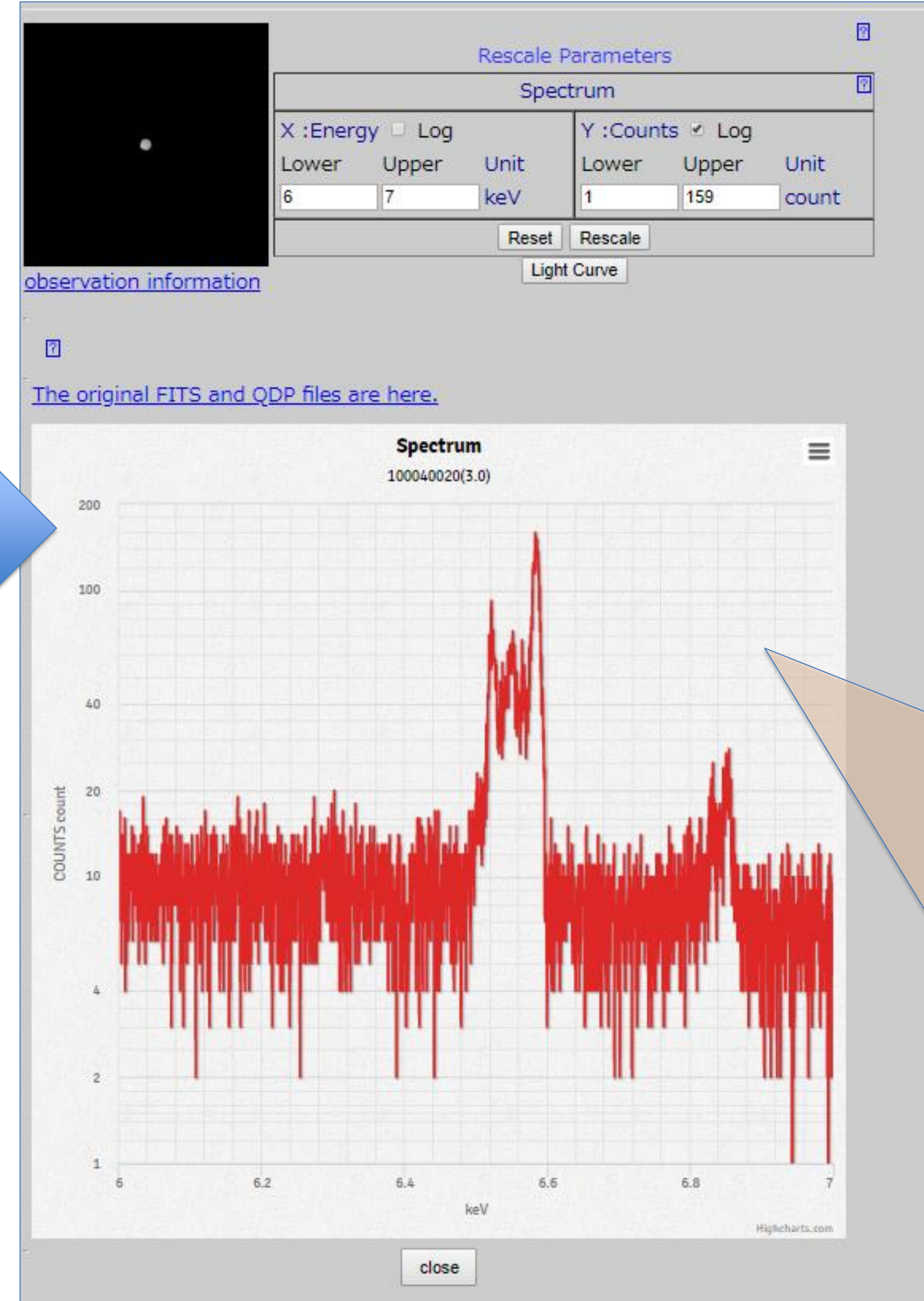
