H, Na, H2O, HF	2, 26, -1
Reactant 2	H, Na, H2O, HF	
? Isoelectr. Sequence	H, Be, Ca	
? Surface	Mg, Ag2O, Metal	

Examples are given in green

Attention: the codes are **case-sensitive**, i.e., **'Hf'** is *Hafnium* and **'HF'** is *Hydrogen-Fluorine*

Category	Process
Structure and Spectra	— Structure and Spectra —
Photon Collisions	Line Shapes and Shifts
Electron Collisions	Structure, Spectra
Heavy Particles Collisions	Interatomic Potentials
Surface Interactions	Polarizabilities, Electric moments
Beam Heating and Fueling of Plasmas	Energy Levels, Wavelengths

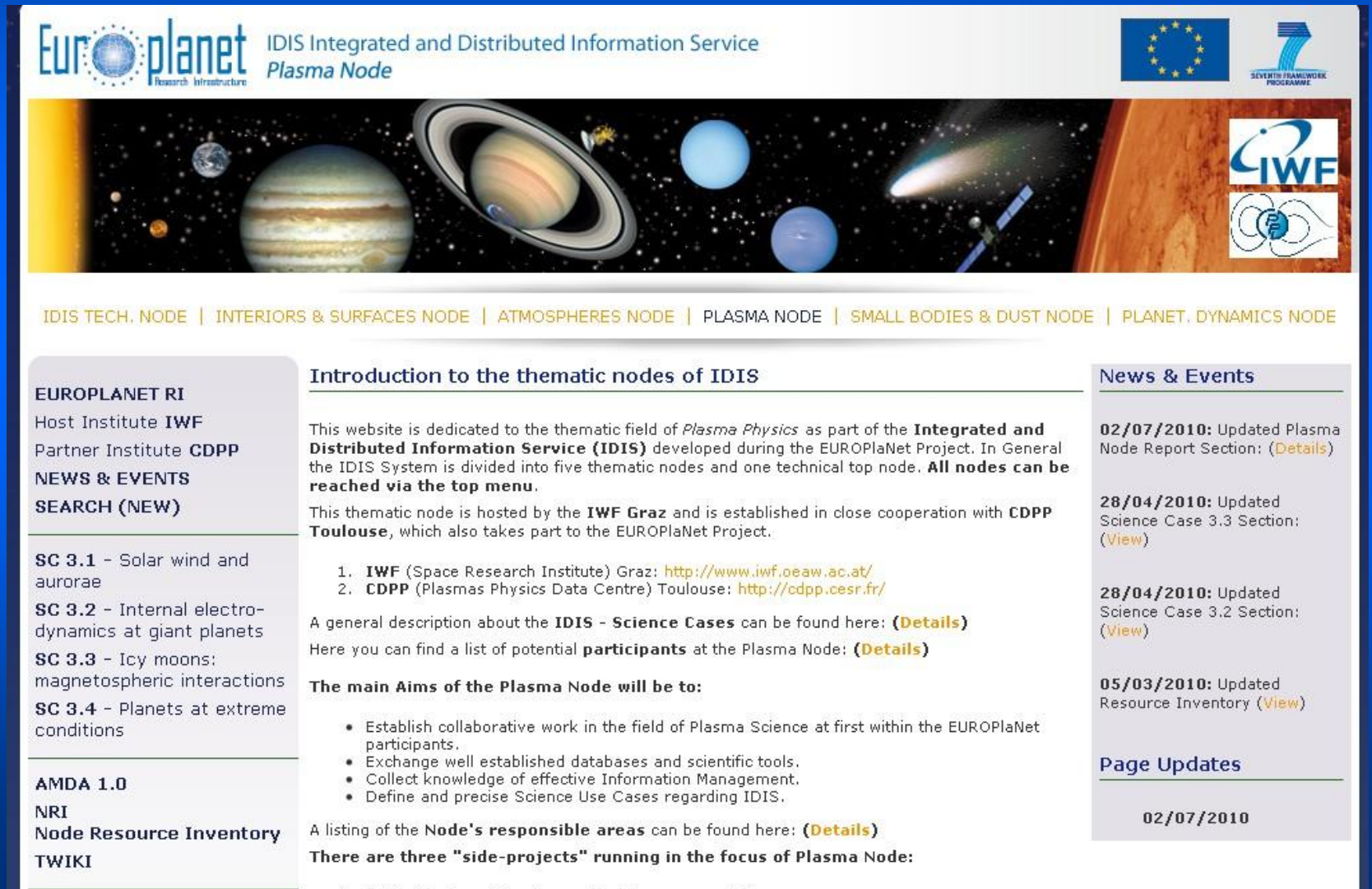
Bibliography

? Author's name	Mott, N*Mott, *stein*	2nd author's name	
? Keywords/Patterns	res*tance, "electron impact"		
Years	-- 98, 1998, 02, 2002	Reference Type	———

