



ALADIN

Extension d'Aladin pour l'affichage de données planétaires

Journée ESEP – Novembre 2017 - Paris-Meudon

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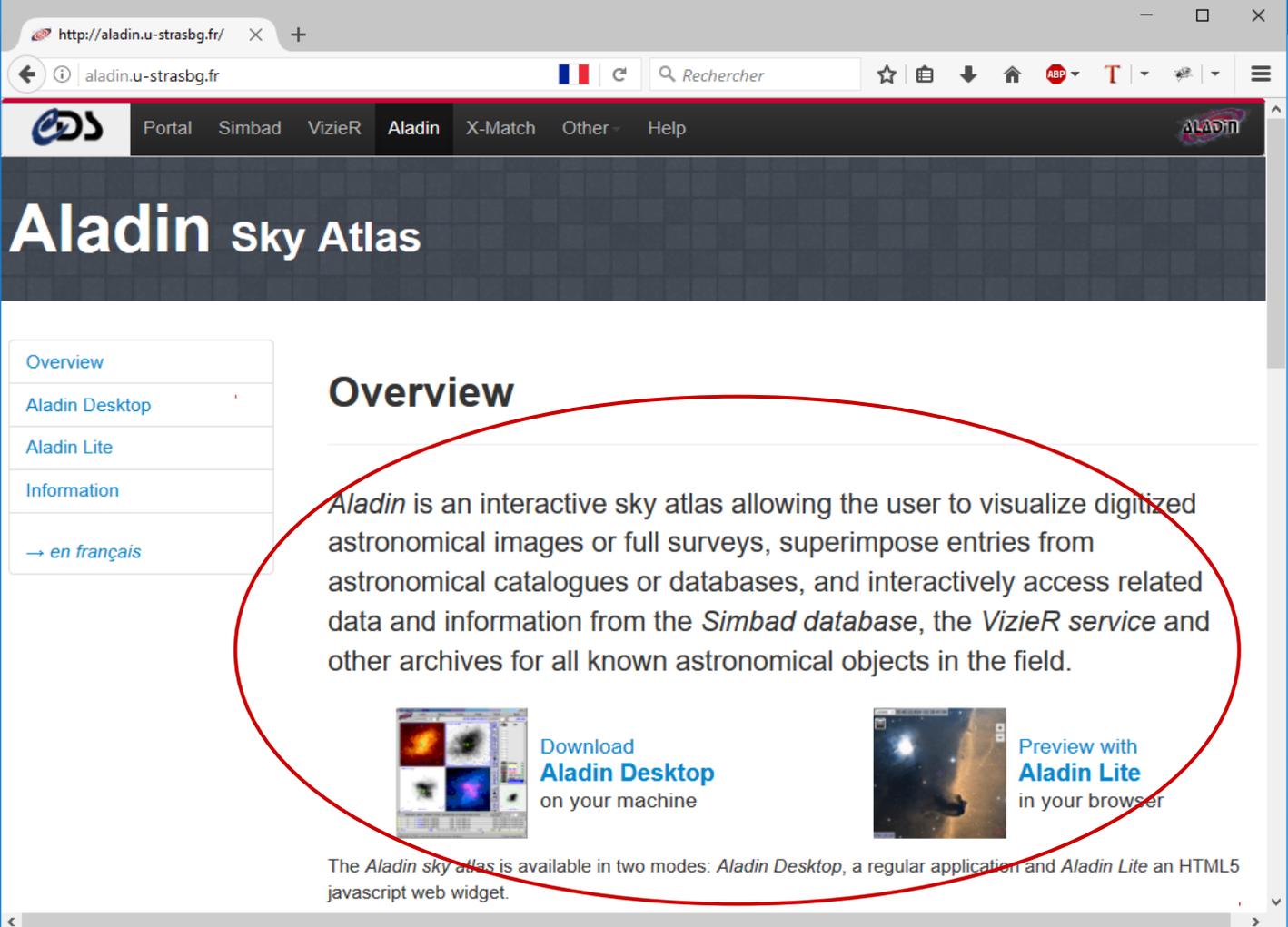


□ What's the plan ?

