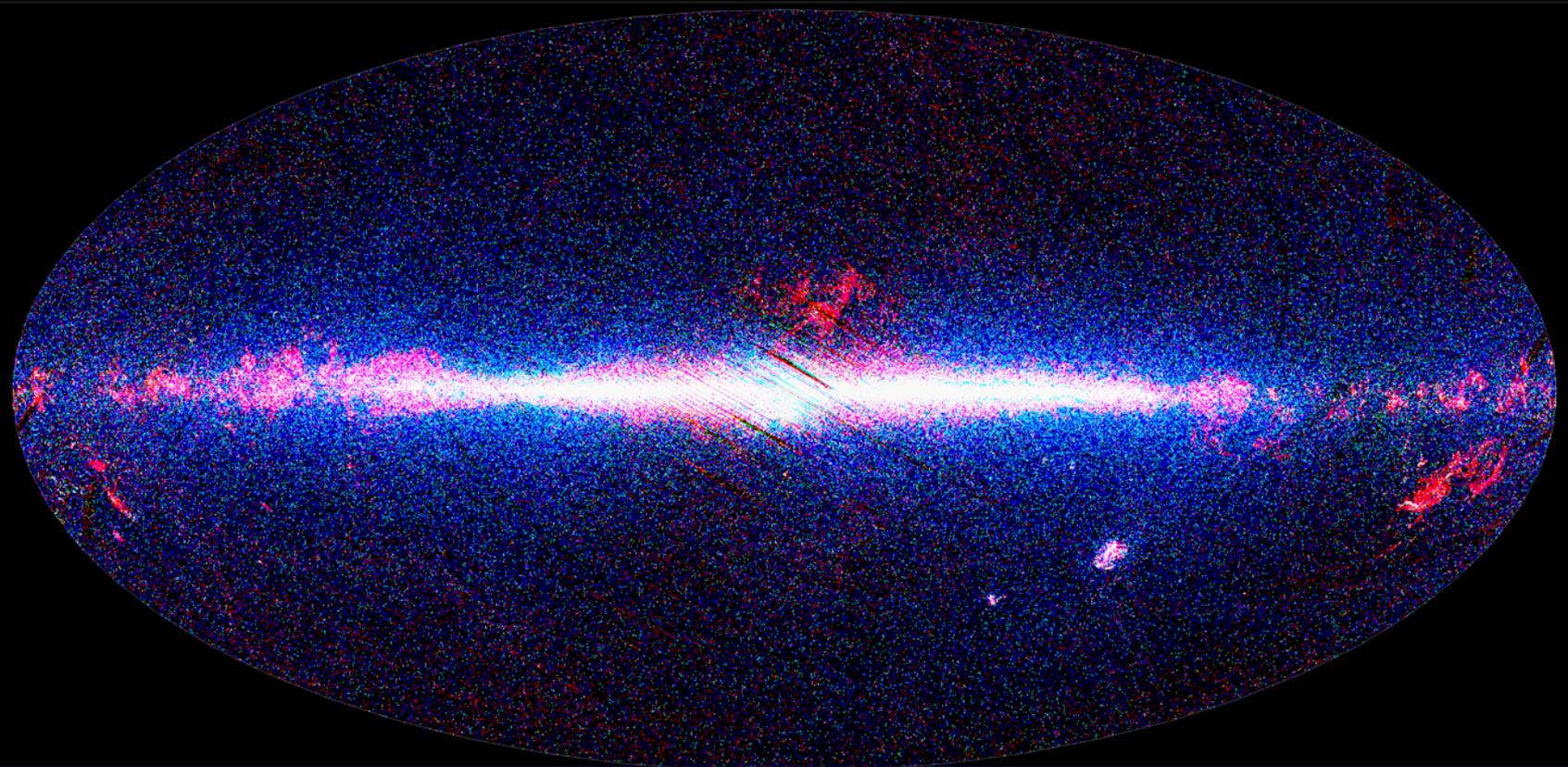


# AKARI All-Sky Survey Catalogues 「あかり」全天サーベイカタログ

Shinki Oyabu

大薮進喜

(ISAS/JAXA)

