Consolidate the HiPS network

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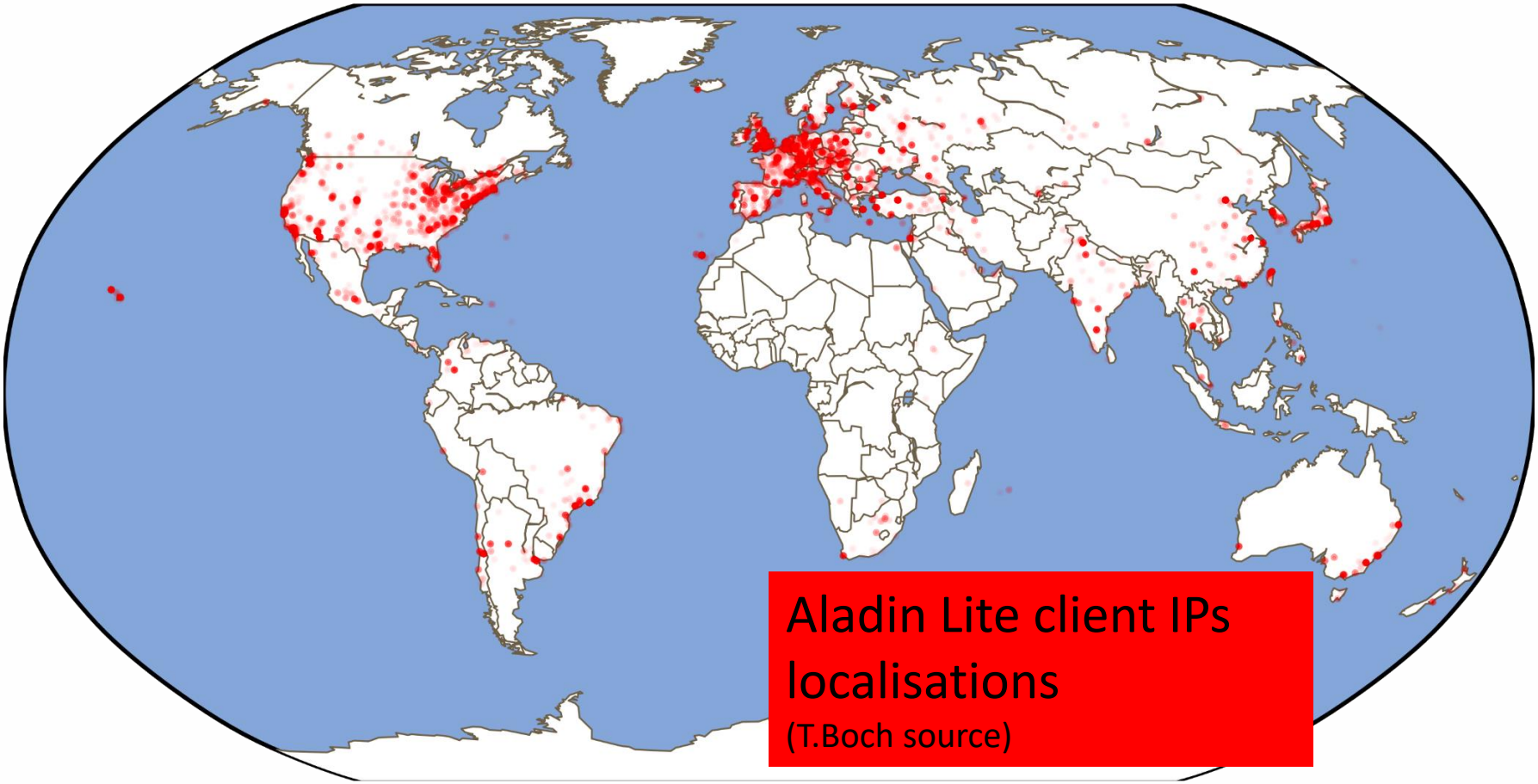
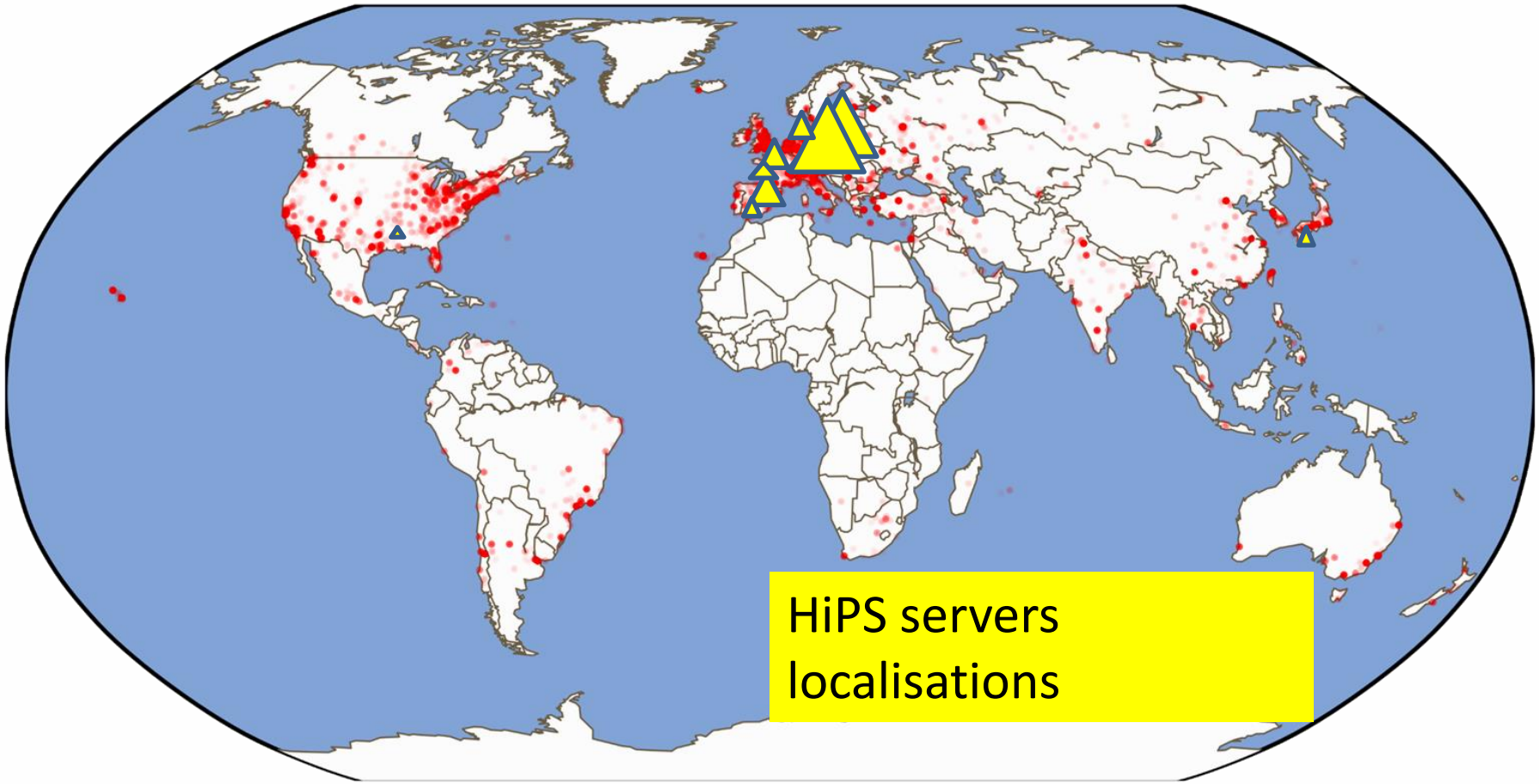