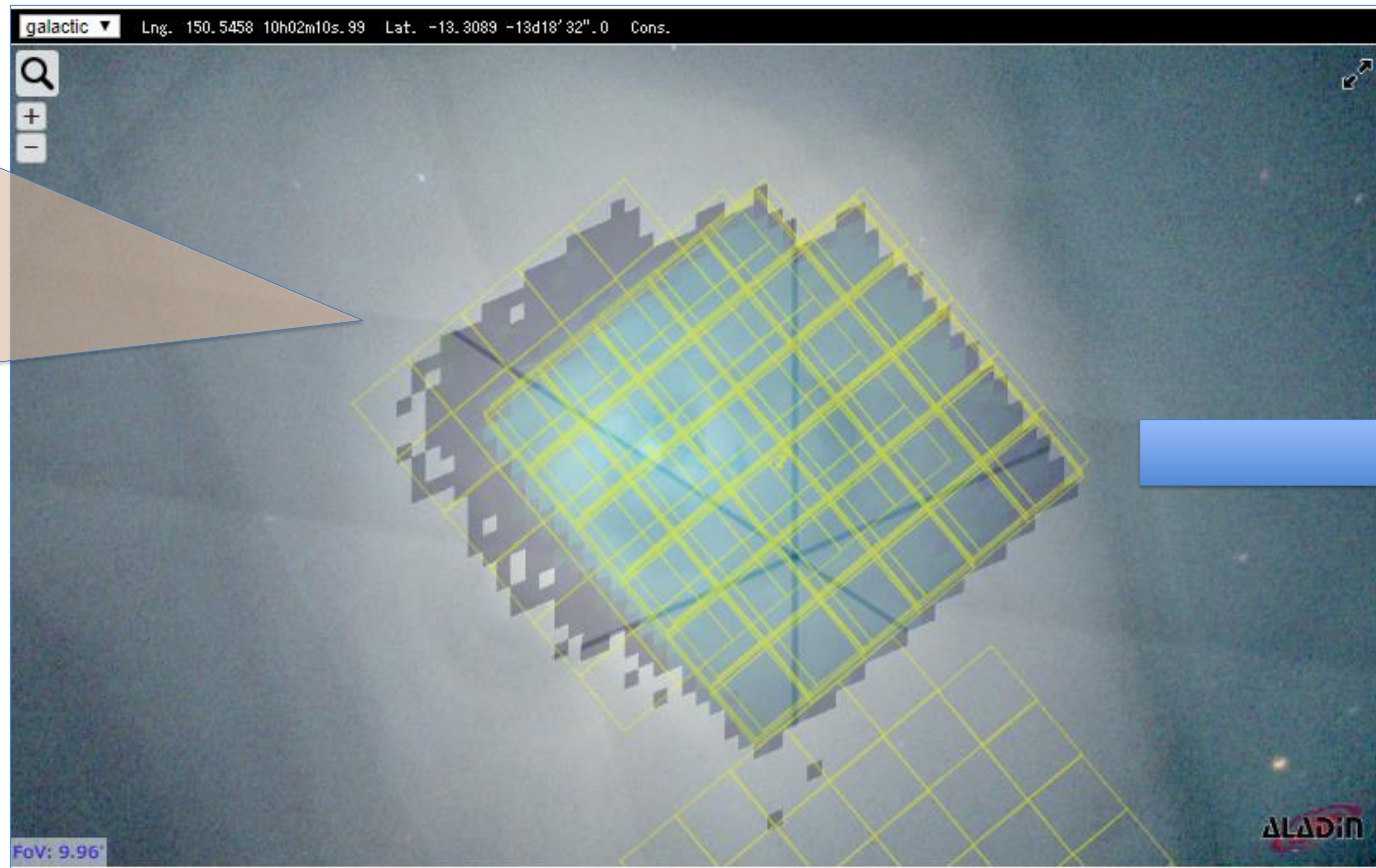