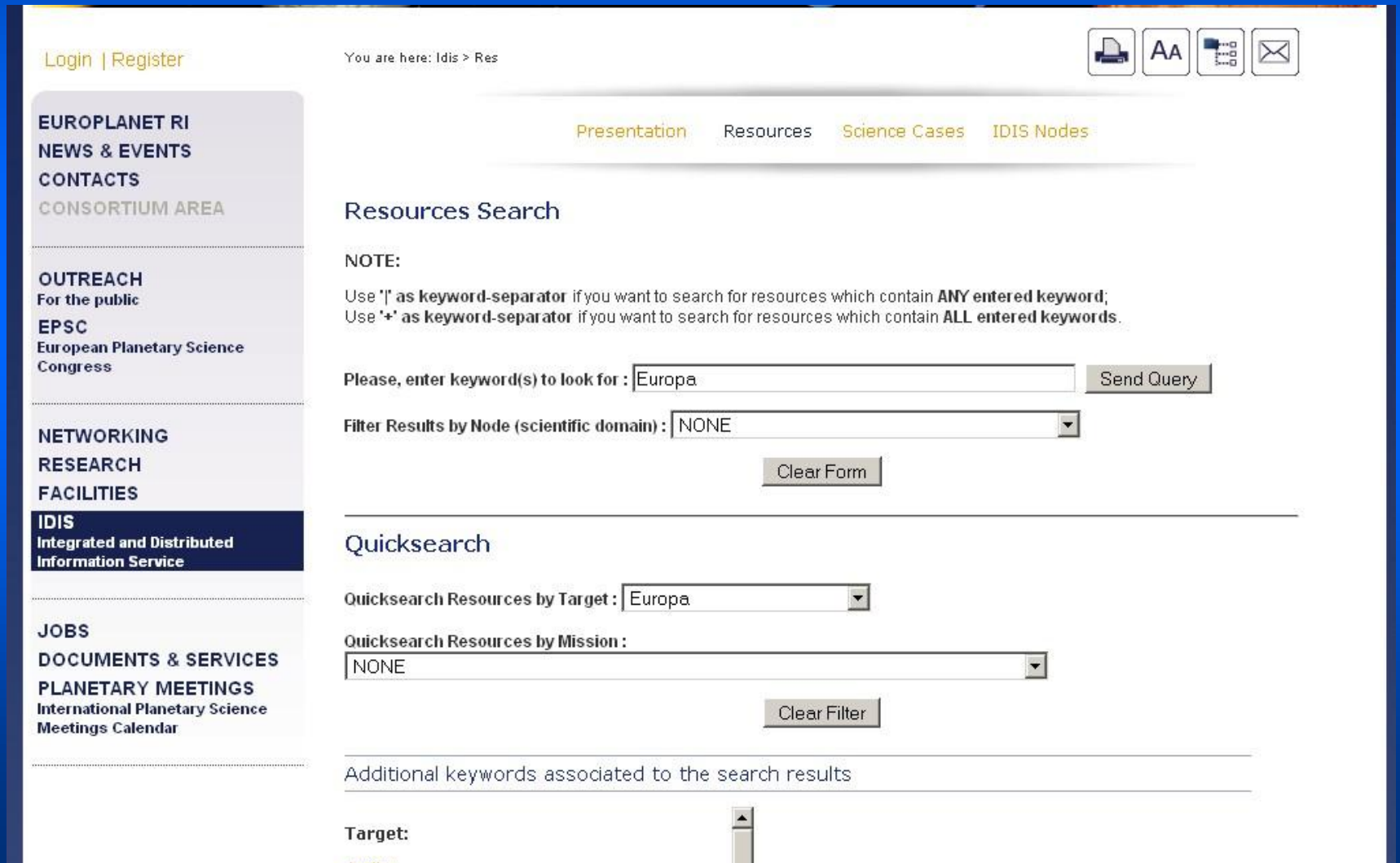
Sort by Year: ☑ | Abstract/Comment: ☑ | Search *Case Sensitive*: ☐ **The maximal allowed number of references is 200.**

IDIS

Node: Plasmas / Graz - Toulouse



Plasmas: *Search tool*



IDIS

Plasmas: *Solar Wind*

IDIS TECH. NODE | INTERIORS & SURFACES NODE | ATMOSPHERES NODE | PLASMA NODE | SMALL BODIES & DUST NODE | PLANET. DYNAMICS NODE

EUROPLANET RI
Host Institute **IWF**
Partner Institute **CDPP**
NEWS & EVENTS
SEARCH (NEW)

SC 3.1 - Solar wind and aurorae
. Scientific Topics
CMEs and Shocks in Solar Wind
Giant Planets magnetospheres
Moons influence on SKR
Satellite influences on aurorae
Solar Wind influence on HOM/DAM
Solar Wind influence on SKR
. Ground-based facilities
. Space-based facilities

SC 3.2 - Internal electro-dynamics at giant planets
SC 3.3 - Icy moons: magnetospheric interactions
SC 3.4 - Planets at extreme conditions

