



# CFHTLS DATA, VO STANDARDS and CDS tools

F.Bonnarel, JJ.Kavelaars,  
T.Boch, P.Fernique



F.Bonnarel Paris 06/11/2006  
French cfhtls users'meeting





# VO Standards for data Archives

- Data Models: spectrum, dataset characterisation
- DAL protocols have 3 phases: Query, Retrieval, Staging
  - SSA
  - SIA
  - Extensions, Generic Data Set discovery
- VO Registry



F.Bonnarel Paris 06/11/2006  
French cfhtls users' meeting



Others:



File



all VO



FOV

### VO discovery tool



Target..... M 87

Radius..... 14.0'

Servers  Images  Catalogs  Spectra

Waiting for 21 answers...

- SDSS
- Aladin
  - 2MASS
    - J
    - K
    - H
  - IRAS-IRIS
    - 60MU
    - 100MU
    - 12MU
    - 25MU
  - POSSI
    - E
    - O
  - POSSII
    - J
    - F
    - N
- Far Ultraviolet Spectroscopic Explorer (Simple Spectrum Data Access)
- Chandra X-Ray Observatory Data Archive
- Hubble Space Telescope Faint Object Spectrograph
- SIAP service for the INT wide-field survey
  - INT-WFC-I

Press it to stop the processing =>

Reset

Clear

History

SUBMIT

Close



# CADC Archive and VO access and standards



- SIA for general CFHT archive
- cutout service for Elixir data : announced in 2005 (not embedded in SIA, as far as I know -> « availability problem »)
- SIA for Terapix stacks: prototype
  - Accessible via Aladin
  - SIA with extensions for structuration and multiple access to the same dataset



F.Bonnarel Paris 06/11/2006  
French cfhtls users'meeting





# CADC Archive and VVO access and standards



- Future plans:
  - other access modes (Full Retrieval page, link to ELIXIR members ?)
  - Catalogs
  - Registry ?
  - Release : soon



F.Bonnarel Paris 06/11/2006  
French cfhtls users'meeting



- Images:
  - Aladin images
  - SkyView
  - Sloan
  - MAST

### Query the CFHTLS Terapix Stacks ?

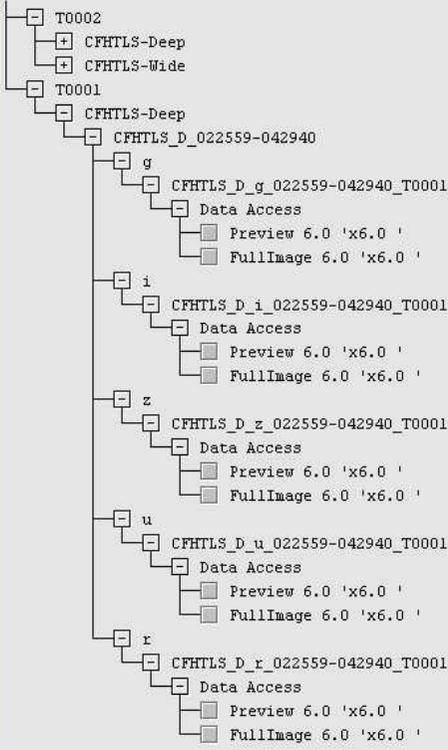
Renseignez tous les champs puis appuyez sur le bouton CHERCHE

Right Ascension .....	36.5
Declination .....	-4.5
Radius .....	0.1

- Catalog:
- All VizieR
  - Surveys
  - Missions
  - IM3D
  - NED
  - SkyBot
  - Sextractor
  - Others..

