

Improving CDS Webpages Accessibility



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Concerns... providing the best experience to (all) the users was always our aim when developing tools and services.

Web accessibility ?

- Web accessibility means designing websites, applications, and digital content so that **everyone**, including people with **disabilities**, can perceive, understand, navigate, and interact with them. It ensures equal access to information and functionality for users with Visual impairments (blindness, low vision, color blindness), Hearing impairments, Motor or mobility limitations or Cognitive or learning disabilities

Accessibilty 4 principles

WCAG (Web Content Accessibility Guidelines) Principles (P.O.U.R.)

- Perceivable** – information must be presented in ways users can perceive (e.g., alt text for images, subtitles).
- Operable** – interface elements must be usable via keyboard, voice, or assistive technologies.
- Understandable** – content and navigation must be clear and predictable.
- Robust** – content must work with a variety of user agents and assistive tools.

Why Accessibilty Matters

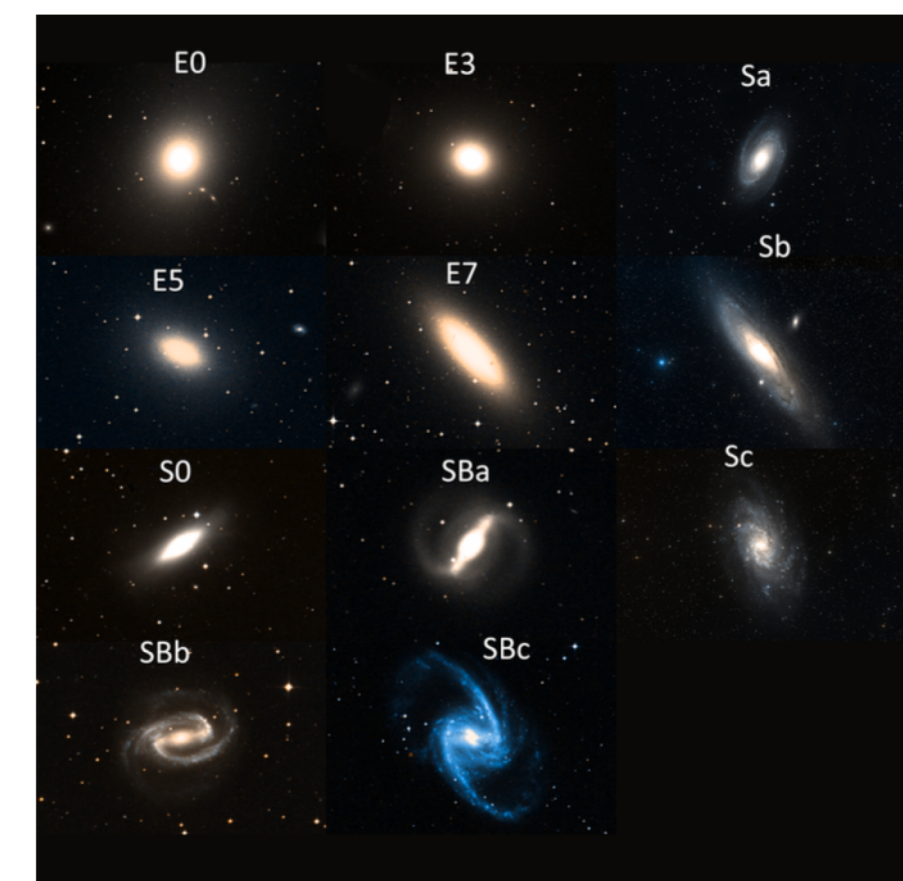
- Ethical and social reason:** promotes **digital inclusion**.
- Legal requirement:** compliance with standards such as
 - WCAG (Web Content Accessibility Guidelines)**,
 - European Accessibility Act (2025)**,
 - Référentiel général d'amélioration de l'accessibilité (RGAA)** in France.
- Technical benefit:** improves SEO, UX, and mobile compatibility.
- Scientific / institutional relevance:** ensures **open science** and **public data reuse** by all.