AMDA 1.0
NRI

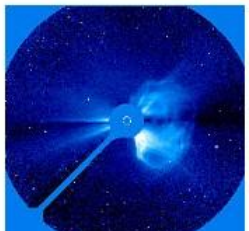
BACK TO SCIENTIFIC TOPICS

CMEs and Shocks in Solar Wind

Problem description:

Solar *Coronal Mass Ejections (CMEs)* are large-scale magnetized plasma structures carrying billions of tons of material that erupt from the Sun and propagate in the heliosphere, interacting in multiple ways with the solar wind (**Fig.1**). They appear to be a critical element in the solar dynamo which removes the dynamo-generated magnetic flux from the Sun and connects the internal dynamo processes to the external solar environment. The observational data on solar CMEs are related to two spatial domains: the near-Sun region (up to $30R_{sun} \approx 0{,}14$ AU) remote-sensed by coronagraphs; and the outer region, including the geo-space and beyond, where in-situ observations are made by spacecraft. The generic term used for CMEs in the solar wind is *ejecta*. Due to the existence of two spatial domains of observations, the term CME is usually applied for ejecta as they are observed near the Sun (≤ 0,14 AU), whereas at the larger distances they are traditionally called as *Interplanetary CMEs (ICMEs)*.

Traveling outward from the Sun at high speeds (up to thousands kilometers per second), CMEs create major disturbances in the interplanetary medium. Due to the high speed, intrinsic magnetic field and the increased density (as compared to the solar wind background), CMEs produce strong effects on the planetary environments and magnetospheres. Besides of the density and velocity disturbances created in the solar wind plasma, among the main planetary impact factors of CMEs, appear also the associated interplanetary shocks, energetic particles accelerated in the shock regions, and the magnetic field disturbances which create magnetic storms.

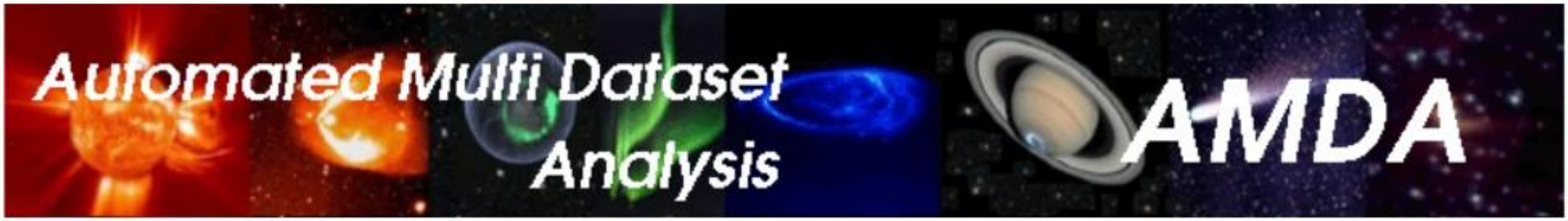


Europlanet Research Infrastructure

IDIS

SEVENTH FRAMEWORK PROGRAMME

Plasmas: *Virtual Observatory*



Announcements

- 22.04.2010 : Duration filter and statistical information added in time table manager
- All Announcements

Welcome To AMDA

Version r2010-03-29 beta

A generic Webtool for Space Physics data :

- automated event search and characterisation
- catalogue generation and exploitation
- automated database conditional extraction
- access to remote Data Centers

First Visit : Demo Tour ->

AMDA ACCESS

login

passwd

login reset

Register->

or test AMDA as a guest

login: guest

passwd : your e-mail address

IDIS

Node: Small Bodies & Dust

IDIS Integrated and Distributed Information System
Small Bodies and Dust Node

IDIS Tech. Node | Interiors & Surfaces Node | Atmospheres Node | Plasma Node | Small Bodies and Dust node | Planetary Dynamics Node

Home

SBDN Hosting Institute

IFSI/INAF

SBDN Internal Resources

SBDN Search

Comet Emission Lines Search

Comet Nuclei Model

SBDN External Resources

Virtual Meteor Observatory

SBDN Science Cases

S.C. 4.1: Relative Contribution to Zodiacal Cloud

Introduction to the thematic Nodes of IDIS

The EuroPlaNet information service provides access to lists of researchers, laboratories and data archives relevant for many aspects of planetary and space physics. Information can be accessed via search tools in the top node or directly via services available in the different thematic nodes.

The IDIS Small Bodies and Dust Node (SBDN in the following) aims at becoming a focus point in the fields of Solar System's minor bodies and interplanetary dust by providing the community with a central, user friendly resource and service inventory and contact point. The EuroPlaNet IDIS thematic science node "**Small Bodies and Dust Node**" is hosted by the Istituto di Fisica dello Spazio Interplanetario and is established in close cooperation with the Istituto di Astrofisica Spaziale. Both these instates are part of the Istituto Nazionale di Astrofisica (INAF).