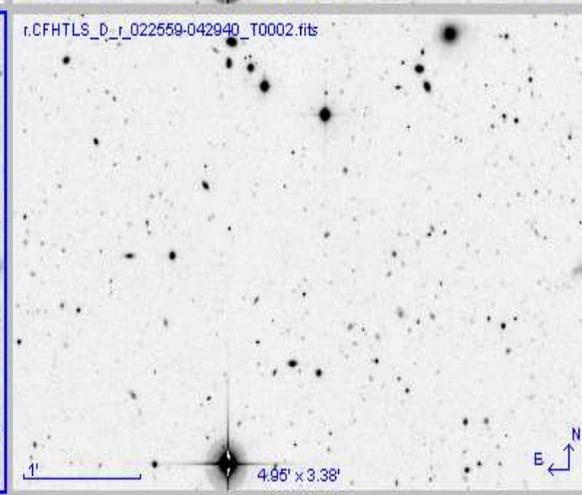
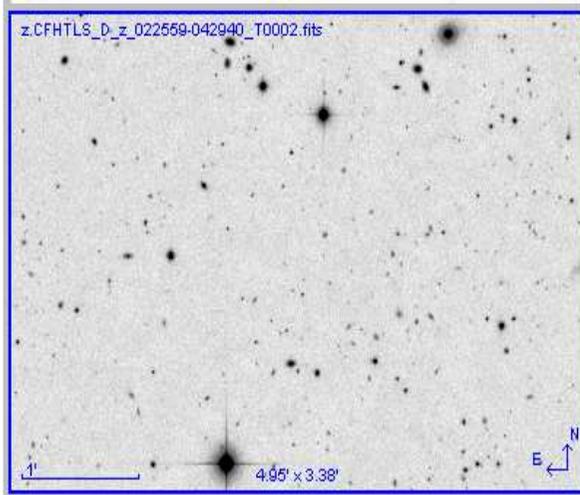
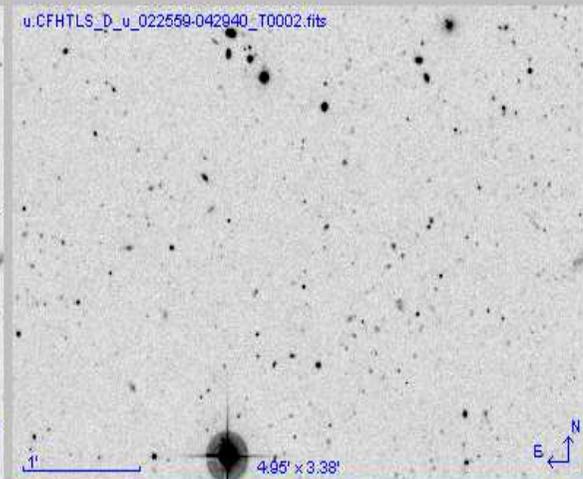
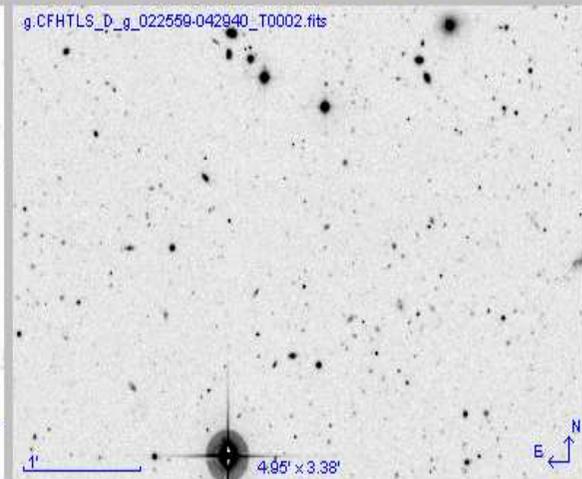
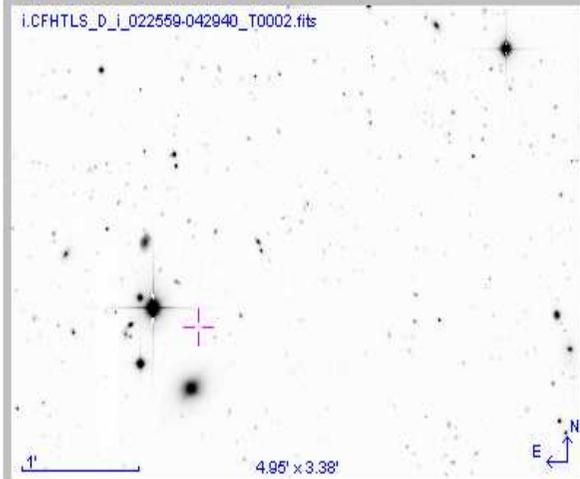
### CFHTLS

- SSS...
- VLA...
- DSS...



