

# MAJOR ASIAA PROJECTS (2012)



SAO • SMA : Array Completed; BW Upgrade

NTU • AMiBA : 7-element papers; 13-element installed

NTHU • TIARA; SIS Junction : 230, 345, 400, 690, 900 GHz  
(NAOJ, PMO) → (SAO, Yonsei) →

NCU • TAOS-1 : 4-element Operation; TAOS-2: Building

ASIM • CFD-MHD : 2-D Hydro Codes – 3-D

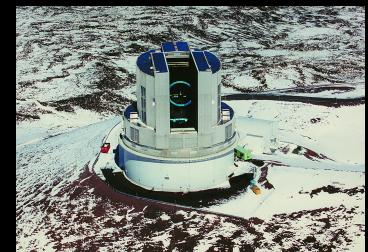
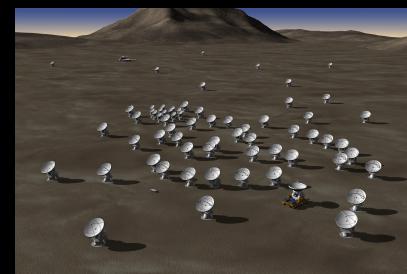
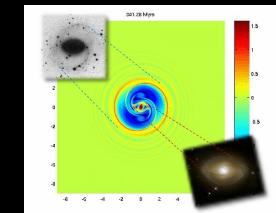
CFHT • WIRCam : Operating; SPIROU

NAOJ • ALMA-J : FEIC shipped 17<sup>th</sup> FE to Chile

NRAO • ALMA-NA: 12m antenna, ALS; 3/5 FEs, VLBI

NAOJ • HSC: filter exchanger, 125 CCDs, lens; PFS

SAO • Submm VLBI: acquired ALMA-NA prototype



# ASIAA Instrument Projects

- **RADIO:** SMA --- AMiBA --- ALMA --- **GLT**



(2003)



(2009)



(2012)



(2014)

- **OIR:** TAOS-1 --- CFHT/WIRCam --- Subaru/HSC

(2004)

(2005)

(2011)



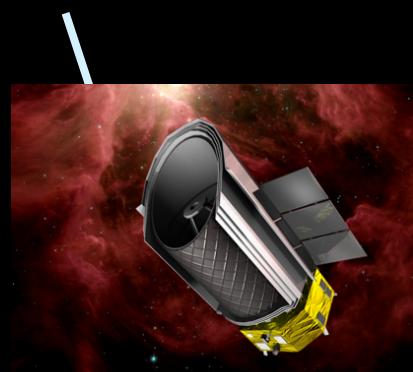
**TAOS-2**  
(2013)



**SPIROU**  
(2015?)



**PFS**  
(2017?)



**SPICA**  
(2020?)

# ASIAA Radio Developments

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- Emphasis: Interferometry (Highest Resolution)  
Submillimeter Wavelengths
- Technical Developments: Detectors (SIS)  
Microwave Devices  
Digital Electronics  
System Integration  
Antennas  
Focal Plane Arrays

# ASIAA Interests in SKA

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- SKA Science: High-z HI (BAO, EoR)  
Pulsar Timing (Grav wave)
- SKA Technology: Digital Processing  
Widefield Imaging
- SKA Strategy: Focused Project  
East Asian Collaboration

# ASIAA SKA Related Activities

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- Digital Developments: 5GHz (10GHz) ADC
- Receivers: ALMA Band 1 Developments  
GBT 800MHz Focal Plane Array
- Science: GMRT EoR Experiments  
GBT BAO Experiments
- Planning: Focusing on Technology