The main aim of the **Small Bodies and Dust Node** will be to:

Europlanet Research Infrastructure

IDIS

SEVENTH FRAMEWORK PROGRAMME

SBDN: *Virtual Meteor Observatory*

VMO
IMO Node

Virtual Meteor Observatory
Node of the International Meteor Organization

Navigation

- Home
  - Standards
  - FAQ
  - Usage conditions
  - Reporting bugs
  - Links
- Sections
  - Observers
  - Locations
  - Camera systems
  - Camera observations
  - Visual observations
  - Showers
- Query and export

Observer login

IMO Code: *

Welcome to the database of the International Meteor Organization

You have reached the database of the International Meteor Organization (IMO), containing worldwide scientific observations of shooting stars (meteors) in the atmosphere of the Earth. This database is part of a *Virtual Meteor Observatory* (VMO), because it uses standard data formats and protocols. This allows other software tools and databases to be compatible.

The VMO is hosted with support from ESA RSSD and Europlanet.

Observer codes
» Browse
» Register

Location codes
» Browse
» Register

Camera systems
» Browse
» Register

IDIS

SBDN: *Zodiacal Cloud*

SBDN: *Other Resources*

SBDN Internal Resources

SBDN Search

Comet Emission Lines Search

Comet Nuclei Model

SBDN External Resources

Virtual Meteor Observatory

SBDN Science Cases

S.C. 4.1: Relative Contribution to Zodiacal Cloud

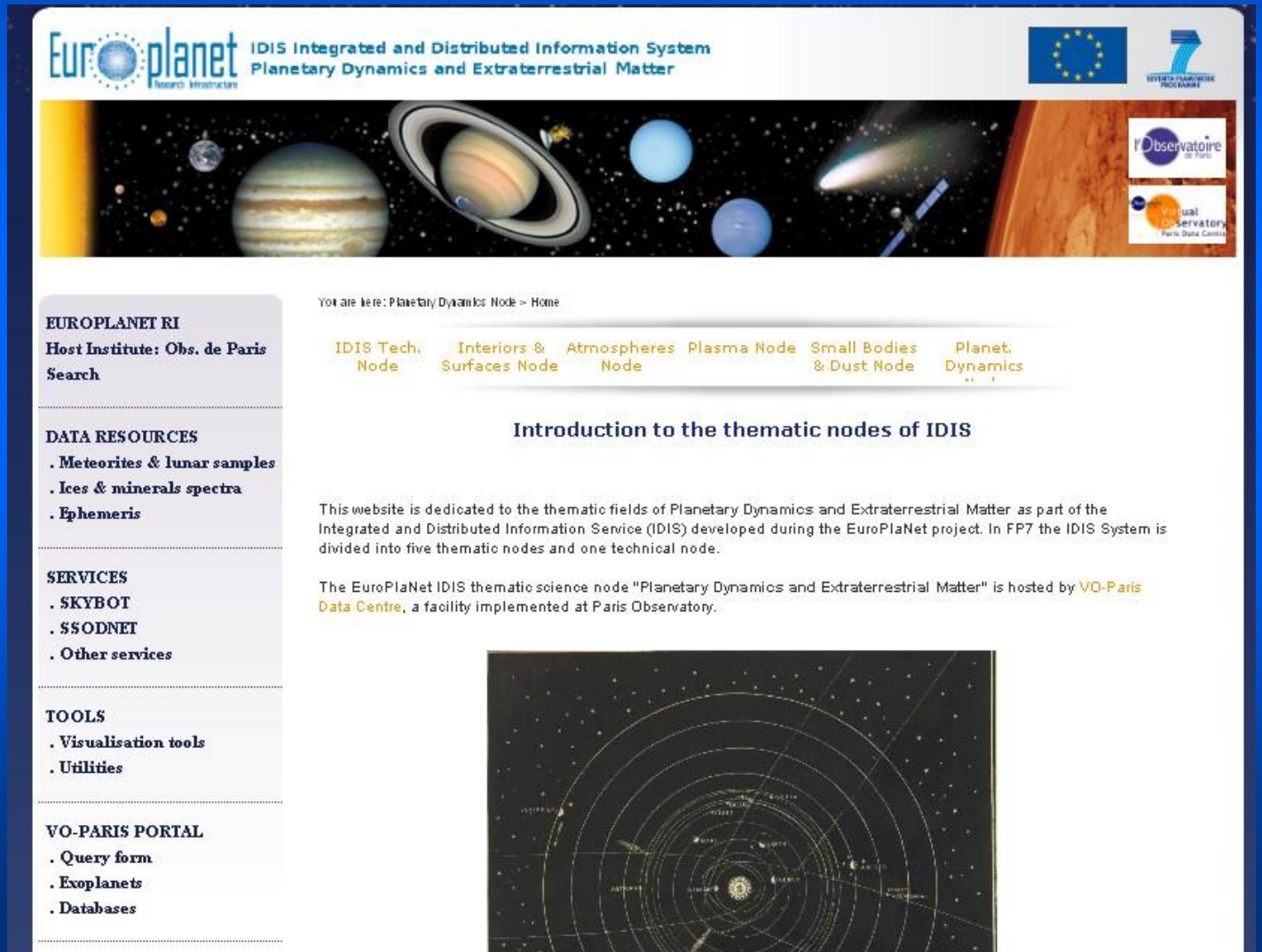
Overview
Objectives
Resources

S.C. 4.2: Gas and Dust emission of comet Churyumov-Gerasimenko during Rosetta mission