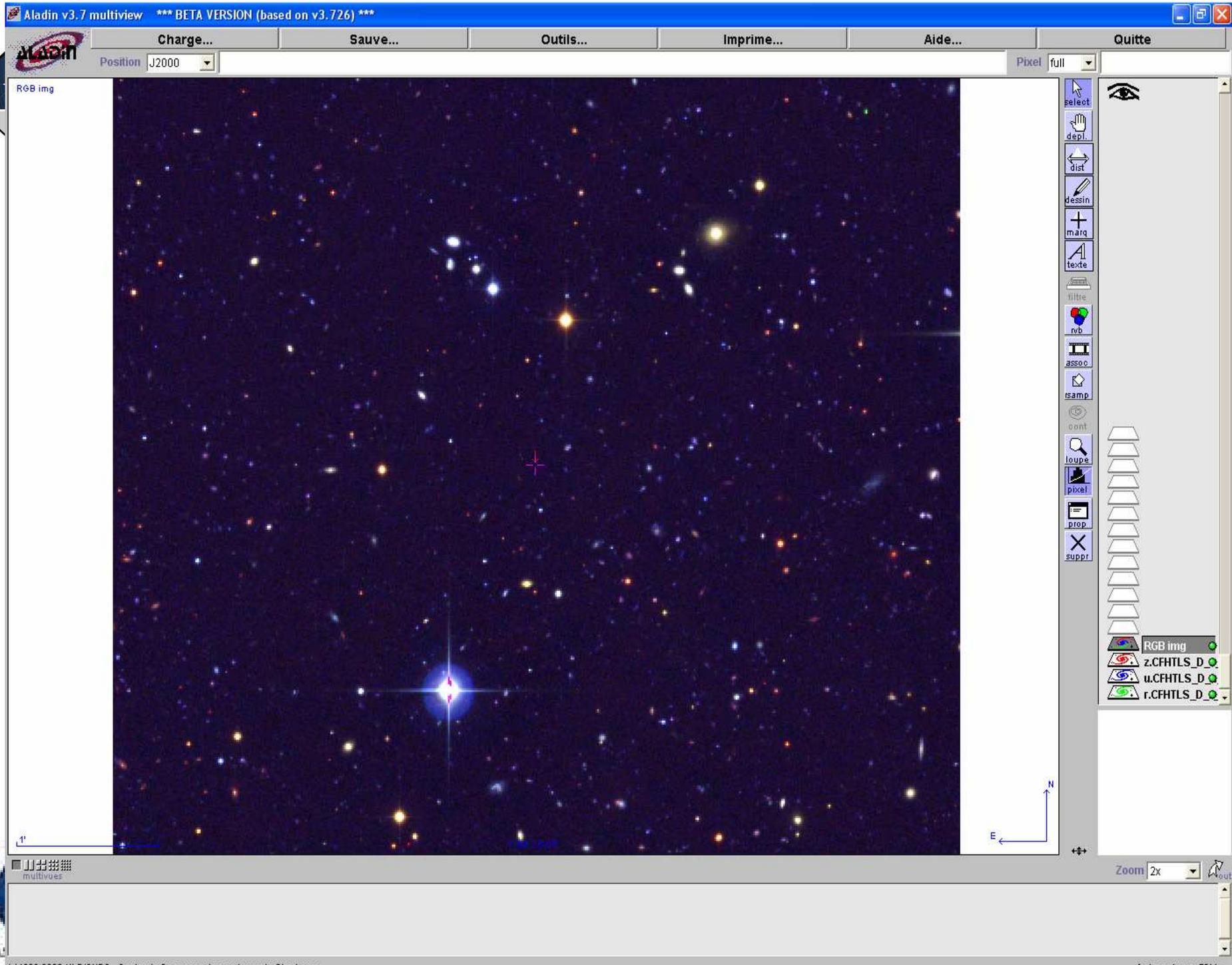
Réinit. Efface Histor. **CHERCHE** Ferme