A web-tool to browse and access JAXA's science satellite data and more

Ken Ebisawa (ISAS/JAXA)

JUDO2 (2nd generation of JAXA Universe Data Oriented; <http://darts.isas.jaxa.jp/astro/judo2>) is a Web-tool to access not only JAXA's science satellite data but also other satellite and ground-based observation data. We adopt Aladin Lite which allows to access public HiPS (Hierarchical Progressive Survey) data all over the world including *Chandra* and *XMM*, and to browse, move, zoom in/out. We produce HiPS data of JAXA's projects, *MAXI*, *Hitomi*, *Suzaku*, *ASCA* (X-rays) and others. Also, we create HiPS images of *Swift BAT* and constellations, and HiPS catalogs of *MAXI*, *Swift BAT* and *Swift XRT*. These HiPS data are available at <http://darts.isas.jaxa.jp/pub/judo2/HiPS/> which are accessible by Aladin Desktop or Aladin Lite.

Two images can be overlaid each other, while you can control transparency of the top image. Here, Hitomi SXS Perseus cluster image is superposed on Chandra image.



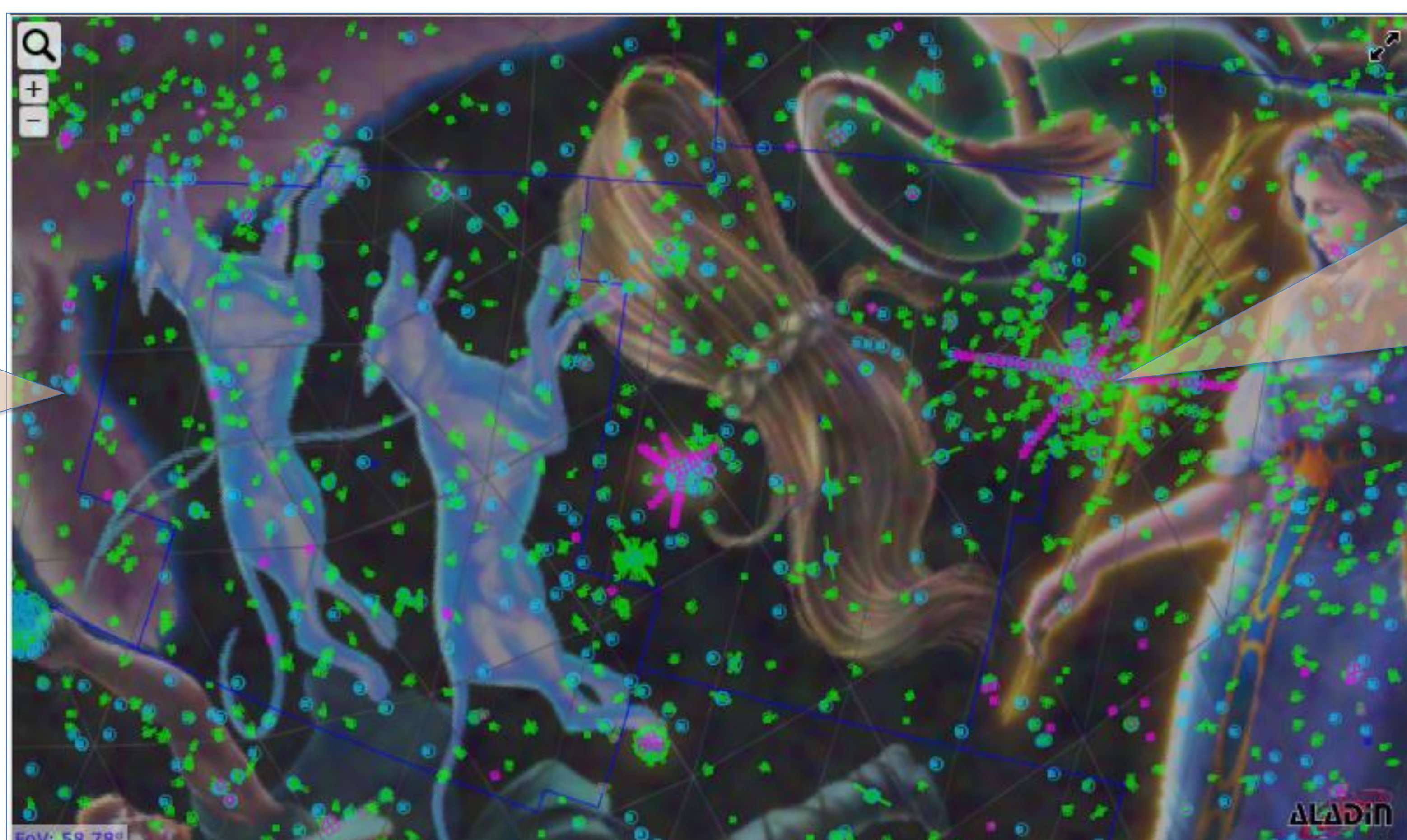
JUDO2 has direct link to DARTS's UDON2 (2nd generation of Universe via DARTS ON-line), with which users can quickly look at light-curves and spectra of particular sources or region of the sky.

On the LMC region *MAXI* and *Suzaku* images, foot-prints of the following satellites are shown *Hitomi*, *Suzaku*, *ASCA*, *Akari*, *XMM*, *Chandra*, *NuSTAR* and *NICER*, as well as *MAXI*, *Swift BAT* and *XRT* catalogs.