Overview
Objectives
Resources

IDIS

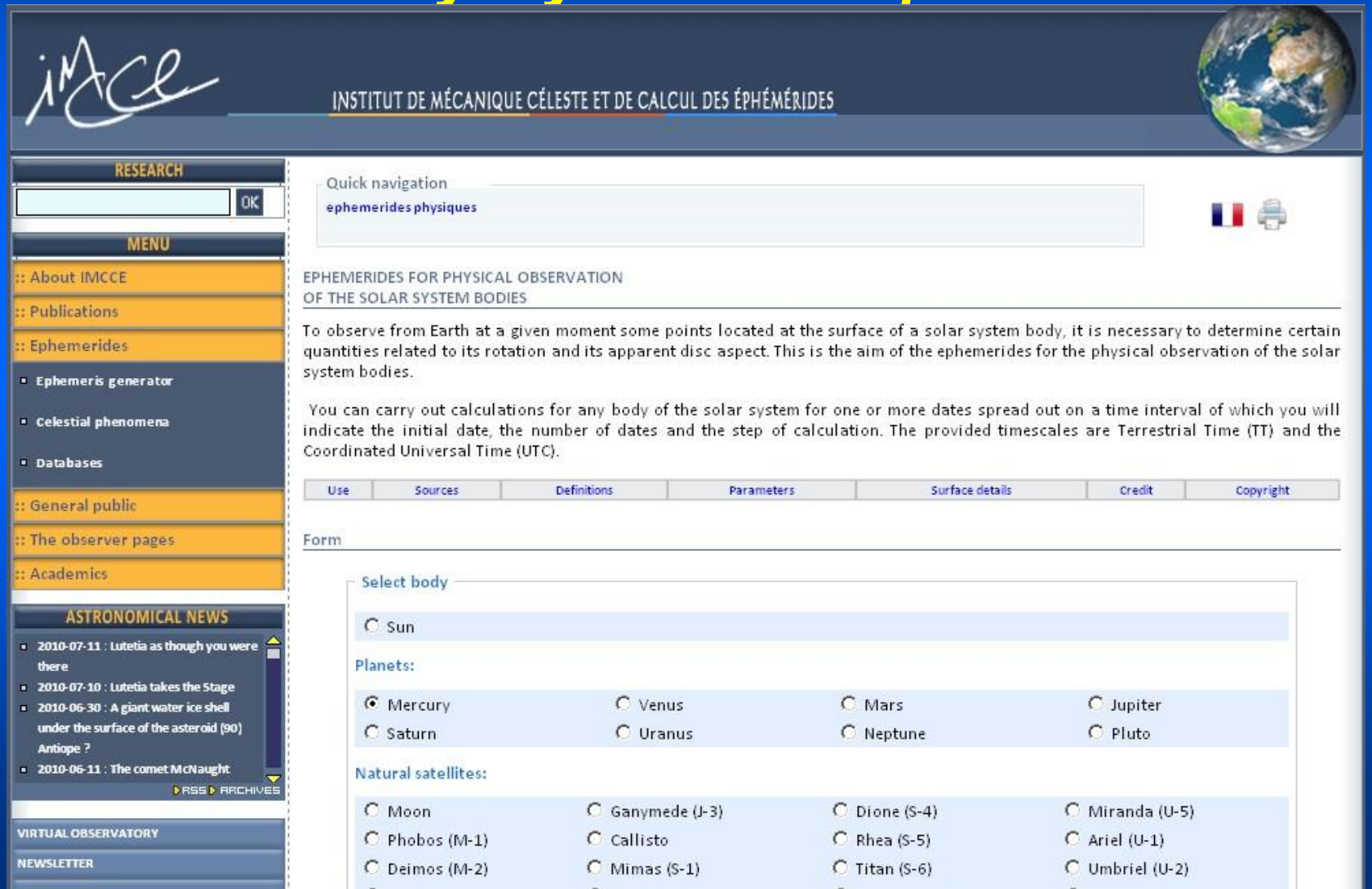
Node: Planetary Dynamics and Extraterrestrial Matter



