

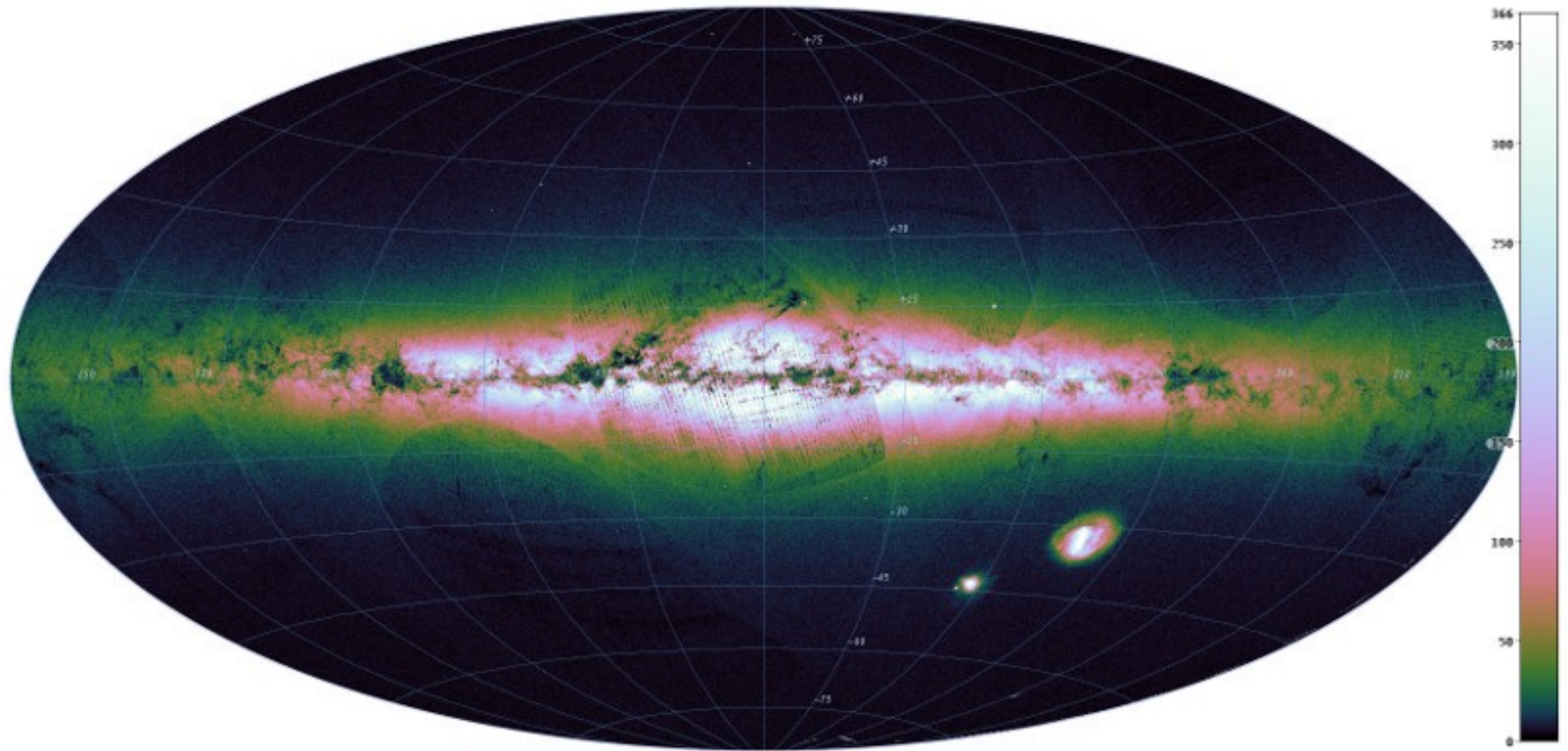
4 π immersive visualization of HiPS images