Practical actions

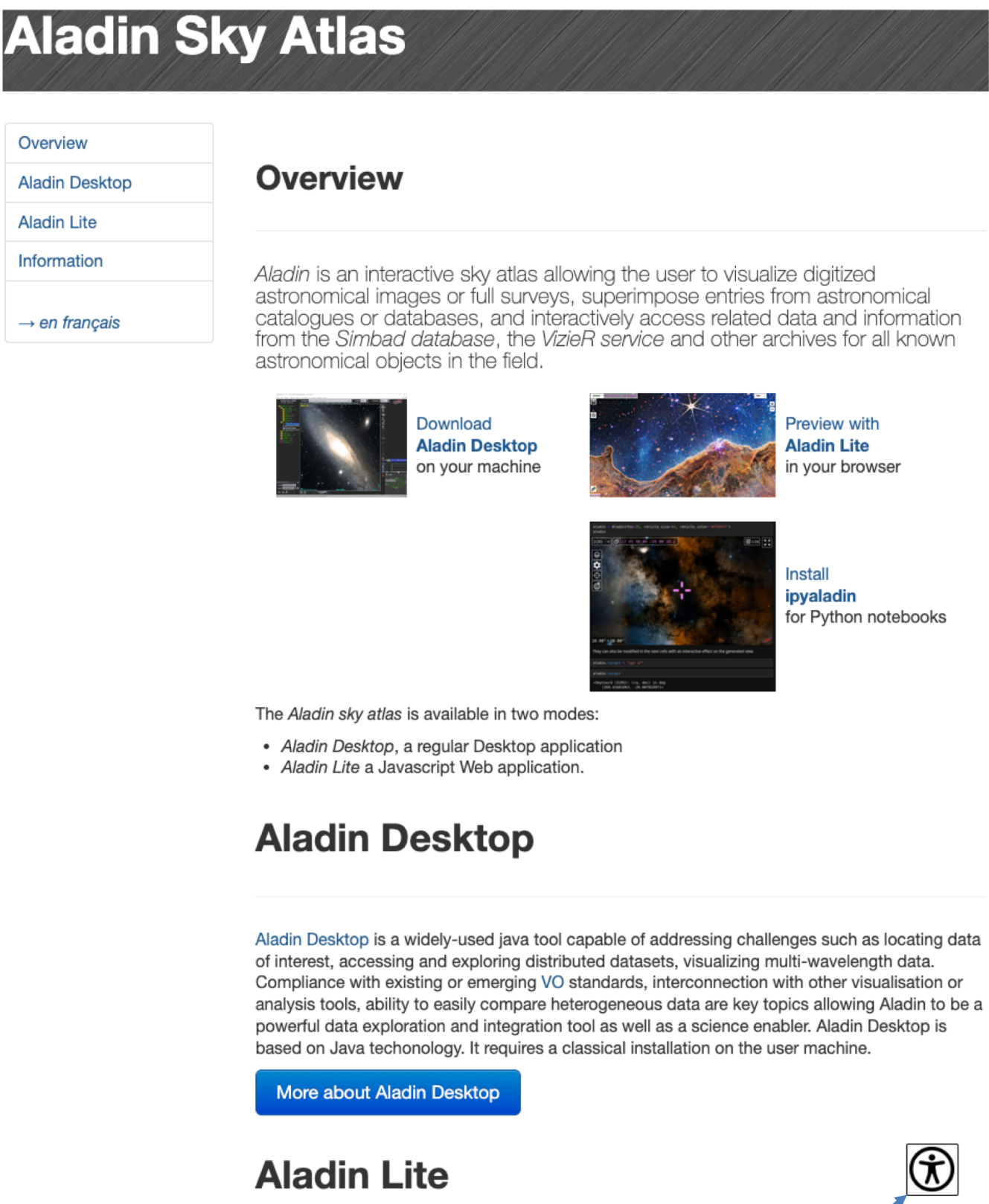
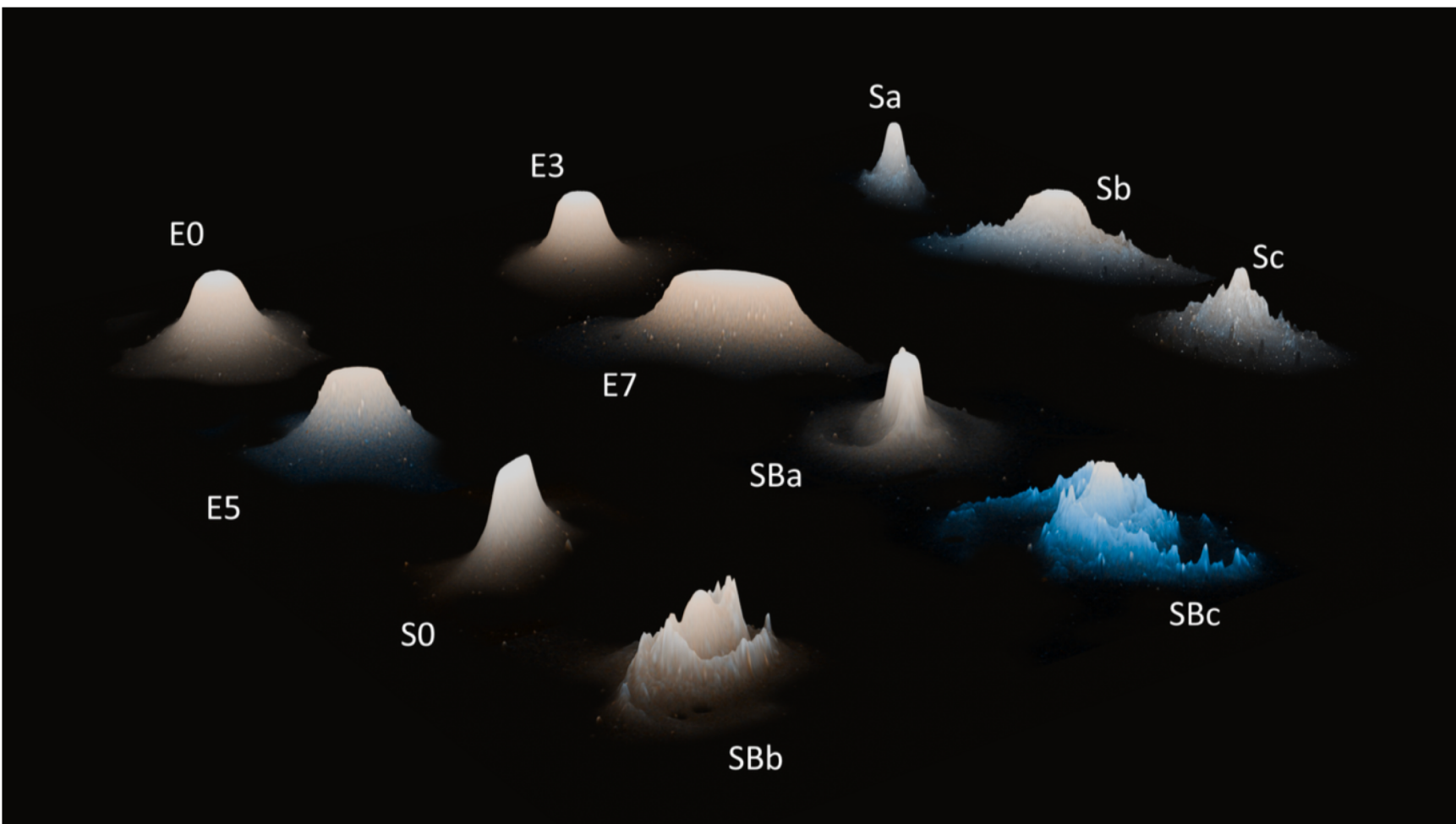
- Validate** using tools, e.g. W3C Web Accessibility initiative tools list
- Provide **alternative text** for images and icons.
- Ensure **color contrast** (minimum ratio 4.5:1).
- Enable **keyboard navigation** for all interactive elements.
- Use **ARIA labels** and semantic HTML.
- Add **captions and transcripts** for videos.
- Test sites with **screen readers** (JAWS, VoiceOver).