- 1) Aladin Sky Atlas ? What it is ?
- 2) Key figures on Aladin Desktop
- 3) Aladin v10 in 3 words
- 4) Planets in Aladin
- 5) Demonstration



□ What Aladin is ?



The screenshot shows the Aladin sky Atlas website. The browser address bar displays <http://aladin.u-strasbg.fr/>. The navigation menu includes Portal, Simbad, VizieR, Aladin, X-Match, Other, and Help. The main heading is "Aladin sky Atlas". A sidebar on the left contains links for Overview, Aladin Desktop, Aladin Lite, Information, and a link to "en français". The main content area is titled "Overview" and contains the following text:

Aladin is an interactive sky atlas allowing the user to visualize digitized astronomical images or full surveys, superimpose entries from astronomical catalogues or databases, and interactively access related data and information from the *Simbad database*, the *VizieR service* and other archives for all known astronomical objects in the field.

Below the text are two buttons: "Download Aladin Desktop on your machine" and "Preview with Aladin Lite in your browser". At the bottom, a note states: "The *Aladin sky atlas* is available in two modes: *Aladin Desktop*, a regular application and *Aladin Lite* an HTML5 javascript web widget."

□ Key dates

1995

CDS

Proto XWindows (C++)

2000

All
VO

Applet (java)

2003

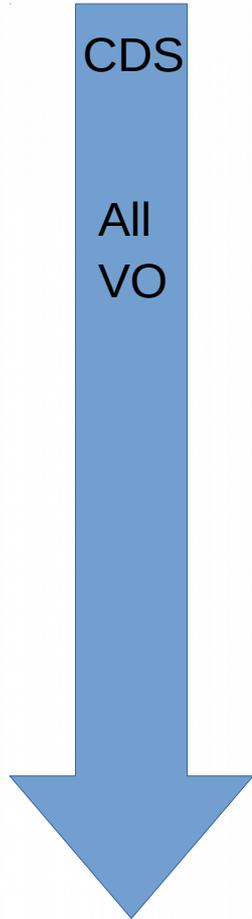
Standalone/Applet (java)

2013

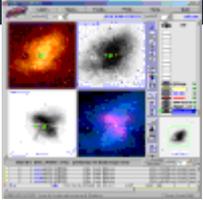
2017

Aladin Lite (javascript)

Aladin v10 (java)



□ Aladin Sky Atlas, one in two!



Aladin Desktop

- high level features **desktop**
- access images, catalogs, footprints
- **full range of functionalities**
- interoperable with VO tools
 - Aladin is a VO portal
 - used to validate most standards
- Used for observation preparation tools (APT, GuideCam)
- going all hierarchical now! (HiPS)



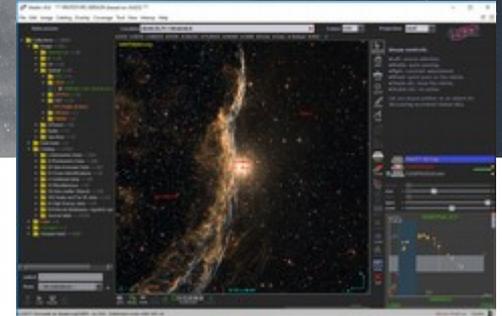
Aladin Lite

- **Web** HiPS visualizer
- preview mode
- embed in any webpage
- **easy appropriation**
- **highly used in wide range of sites/services**
- basic functions... but more and more!

□ Key figures on Aladin Desktop

- 1) **Code: 5MB jar**, 250k source lines, 500 classes
 - only based on CDS & JDK regular libraries (+ HEALPix lib)
 - 2 main developers (P. Fernique, T. Boch)
 - + dozen of contributors
- 2) **Usage: 1k sessions per day** for 150k http queries (HiPS tiles queries included)
- 3) **Language: 85% en**, 10% fr, 2% de, 1% it, 1% es ..
- 4) **Java: 75% 1.8**, 12% 1.7, 12% 1.6, 0.2% 1.5, ...