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HiPS surveys

- On one hand : many all-sky image surveys



Immersive tools

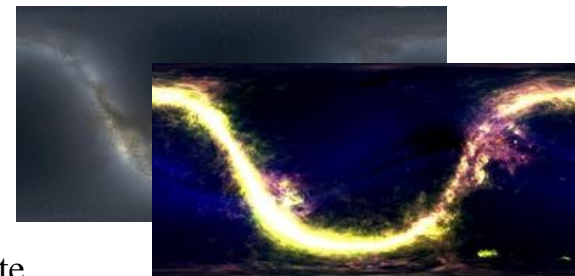
- On the other hand : Oculus rift, Google cardboard, ... + PhotoSpheres (G.PANO)



The idea : immersive HiPS

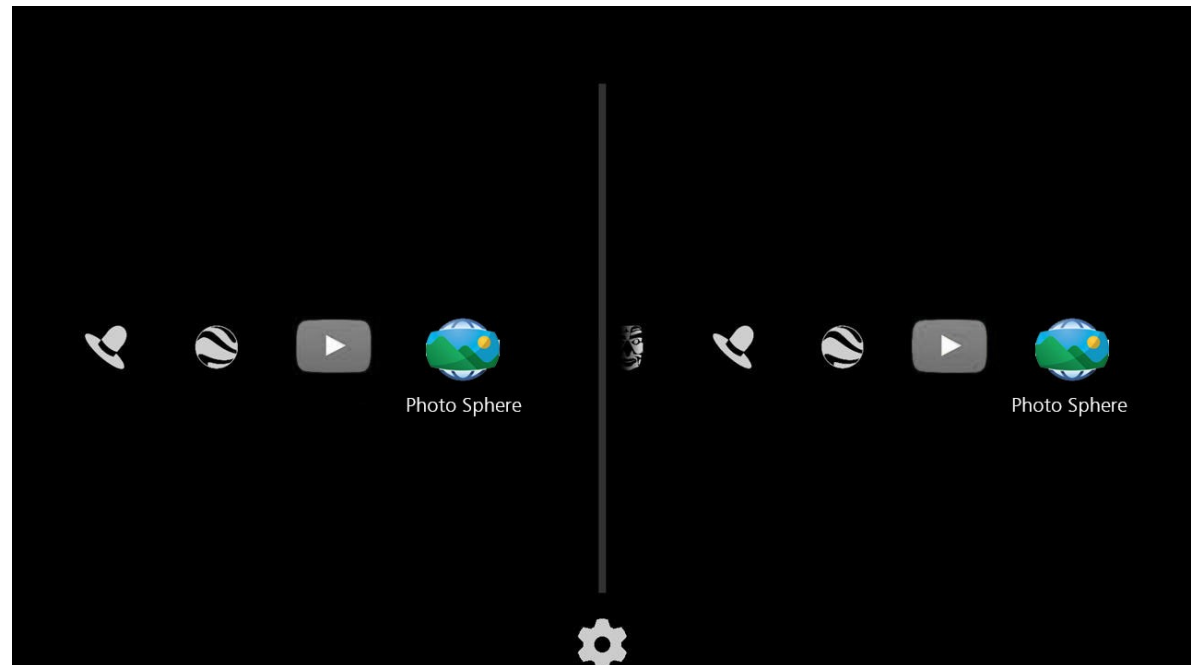
- View HiPS images in Google Cardboard ?
- Recipe 1 (preparation) :
 - Create equirectangular (x=RA ; y=DEC) JPG image from HiPS (e.g. level 3)
 - Embed proper XMP metadata
- Recipe 2 (install) :
 - Name file PANO_myHiPS.jpg
 - Place in DCIM/Camera on smartphone