Actions at at CDS

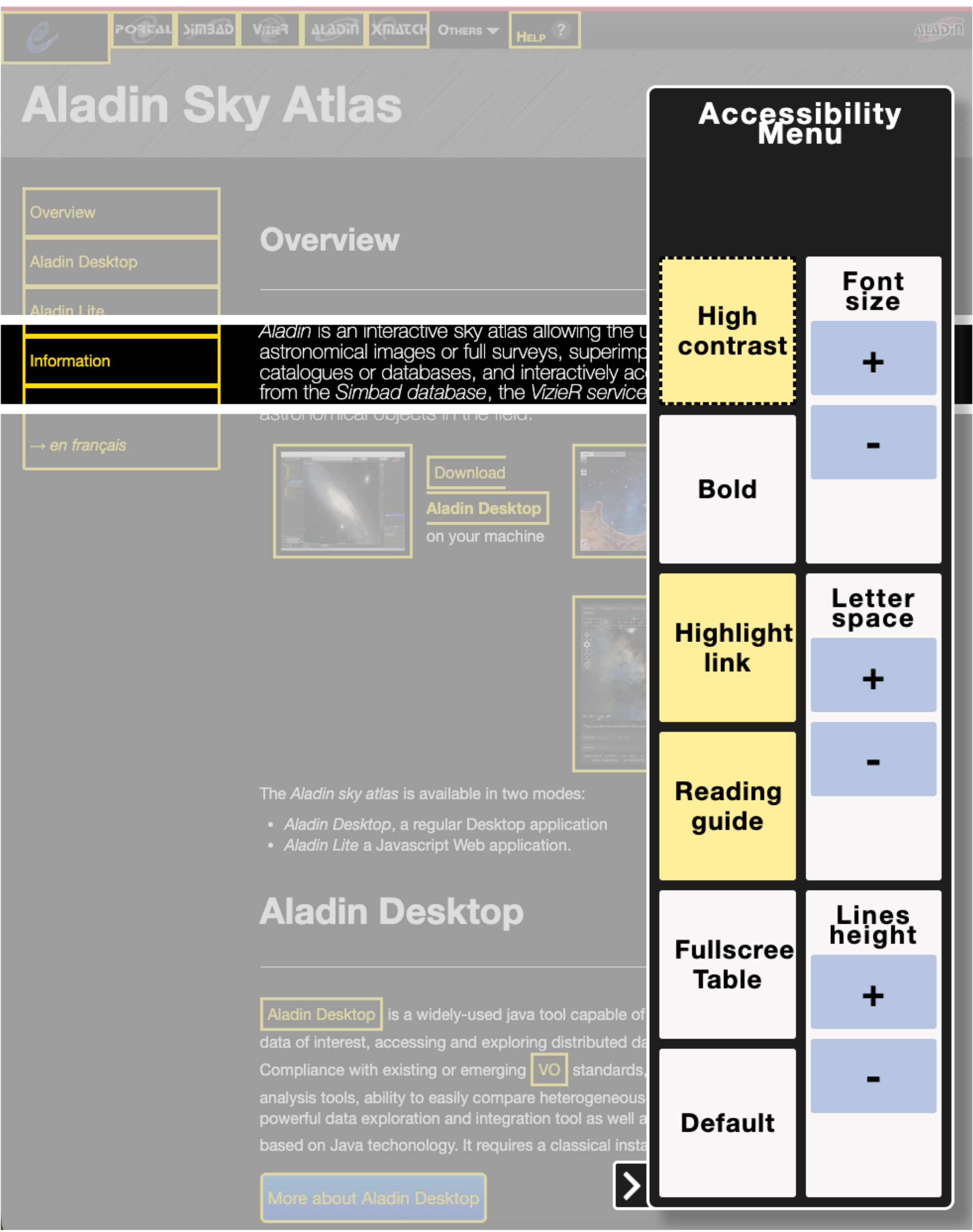
- Compliance testing through Accessibility Evaluation tools*
- taking into account rules from guides like ARIA (Accessible Rich Internet Applications).*
- Dedicated library available for all the CDS Webpages*
- tests around sonification and 3D modelisation*



3D modelisation of galaxies where height is linked to the pixels brightness



Example : A dedicated icon on the Web pages to open the accessibility menu to highlight, enlarge etc.



Next steps and Perspectives

Implementation in all the webpages, new sonification features, 3D printing, etc.

Even a small step can improve the user experience