□ Release v10



1) Desktop only

=> no longer applet support, full screen

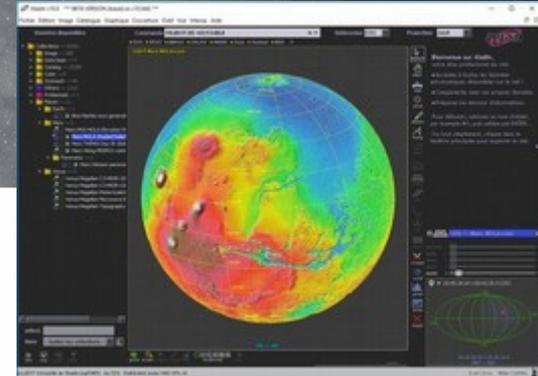
2) Integration++:

- IVOA protocols: SIAv2, TAP, Datalink/SODA, VO registry (via RegTAP), VOSpace, MOC, HiPS
- CDS advanced services: MocServer, Xmatch, query by MOC

3) New look & feel

=> modernisation, simplification

□ Release v10 - **beta**



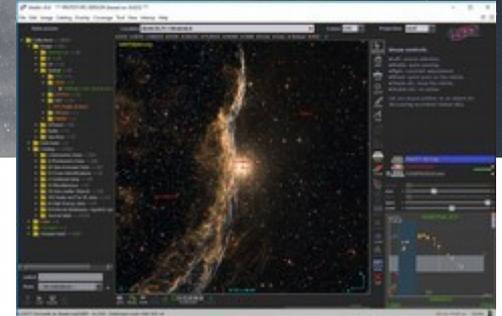
1) **Planet** (partial) support

=> HiPS planet maps (Earth, Mars, Venus, ...)

2) **EPNcore** compatible

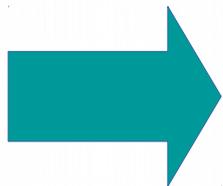
- Table a la VO for planet data (martian craters...)

□ The live demo...



New use cases based on:

- *Fast browsing/filtering on all VO data collections*
- *Query by regions*
- *Query by criteria*
- *Xmatch with any tables*



<http://aladin.u-strasbg.fr/java/AladinBeta.jnlp>

Live demo...