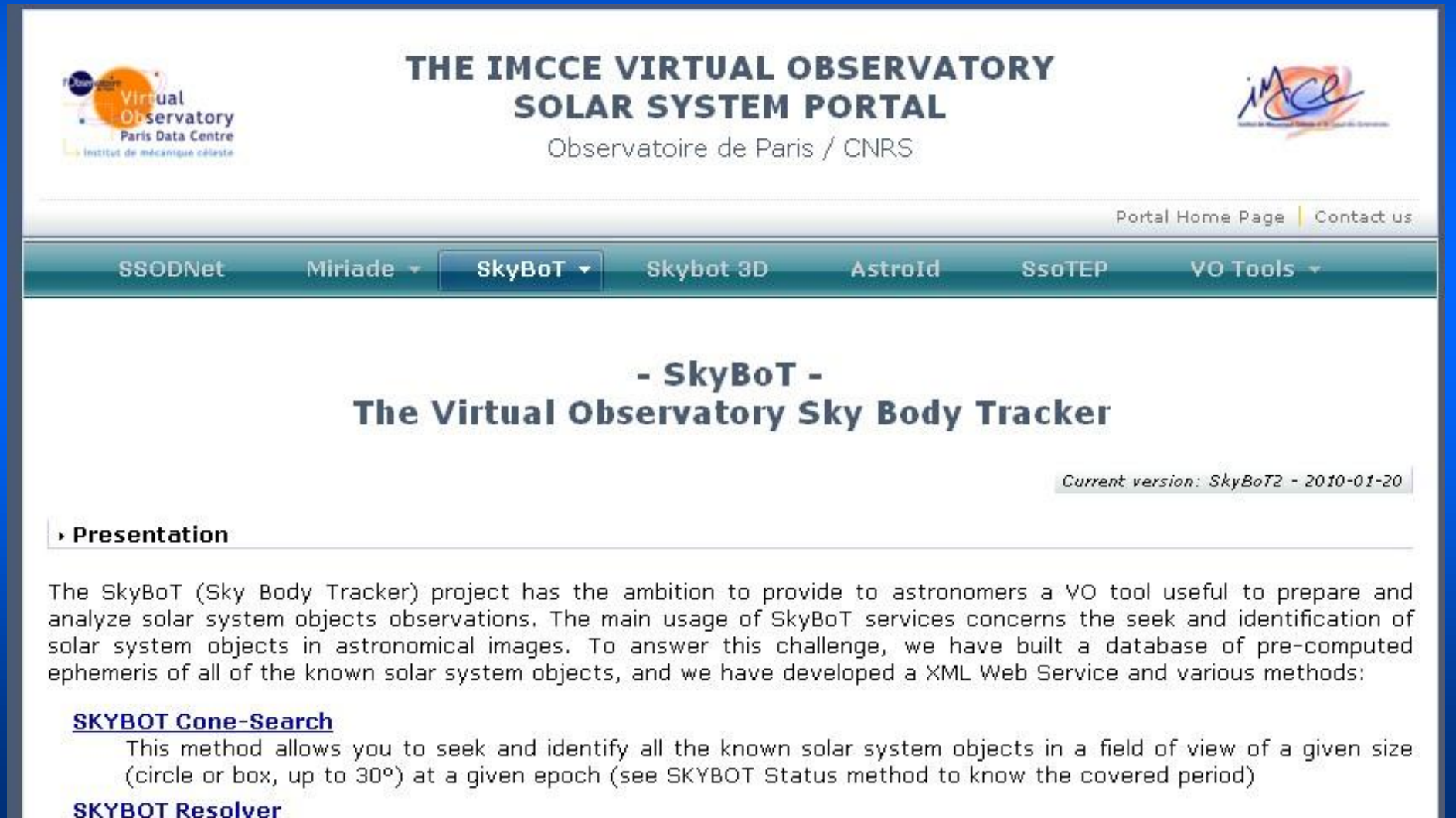
IDIS

Planetary Dynamics: *Ephemeris*

Planetary Dynamics: *Ephemeris*



Planetary Dynamics: *Sky BodyTracker*



IDIS

Planetary Dynamics: *Meteorites*

The Meteoritical Society

International Society for Meteoritics and Planetary Science

USGS science for a changing world

Home | News & Events | Publications | Membership | Resources | Search | Contact us

Search the Meteoritical Bulletin Database

Last update: 12 Jul 2010

Search for:	Search type:	Search limits:	Display:	Publication:
(•) Names	(•) Contains	All countries	Link to Google Earth	All bulls
( ) Text	( ) Starts with	All classes	Sort by name	What's new in the last:
( ) Places	( ) Exact	[ ] NonAntarctic	50 lines/page	(no time limit)
( ) Classes	( ) Sounds like	[ ] Falls	Normal table	
		[ ] Has photo	[ ] Limit to approved meteorite names	

Search text: [ ] Search! Reset

Database stats: 39133 valid meteorite names; 11964 provisional names; 4582 full-text writeups.

News feed for newly approved meteorites: SUBSCRIBE

Data sources:

- The Catalogue of Meteorites: 2002 June (current through *Met. Bull 87*).
- MetBase: v7.2 (current through *Met. Bull. 89*).
- Antarctic Meteorite Newsletter: through **33(1)**, 2010 February.
- Meteorite Newsletter (NIPR): through **v.19**, 2010 March.
- Meteoritical Bulletin: through *Met. Bull. 97*, 2010.

