

Online tools for planetary sciences



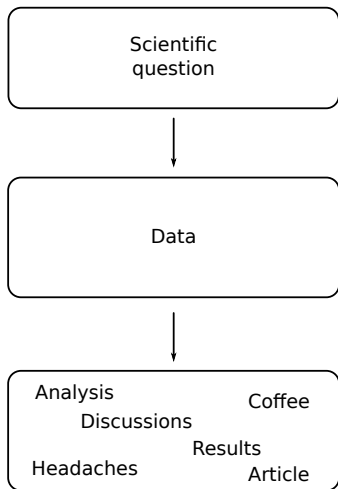
rocks

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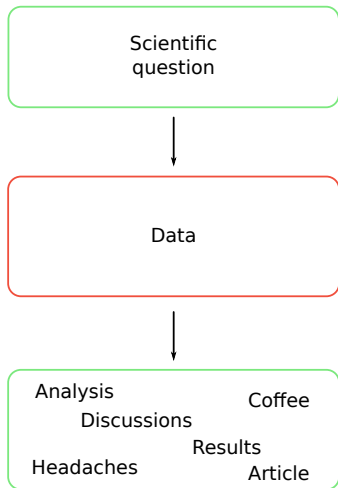
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A typical research project



A typical research project



Repetitive (and tedious) tasks!

- Planning and conduction of observations
 - Observations already exist?
 - Target/sample available? visible?
- Gathering ancillary data for the analysis
 - Complementary information diameter, fall/find, ...
 - Context for research another population
- Repetitive low-level analysis
 - Spectral classification
 - Cross-matches & merges

Shared resources save community time

- Tedious task? Share the load!
 - Many agencies have the mission to support the community
 - Target/sample available? visible?
- Gathering ancillary data for the analysis
 - Complementary information diameter, fall/find, ...
 - Context for research another population
- Validation
 - Spectral classification
 - Cross-matches & merges

Pointing a telescope

Example

Where do I point the telescope from the name of a target?

Pointing a telescope

Example

Where do I point the telescope from the name of a target?

Answer: CDS, IMCCE Miriade, JPL SSD, MPC, Lowell AstEph



Visibility of targets

Example

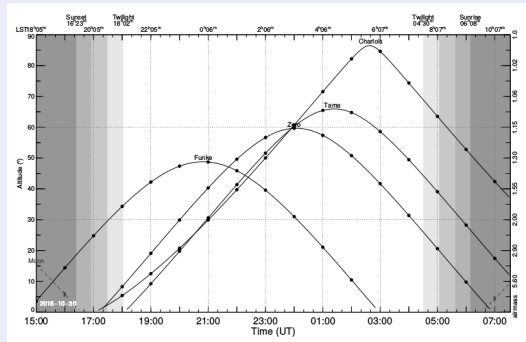
Can I observe asteroids Ceres, Pallas, 4321 tonight? And M31?

Visibility of targets

Example

Can I observe asteroids Ceres, Pallas, 4321 tonight? And M31?

Answer: IMCCE ViSiON, Lowell AstObs



Accessing data

Example

What is the taxonomy of Vernazza? the diameter of Groussin?

Accessing data

Example

What is the taxonomy of Vernazza? the diameter of Groussin?

Answer: IMCCE SsODNet, JPL sbdb, OCA MP3C, Lowell AstInfo, SiMDA

(20607) Vernazza		COPY LINK
Type: Asteroid		
Class: MB>Outer		
Parent body: Sun		
Dynamical system: Sun		EXPORT
Dynamical parameters		^
Physical parameters		v
Absolute magnitude	$H = 13.03^{+0.2}_{-0.2} \text{ mag}$	
Diameter	$D = 15.049^{+0.24}_{-0.24} \text{ km}$	
Albedo	$p_V = 0.0479^{+0.0089}_{-0.0089}$	
Taxonomy	Class	= B
	Complex	= B
	Wavelength range	= VIS
	Scheme	= Bus-DeMeo

```
$ rocks diameters groussin
(16280) Groussin
+-----+-----+-----+-----+-----+
| | diameter | err_diameter_up | err_diameter_down | method | shortbib |
+-----+-----+-----+-----+-----+
| 1 | 3.081 | 0.105 | -0.105 | NEATM | Masiero+2011 |
| 2 | 3.19 | 0.84 | -0.84 | NEATM | Masiero+2012 |
+-----+-----+-----+-----+-----+
```