3 sur 24 - Presse-Papiers  
Élément ajouté.



select  
depl.  
dist  
dessin  
marq  
texte  
filtre  
nrb  
assoc  
isamp  
cont  
loupe  
pixel  
prop  
suppr

RG  
r.C  
i.CI  
g.C  
u.C  
z.C





# CFHTLS data and CDS Aladin



- Aladin is an Image Oriented VO portal
- Cross correlation with All VO (or pre-VO) archives (images, catalogs, spectra)
- Collaboration with
  - other desktop tools: VOSPEC, SpecView, TopCat, VOplot, etc...)
  - or processing tools (SExtractor)



F.Bonnarel Paris 06/11/2006  
French cfhtls users'meeting





Aladin v3.7 multiview \*\*\* BETA VERSION (based on v3.726) \*\*\*

Charge... Sauve... Outils... Imprime... Aide... Quitte

Position J2000 02:25:56.49 -04:23:10.7

z.CFHTLS\_D\_z\_022659-042940\_T0002.fits

- Console de commandes Aladin (+ bloc-note)...
- Cross corrélateur de catalogues...
- (Re)calibration astrométrique d'images...**
- (Re)calibration astrométrique de catalogues...
- Calculateur de colonnes de catalogues...
- Régions d'intérêt : Outil de génération d'imagettes...
- VOplot (VO-India): traceur 2D pour les objets sélectionnés**
- VOSpec (ESAC): Outils d'analyse des spectres...**
- Démarrer le Pointeur Simbad : recherche automatique d'objets**
- Controlleur de macros
- Préférences utilisateurs...

Pixel full -1.3595

- select
- depl
- dist
- dessin
- marq
- texte
- filtre
- rvb
- assoc
- rsamp
- cont
- loupe
- pixel
- prop
- suppr

- USNO-A2
- RGB img
- z.CFHTLS\_D
- u.CFHTLS\_D
- r.CFHTLS\_D

Zoom 2x

Sélecteur de serveurs

Autres: File all VO C.FOV

- Aladin images
- SkyView
- Ioan
- MAST
- CFHTLS
- SBS...
- VLA...
- DSS...

Serveur d'images Aladin

Etape 1: Indiquez une position et appuyez CHERCHE

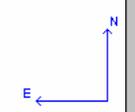
Position: 02 26 00.04 -04 23 59.8 [Pointe]

