SUI design meeting notes 2015-03-06

Date

06 Mar 2015

Attendees

- Unknown User (xiuqin)
- Trey Roby
- Loi Ly
- Gregory Dubois-Felsmann
- Unknown User (ciardi)

Goals

- Go through one use case and identify the functions needed for it

Discussion items

- Search the images and object tables (source tables) at the same time
- Meta data for deep coadds are useful at some situations
- From one deep coadd, we should be able to get all the visit images that go into making the coadd
- Try not to close any display view/tab/window because there is something to add to the display, Ciardi would rather close it himself, side by side view of multiple data is highly desired
- Context background image
  - Images to be used (LSST, 2MASS, WISE, ...), consider WWT capabilities as one option, Healpix all sky images from other center?
  - Context background image to be three-color image for better structure information
  - LSST Chi-squared monochrome coadded images for 6 bands, good to see the structure of the sky in 6 bands (could be used to background image)
- LSST coverage/depth map
- interaction between the BG image and the object/source table
  - click on the image, (w/o the sources overlaid), highlight the object (if exists) ob the source table
- Time series
  - one object selected, get all the visit images cutouts for this point, get the cached ones first, then warn users that the other images will take XXX minutes/hours
    - could we know before hand from the source list that the corresponding image is on disk/tape?
    - organization of the images could affect the speed of getting those cutout
    - movie play, 250 - 1500 - 15000 single visit images for each filter
  - The stack of images should be stretched the same way, same algorithm and same range
  - FITS meta should have all the images we need to do the proper stretch over the stack of images
- Questions:
  - Calibrated visit images, what has been done to them?
  - Could we organize the images by region, to make the cutout fast?
  - Will LSST produce Chi-squared monochrome coadded images for 6 bands
  - Which table records the relationship between deep coadd image and the visit images that are used to make the deep coadd?
- Firefly open API for plugins (to support data analysis performed with LSST data)
  - Firefly can see all the available plugins to display for user to select from
  - user can plug in his own algorithm to do certain thing
  - user can publish his own plugin for other users: in git, in his own workspace,
  - a set of parameters for plugins
  - Firefly can detect the parameters needed for the plugin, and then try to supply ways to gather those data
- XY plot
  - needs error bars

Component	Function	parameters	Notes
context background image	load an image to be used as background image	position: the center position of the image size: size of the image, unit degree mission/project: that produced the image, like 2MASS, WISE, SDSS, LSST	• a list of missions will be supplied • SUI will supply default image according to size

Action items

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