

Barriers for VO Uptake

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We've got a problem

- Dramatically slow progress in the uptake
- Only VO experts can break through the barriers

How do we know?

- Lack of the VO science
 - My 2 papers are again in the IVOA Newsletter
 - 0.5% of research studies use VO
- I & I talk at ADASS in Boston

Dreams at the dawn of the VO

1. Virtual telescope: increase re-use of the observations
2. Comprehensive data and references about any astronomical object

I. Virtual telescope

- ESO Archive, probably the biggest data collection in the world:
 - No cutouts, no list of objects...
 - No proper VO discovery
 - Mess in FITS headers, metadata and calibrations
 - 2 years to update observation log from 2003 to 2011 in Vizier

Not VO responsibility?

- Whichever responsibility, users lose
- *“The IVOA focuses on the development of standards and encourages their implementation for the benefit of the worldwide astronomical community”*

2. Data on any object

- I was asked to get optical SEDs of persistent X-ray binaries (50 very well known objects like Sco X-1)
- It took 10 hours of manual digging in 100 papers

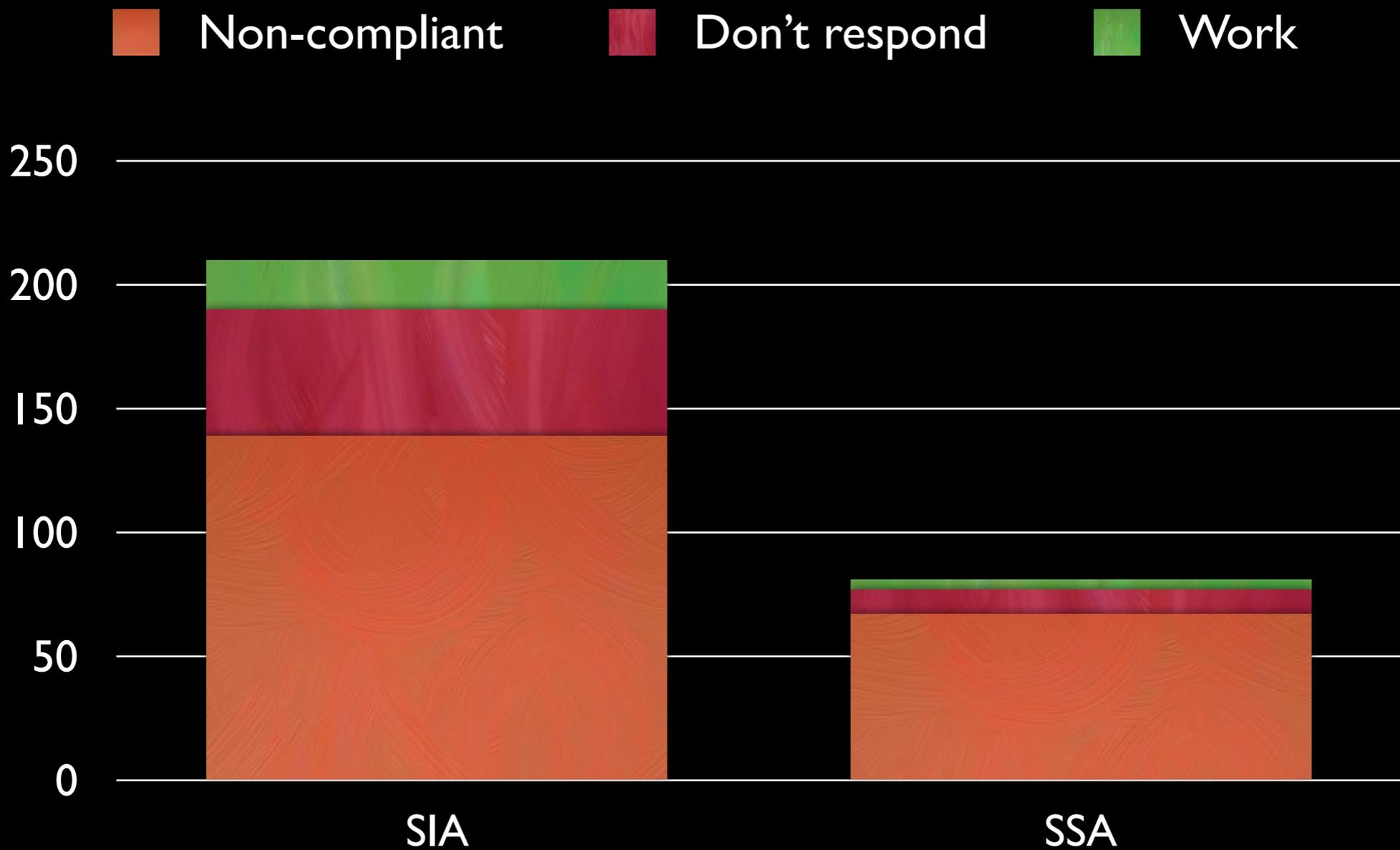
No manpower?

- Can't believe, it's only 20 "object" papers a day which community has to process
- 1 person spends 15 mins every day to build successful comprehensive database of exoplanets

Footprints

- There's specification, but nobody uses it
- No common tools display, no footprints of recent surveys
 - Real life workaround: plot every 3rd object from SDSS DR8
- Chandra exports FOVs in STC-S, but Aladin does not display that

IVOA services this morning



IVOA services this morning

- Does this mean standards are bad?
- No, that means few people care...
- ...because few people use them.

Devil is in the details

- Overall situation can be good, but details of real life usage are exhaustive
- First technical workaround makes it impossible to continue for a researcher

The devil is in the details

- Non-standard TCP ports
- `java -Xmx1024m -jar Aladin.jar`
- Proxy in browser but forgot proxy in Java
- WebSampConnector fails in Firefox 3.x and hangs Safari

The devil is in the details

- Slow acceptance of important standards (e.g. 3 years for TAP), major players implement slowly
- Multicone is not standard at all
- Conesearch to restricted data is “by phone call” only
- Public surveys have no public release timescale

Big achievements

- Userspace VO locomotives, Aladin and TOPCAT
- Excellent HLA and few other archives
- Good set of standards works
- Raising discussion in maillists for the general public

Identifying the barriers

They are inside us

Metrics of the VO success

- Do they exist?
- Let's define them
- Monitor regularly and act accordingly
- Build wider community of concerned researchers and listen to it

Thank you for
your attention