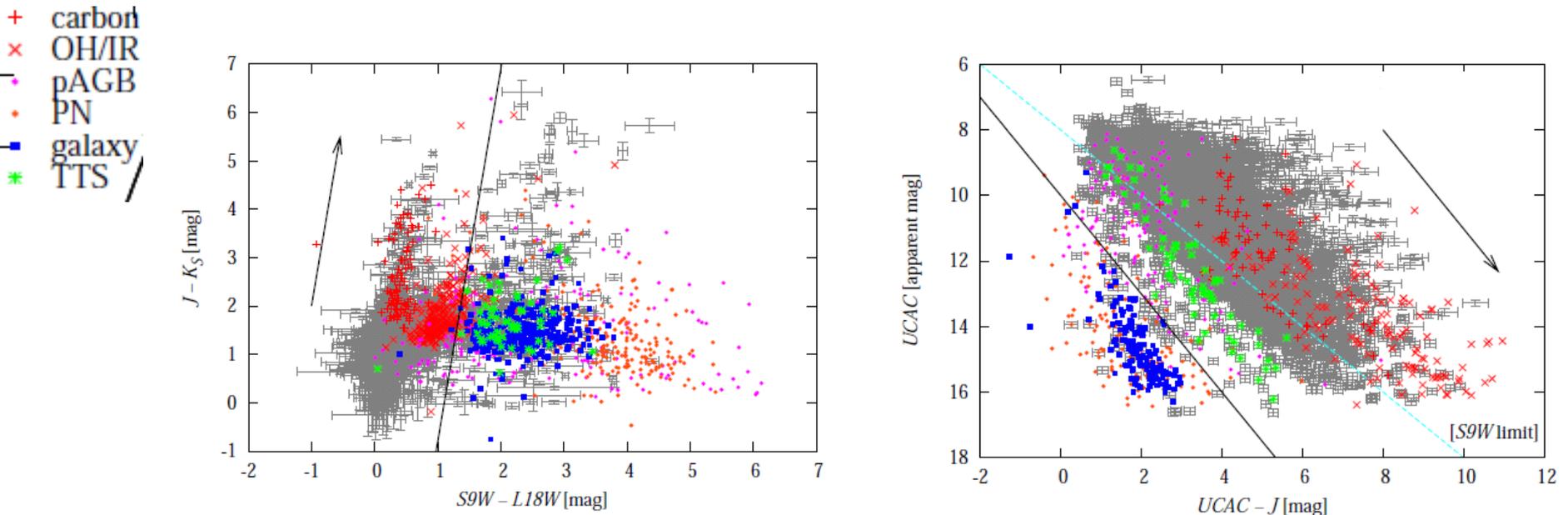


Important numbers of AKARI catalogues

	IRC PSC $\beta$ -1		FIS BSC $\beta$ -2			
Band ( $\mu\text{m}$ )	9	18	65	90	140	160
Number of sources	851,189	195,893	18,638	290,209	69,092	26,631
Detection Limit (Jy)	0.05	0.12	3.2	0.56	3.5	5.6
Flux Uncertainty (%)	3	5	25	20	35	35
Spatial Resolution (")	~6		~40		~70	
Position Uncertainty (")	$\leq 2$		~ 5			

# Examples of Scientific Applications

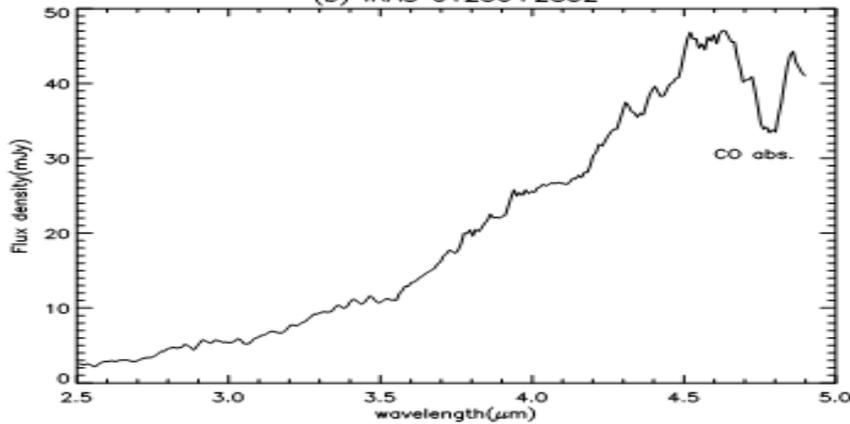
Search for T Tauri Stars toward Taurus-Auriga region  
(Takita et al. submitted to A&A)



Using AKARI mid-infrared catalogs, we searched for T Tauri stars in **1800 square degree** toward the Taurus-Auriga region. The selection criteria are newly developed with known T Tauri stars in this regions and AKARI photometry. This survey provides 50 new TTS candidates in this regions.