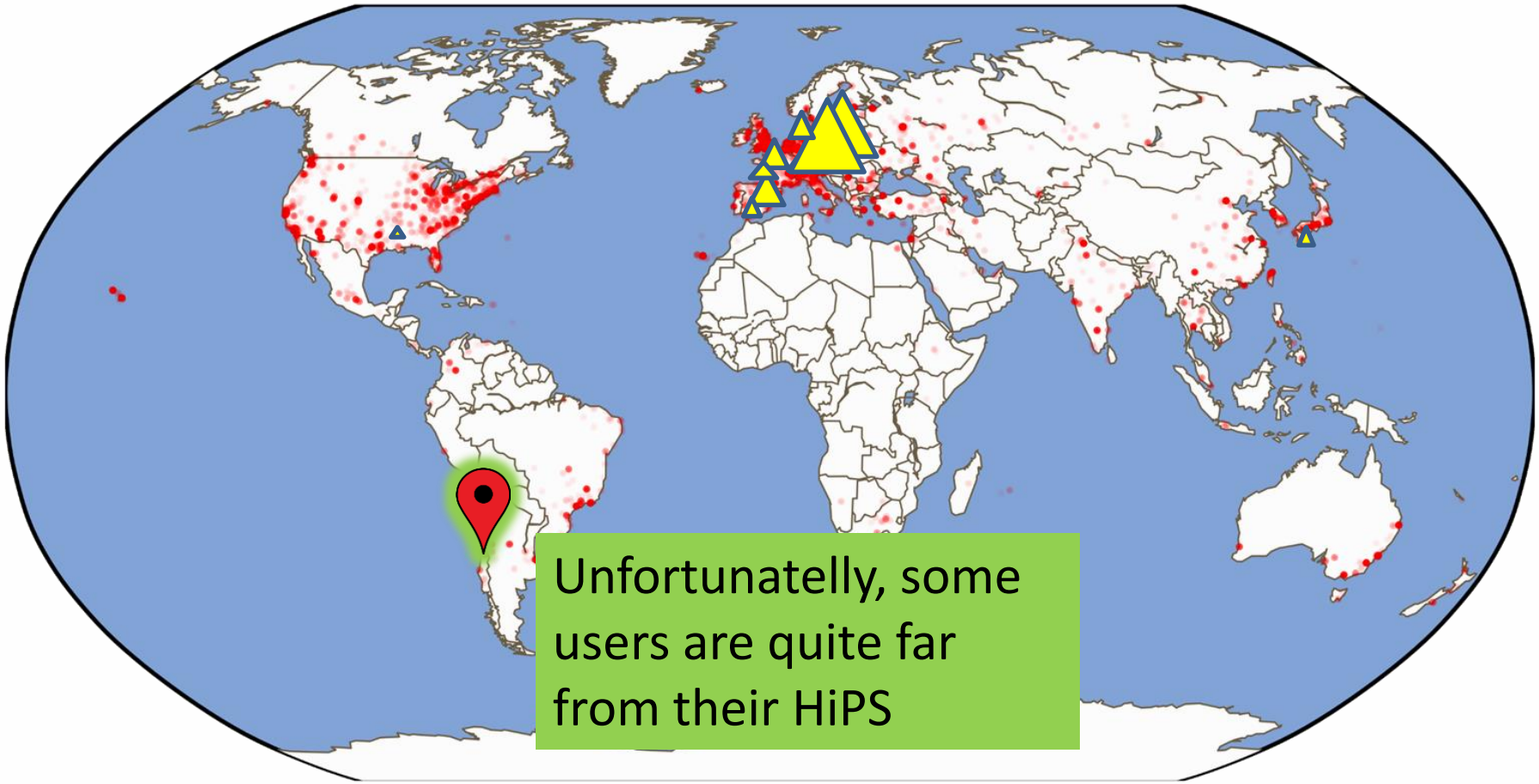
They are HiPS clients…



