IVOA Hawaii, 26-28 September 2013

SkyTouch, a remote control experience of Aladin using SAMP

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Apps session 28 September 2013











Motivation & questions

- Following our previous experiments with Smartphones / Tablets (SkySurveys, SkyObjects, ..), the idea was to study the possible interaction between this kind of device and a desktop application like Aladin
- Questions :
 - Which kind of link : wifi, bluetooth, intermediate proxy, ...
 - Which protocol : adhoc ?, (why not) SAMP ?



First tests using SAMP

- First tests were made localy with samp.js and node.js
- JSAMP hub : the security is well managed and it was not possible to make a connexion between Aladin and an remote device
 - Mark Taylor has generated an alternative version of the JSAMP hub allowing other connexions than from the localhost



Main functionalities possible with the modified hub

- SkyDisplay
- Research field
- Trackpad
- Zoom
- Multiview management
- Grid on/off
- Reticule on/off
- Database access, Simbad, NED, ...
- Color management
- Accuration management
- Own button through a shortcut definition function



Some views (it's a prototype)





Features of the next version

- Trackpad automatic calibration after a search
- Aladin screen copy
 - Storage in the device picture album
- Add of new databases
- Better control of the colorations
- Local storage to keep into memory user informations
- Data array loading in the device



For which devices ?

- The application was developped in HTML5 / Javascript / CSS3 (Hammer.js is used for the multitouch gesture), and converted through PhoneGap
 Cross plateform tests were only made on iOS and
 - Cross-plateform tests were only made on iOS and android



Demo

- The interaction between the 2 devices depends on the network
- A demo was made during the CoSADIE Techforum this month
- A demo will be possible at the ADASS demo booth



Conslusion

- Fun experiment
- Realistic use cases ? Education ?