Planetary Dynamics: *Mineralogy DB*

Mineralogy Database

Search Webmineral

Home | Crystal | jmol | jPOWD | Chem | X Ray | Dana | Strunz | Properties | A to Z | Images | News | Help | About

Info:

- Mineral Definition
- What's New
- Advertising
- Search
- Links
- Webmaster
- JAVA Crystals
- HELP

Babelfish Translation:

- Français
- Español
- Italiano
- Deutschen
- Portuguêses
- 日本語
- 한국어
- 汉语

Help Index:

The Mineralogy Database was last updated on 12/31/2009 and it contains 4,714 individual mineral species descriptions with links and a comprehensive image library. Visit the "What's New" section for details.

Each mineral has a page linked to tables devoted to crystallography, crystal structures, X-Ray powder diffraction, chemical composition, physical and optical properties, Dana's New classification, Strunz classification, mineral specimen images, and alphabetical listings of mineral species. There also are extensive links to other external sources of mineral data and information.

Random Images from 3,700 Minerals

Junoite
© Tom Loomis / Dakota Matrix

Algodonite
© Jeff Weissman / Photographic Guide to Mineral Species

Offretite
© Lou Perloff / Photo Atlas of Minerals

Cannizzarite
© Richard Dale / Dale Minerals

Today is Monday, 19-Jul-2010 06:17:26 CDT

Factoid #18

All the gold mined in the past 6,000 years in the whole world would fit inside a baseball diamond (84'x84'x84') or (25.6m,25.6m,25.6m)and would weigh 145,000 metric tonnes.

This of amount of gold could make 3,836,043,358.8 one troy ounce gold coins if the gold was 24 karat pure.

Translate with Intertran

Translate using InterTran (tm)

Translate

Please MOVE AND HOLD your MOUSE CURSOR over the little DOWN ARROWS in the translated web page in order to see a pop-up window with ALTERNATIVE TRANSLATIONS.

Europlanet Research Infrastructure

IDIS

SEVENTH FRAMEWORK PROGRAMME

Planetary Dynamics: *Minerals*

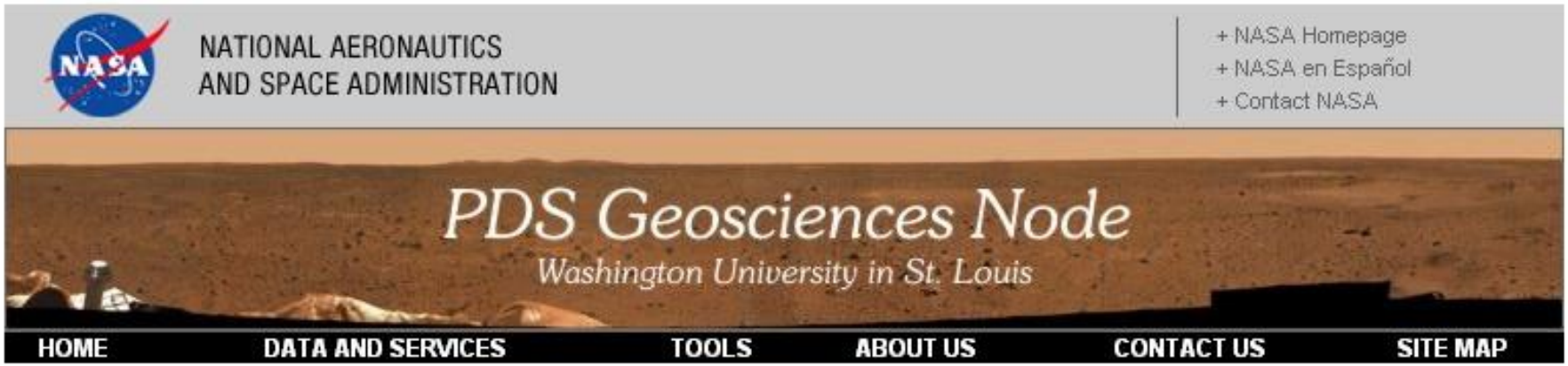
Home Page	Log In	Message Board	The Mi
Register	Search Pages	Chat Now! (2 online)	Mindat A

Alphabetical Index of Minerals, Varieties, Synonyms and other names

The database contains thousands of mineral names, varietal names, synonyms, discredited names and other names. You can use this alphabetical index to help you navigate.