*Please do not touch your laptop for
the next 15 minutes...thanks*



Load Mars HiPS => MOLA maps

Aladin v10.0 *** BETA VERSION (based on v10.044) ***

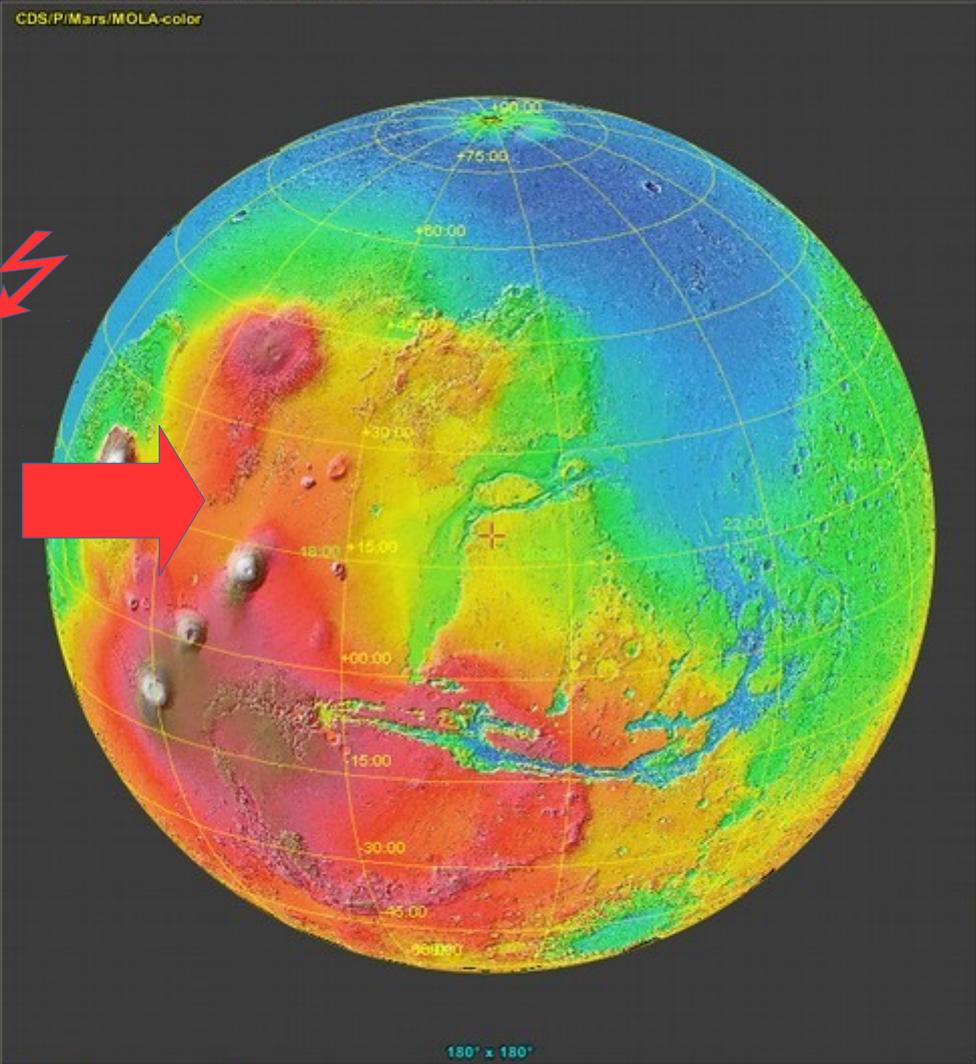
Fichier Edition Image Catalogue Graphique Couverture Outil Vue Interop Aide

Données disponibles Commande 19:20:17.95 +03:13:08.8 Référentiel ICRS Projection Altoff

▼ Collections → 20261

- Image → 288
- Data base → 4
- Catalog → 18590
- Cube → 8
- Outreach → 44
- Others → 1315
- Problematic → 1
- Planet → 11
 - Earth → 1
 - Blue Marble next generati
 - Mars → 5
 - Mars MGS MOLA Elevation M
 - Mars MOLA Shaded Relief**
 - Mars THEMIS Day IR Glob
 - Mars Viking-MDIM21-color
 - Panorama → 1
 - Mars Stimson panorar
 - Venus → 5
 - Venus Magellan C3-MDIR-20
 - Venus Magellan C3-MDIR-Cir
 - Venus Magellan MeterScaleS
 - Venus Magellan Microwave-E
 - Venus Magellan Topography

CDS/P/Mars/MOLA-color



select
dépl.
dist
phot
dessin
maiq
moc
spect
filtre
coup
xy
nb
cont
pixel
prop
suppr

Bienvenue sur Aladin, votre atlas professionnel du ciel.

- Accédez à toutes les données astronomiques disponibles sur le net !
- Comparez-les avec vos propres données.
- Préparez vos missions d'observations.

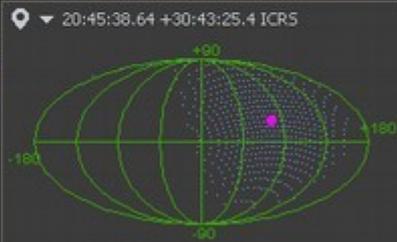
Pour débiter, saisissez un nom d'objet, par exemple M1, puis validez par ENTER...

Ou tout simplement, cliquez dans la fenêtre principale pour explorer le ciel.

☑ CDS / P / Mars / MOLA-color

époque -
taille -
dens. -
opac. -
zoom -

20:45:38.64 +30:43:25.4 ICRS



19:18:18.32 +19:15:14.5
180° x 180°

180° x 180°

réd. vue scab filtre grille exam. ligne nord. ndr multivues unit.