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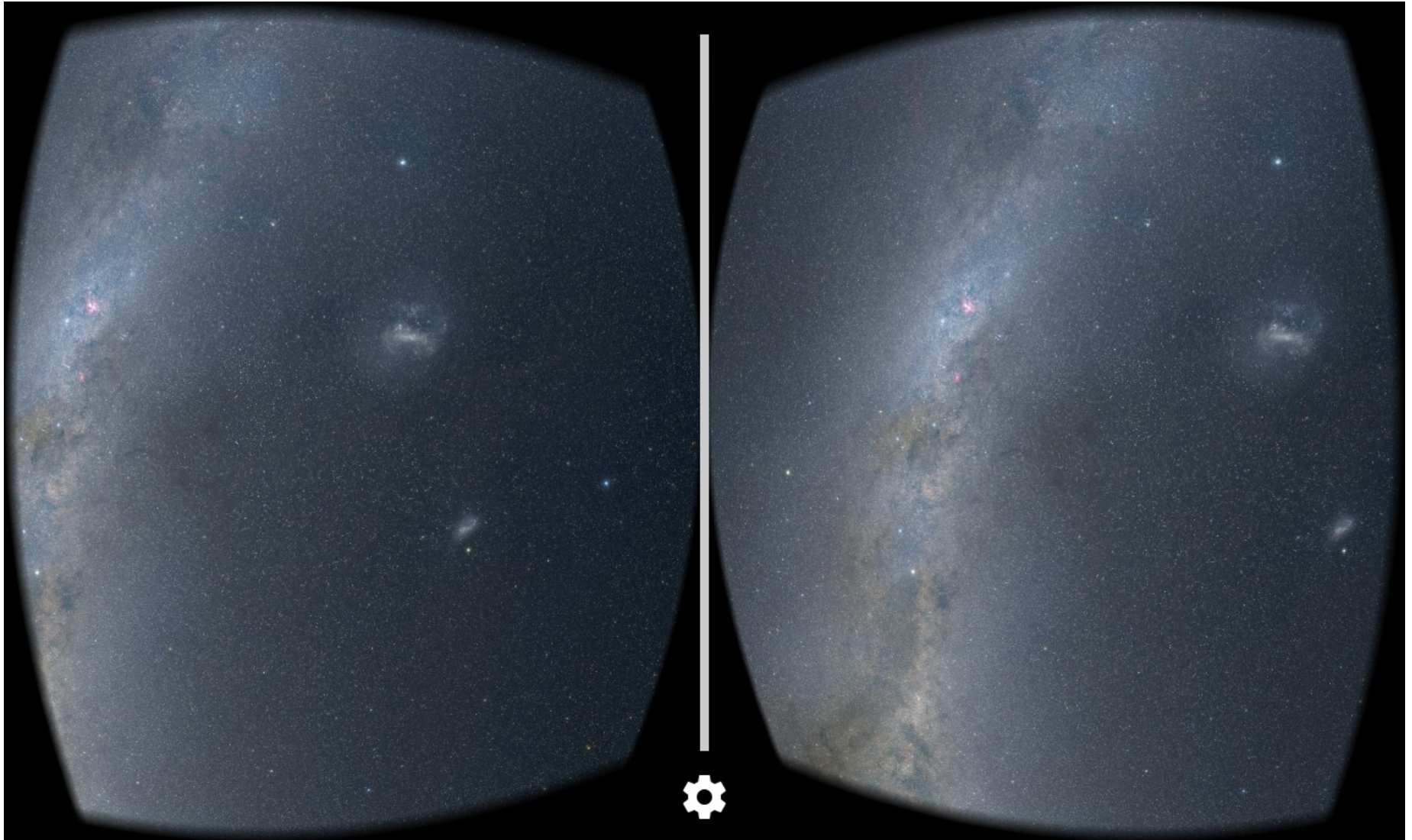


In action

- Use Cardboard Android app
 - Cardboard Demos
 - PhotoSpheres



Mellinger survey



Constellations



Try it !

- <http://aladin.u-strasbg.fr/hips/cardboard-photospheres/>



[Instructions](#)

[Download](#)

Instructions

1. Install Cardboard application on your smartphone from [Google Play](#) for Android or from [the App Store](#) for iPhone devices.
2. Download some photospheres files below on your smartphone.
3. Launch Cardboard application and open one of the downloaded photospheres to visualize it.

Download

Following photospheres have been created from the corresponding HIPs.



Mellinger Color

Credit: Axel Mellinger.

[Download file](#)



IRIS Color

[Download file](#)



Fermi Color

Credit: HEASARC/Skyview.

[Download file](#)



Constellations

Credit: AstroArts Inc.

[Download file](#)



AKARI FIS Color

Credit: ISAS/JAXA.

[Download file](#)

Perspectives

- Outreach with
 - real all-sky images
 - density maps
 - art...
- Possible improvements
 - Dedicated app, with proper sky alignment ?
 - Use GeoLoc and time