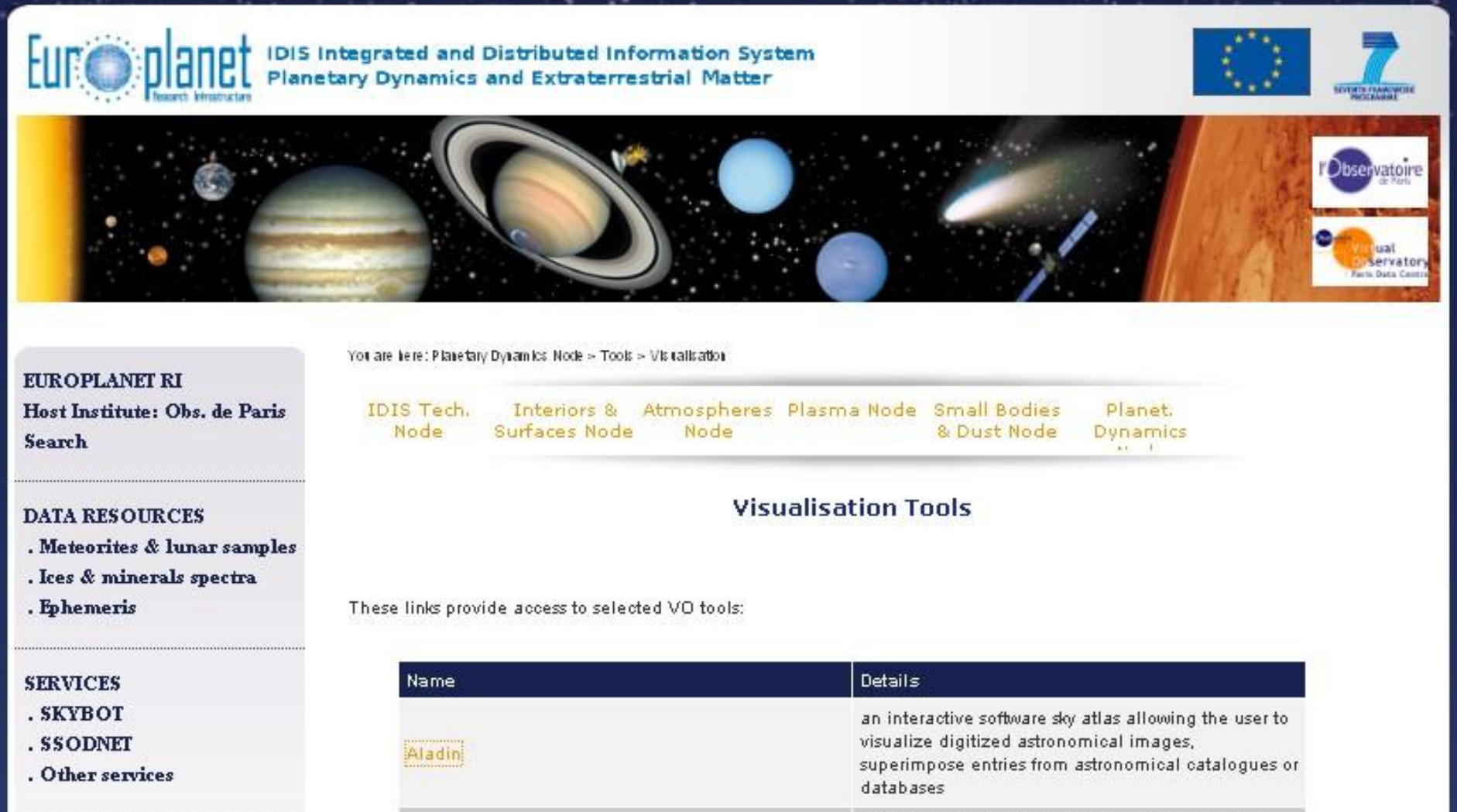
- **A:** Aabam to Azzurrite
- **B:** Bababudanit to Byzantievite
- **C:** Ca- and Sr-rich Baryte to Cziklovaite
- **D:** D'Achiardit to Dzintars
- **E:** Eakerit to Ezüst
- **F:** Fabianit to Fyzelyite
- **G:** Gaargoti to Gysinite-(Nd)
- **H:** Hỗ phách to Hyttsjöite
- **I:** Ianthinit to Iztăctepoztli
- **J:** Jáchymovit to Juxporite
- **K:** Kaadmium to Kyzylkumite
- **L:** Labrador to Lœwigita
- **M:** M40 to Mysorin
- **N:** Na Alum to Nyholmite
- **O:** Oakermanit to Ozokerite

Planetary Dynamics: *Mars Analog Spectra*



IDIS

Planetary Dynamics: *Visualisation Tools*



Future of Europlanet-RI / IDIS

- Extension of available information
- Access tools to access and combine data of different fields and different sources (Virtual Observatories)
- Intensive co-operation with scientists across Europe and beyond

Europlanet Research Infrastructure

IDIS

SEVENTH FRAMEWORK PROGRAMME

Web Access Addresses:

Technical node for support and management aspects:

http://www.idis.europlanet-ri.eu/

Planetary Surfaces and Interiors node:

http://www.idis-interiors.europlanet-ri.eu/

Plasma node:

http://www.idis-plasma.europlanet-ri.eu/

Atmospheres node:

http://www.idis-atmos.europlanet-ri.eu/

Small Bodies and Dust node:

http://www.idis-sbdn.europlanet-ri.eu/

Planetary Dynamics and Extraterrestrial Matter node:

http://www.idis-dyn.europlanet-ri.eu/