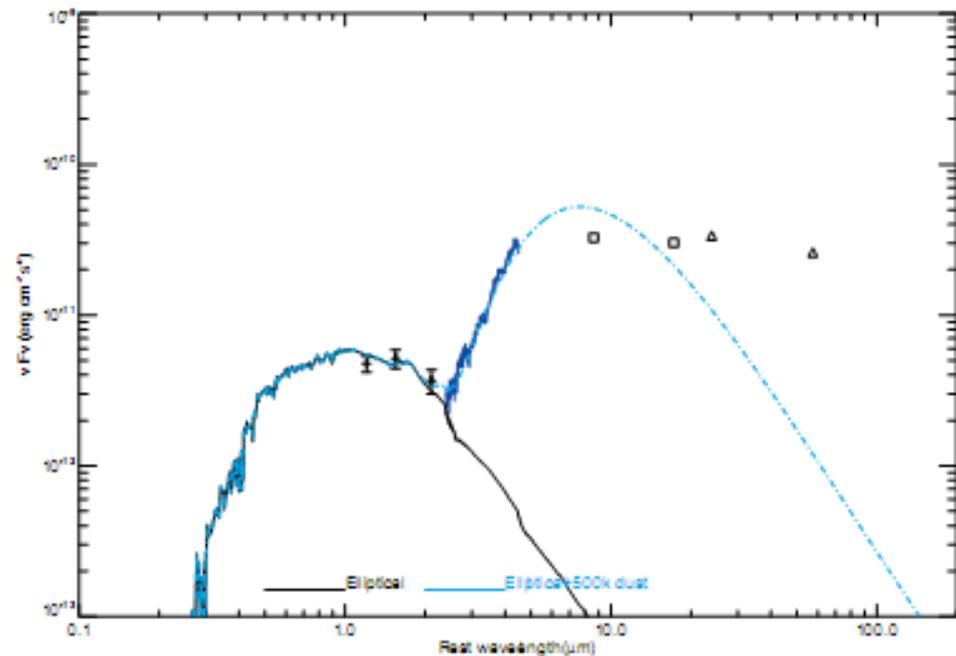
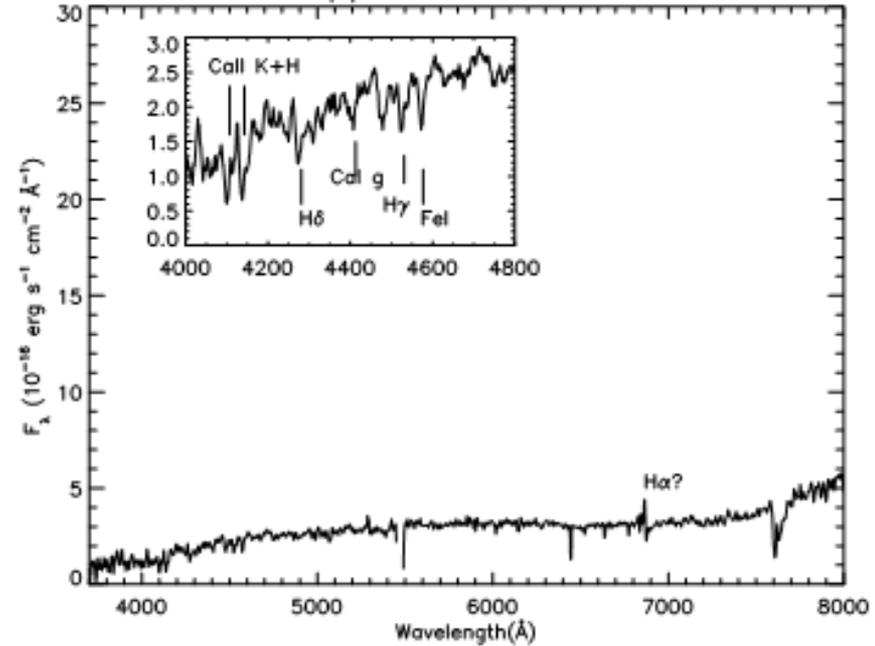
**AKARI sources have better spatial resolution and position accuracy than that of IRAS.**

# AGN Search (Oyabu in prep.)



In a nearby elliptical galaxy at  $z=0.04$ , we found a hot component ( $T=500\text{K}$ ) using AKARI catalogs and AKARI near-infrared spectroscopy, but an optical spectrum as well as previous soft X-ray and radio observations does not show any evidence of this activity.

**IRCS** observations in last semester confirmed this CO absorptions in the M-band. Thus, we conclude that this galaxy has buried AGN in the center. **COMICS** spectroscopy will be interesting to detect silicate absorption in the N-band and to understand this source.



# Most Important Information

- **The AKARI all-sky survey catalogues will be in public soon (in this physical year).**
  - The values in detail may change in the public version.
- **Many sources in the catalogs are unknown and worth studying the details.**
  - The spectroscopic sensitivities of thermal infrared instruments (**COMICS** and **IRCS**) on Subaru are fit for the mid-infrared catalogue. We are also interested in Subaru's capabilities of the optical and near-infrared imaging and spectroscopy.