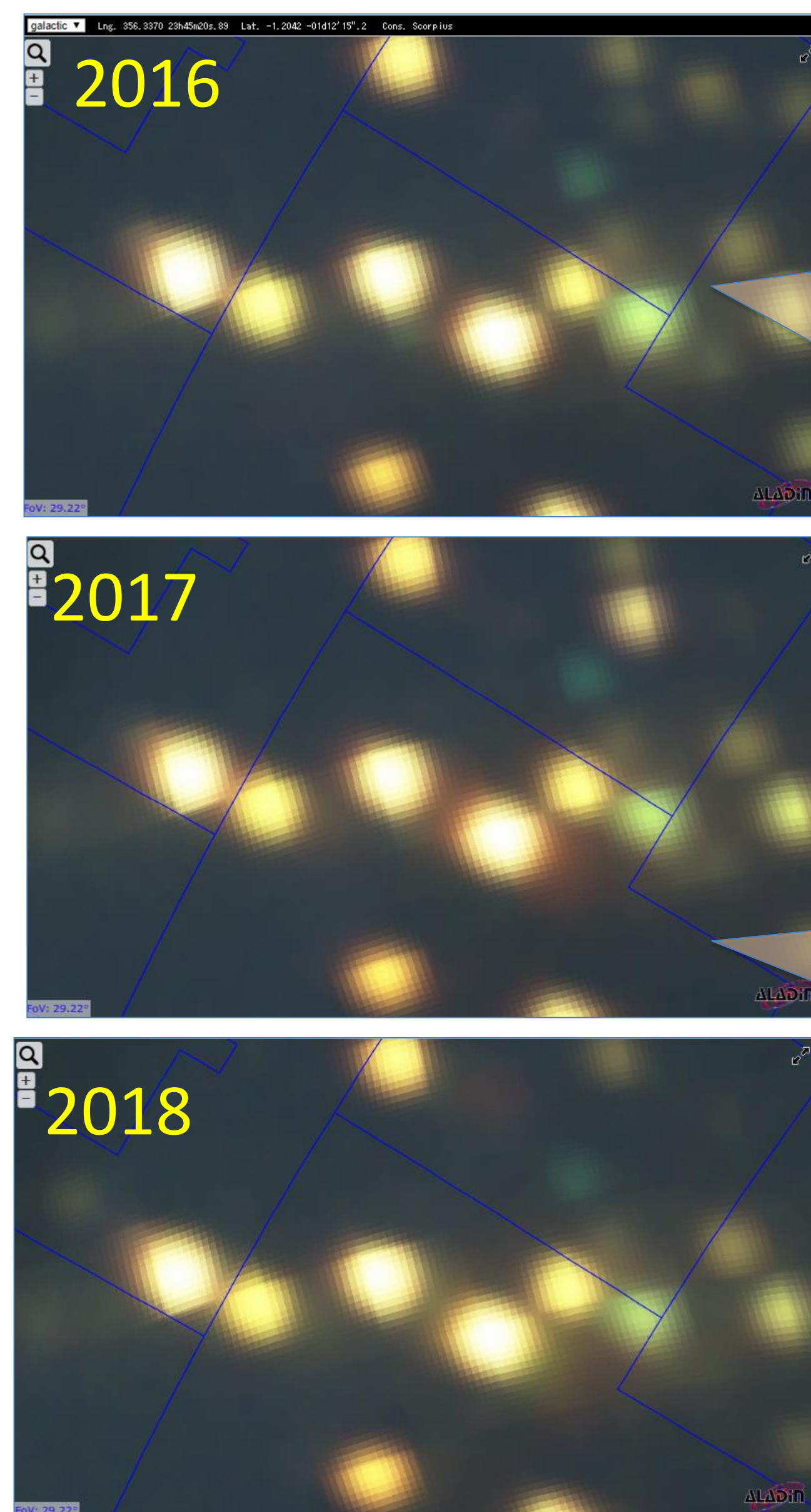
SUZAKU	ASCA SIS	ASCA GIS	ASCA GIS64	HITOMI SXS	HITOMI SXI	NuSTAR	NICER	XMM-Newton	ChandraFull
16 (AB DOR)	22 (30 DORADUS)	77 (CAL 83)							
84 (CAL 83)	92 (LMC X-3)	93 (LMC X-1)							
112 (LMC X-1)	118 (0519-69.0)	119 (0540-69.3)							
121 (N132D)	122 (SN 1987A)	124 (SN 1987A)							
125 (SNR 0509-68.7)	132 (PSR B0540-69)	133 (PSR B0540-69)							
738 (SNR 0538-69.1)	747 (SGR 0526-66)	774 (0509-67.5)							
775 (DEM 71)	776 (0509-67.5)	777 (N63A)							
1039 (Misspointing)	1041 (N49B)	1044 (SN1987A)							
1045 (N103B)	1068 (LMC X-1)	1069 (LMC X-1)							

Observation numbers are directly linked the archival data at DARTS, CXC, HEASARC, and ESAC.

MAXI images of the Virgo and Coma region, constellation figures, and footprints of *Suzaku*, *Chandra* and *XMM* are indicated.



Suzaku (shown with pink) carried out many pointings across several clusters of galaxies to measure temperature variations. You can easily tell, which is the Virgo cluster and which is Coma (hair) cluster!



Time-series of *MAXI* images are available, so that users can display yearly, monthly, weekly and daily all sky *MAXI* images.

Left-hand side is yearly image the GC region by *MAXI* GSC in 2016, 2017 and 2018.