… and they are HiPS servers



Where are you?



HiPS key figures…

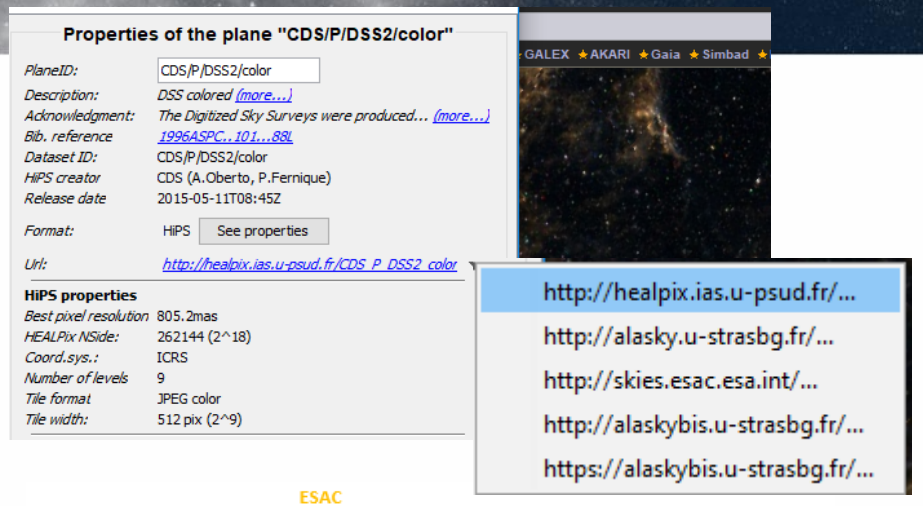
- **400** HiPS for **150TB** of data

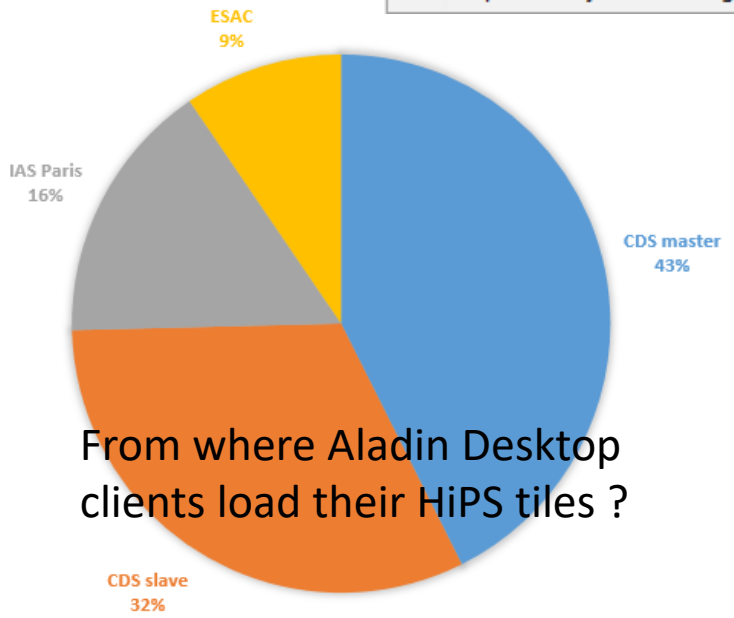
- But among them, **10** HiPS (colored=compressed) are heavely used (representing less than **3TB**)

  => **DSS**, SDSS, 2MASS, Spitzer, Herschel, PLANCK, …

From where are you loading your HiPS ?

- Clients may manually or automatically choose a HiPS server according to the HiPS they want and the number of mirror sites for this HiPS
- **Presently ~75%** of the HiPS requests arrived on CDS HiPS servers at Strasbourg/France
  (rough approximation based on Aladin Desktop logs)





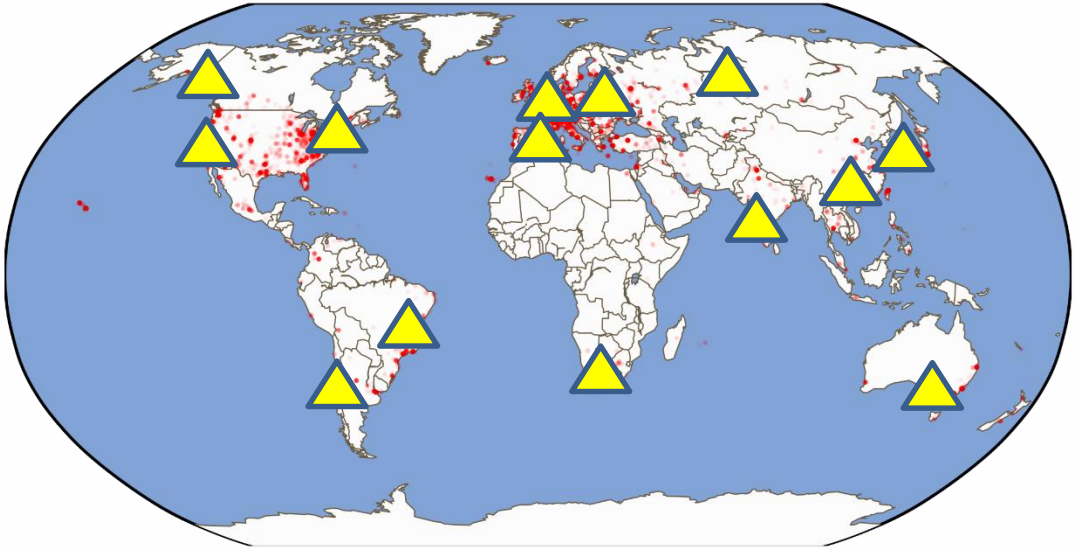
What's the challenge ?

- **150 000** tiles/day displayed by Aladin Lite (& derived tools) + **150 000** tiles/day by Aladin Desktop
- Thanks to user cache, only half of them are really requested, and only ~**30GB/day** are effectively downloaded (upper estimation)

- Not a problem of server load, but more a need to reduce the **response time between the client and the closest HiPS server**

Consolidate the HiPS network

- In a perfect HiPS word, we would have:
  - one (or two) HiPS nodes per continent
  - with a copy of the 10 more used HiPS