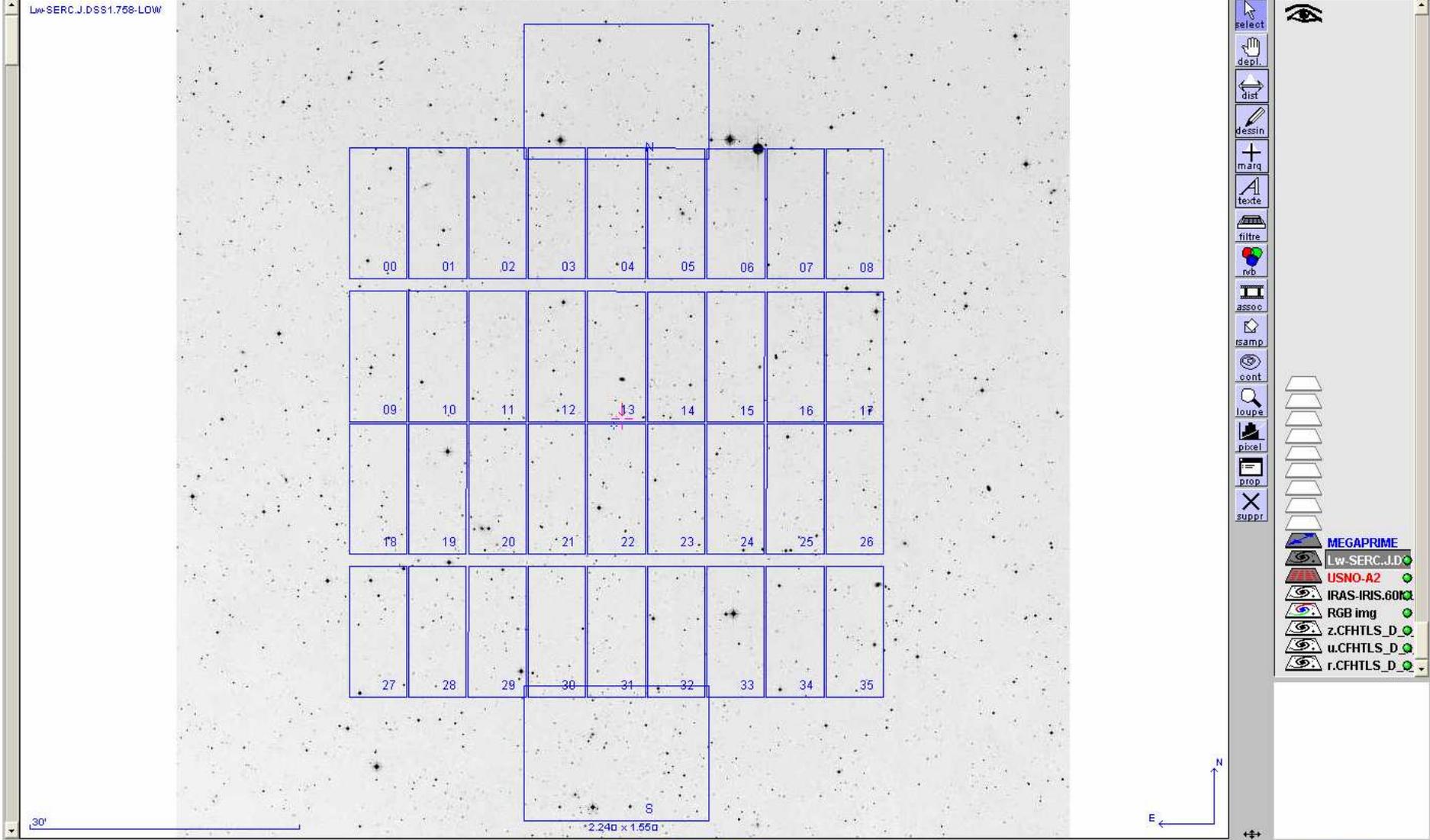
Rayon: 0 arcmin

>>> Etape 2: Sélectionnez une ou plusieurs images [par liste ou [arbre]

- 2MASS
  - K
    - 981001S\_KI0860198 8.6 'x17.1' 01/10/1998
  - H
    - 981001S\_HI0860198 8.6 'x17.1' 01/10/1998
  - J
    - 981001S\_JI0860198 8.6 'x17.1' 01/10/1998
- IRAS-IRIS
  - 60MU
    - I166B3H0 12.5 Dx12.5
    - I202B3H0 12.5 Dx12.5
  - 100MU
    - I202B4H0 12.5 Dx12.5
    - I166B4H0 12.5 Dx12.5
  - 25MU
    - I166B2H0 12.5 Dx12.5
    - I202B2H0 12.5 Dx12.5
  - 12MU
    - I202B1H0 12.5 Dx12.5
    - I166B1H0 12.5 Dx12.5
- SERC
  - J
    - DSS1.758 13.9 'x13.9'
    - DSS1.758-LOW 1.7 Dx1.7
    - DSS1.758-PLATE 6.5 Dx6.5
  - I
    - DSS2.758 12.8 'x12.8'
    - DSS2.758-PLATE 6.4 Dx6.4
- POSSI
  - 0

- Catalog:
- All
  - VizieR
  - Surveys
  - Missions
  - Simbad
  - IRIS
  - SKYBOT
  - SExtractor
  - Others...







# CFHTLS data and CDS Aladin (2)



- **Multiwavelength cross-visualisation**  
(multiview, color composition, contours, catalog overlays and filtering, cubes, Instrument and dataset footprint, on the fly recalibration)
- **New!!! Very large images**  
(up to 2GigaBytes and larger ? Disk reaccessing)



F.Bonnarel Paris 06/11/2006  
French cfhtls users' meeting