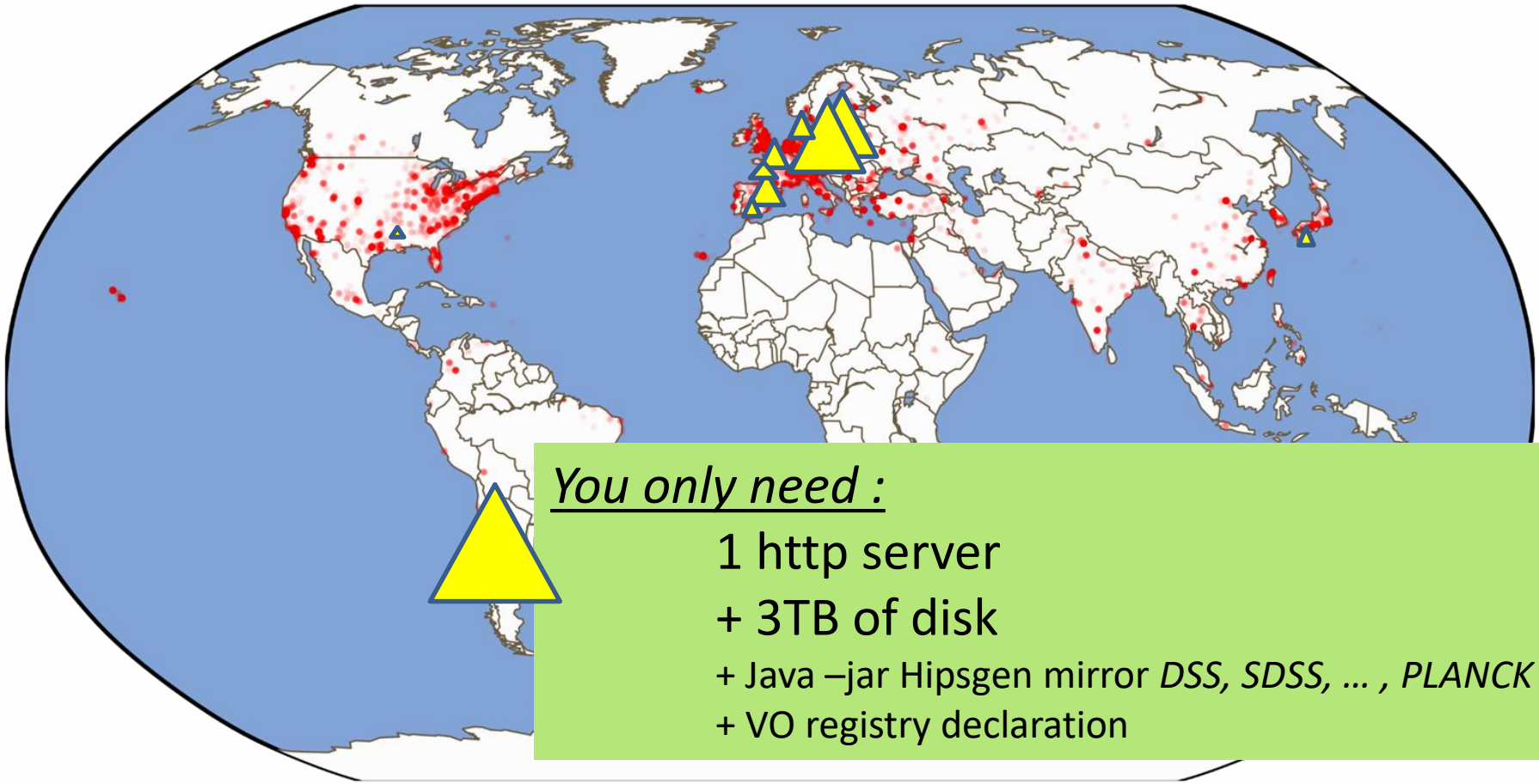
What is a HiPS node ?

Nothing more:

- than an **http server** (apache for instance)
- Distributing collections of **regular files** (HiPS tiles)

(no data base, no CGI script,
and even… no IVOA standards to read & understand, …)

Become a HiPS mirror nodes…



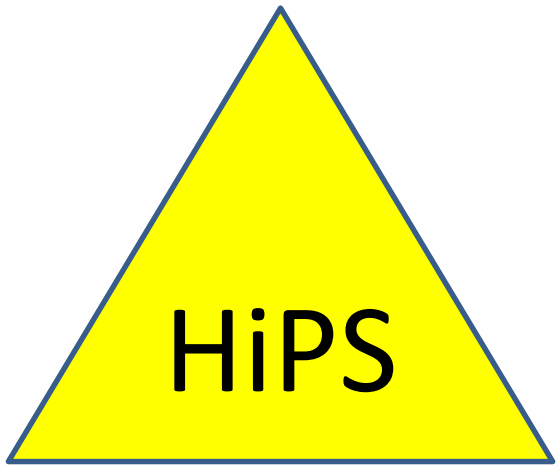
You only need :

1 http server

+ 3TB of disk

+ Java –jar Hipsgen mirror *DSS, SDSS, … , PLANCK*

+ VO registry declaration



you can…