

# KAGUYA SCIENCE MISSION STATUS



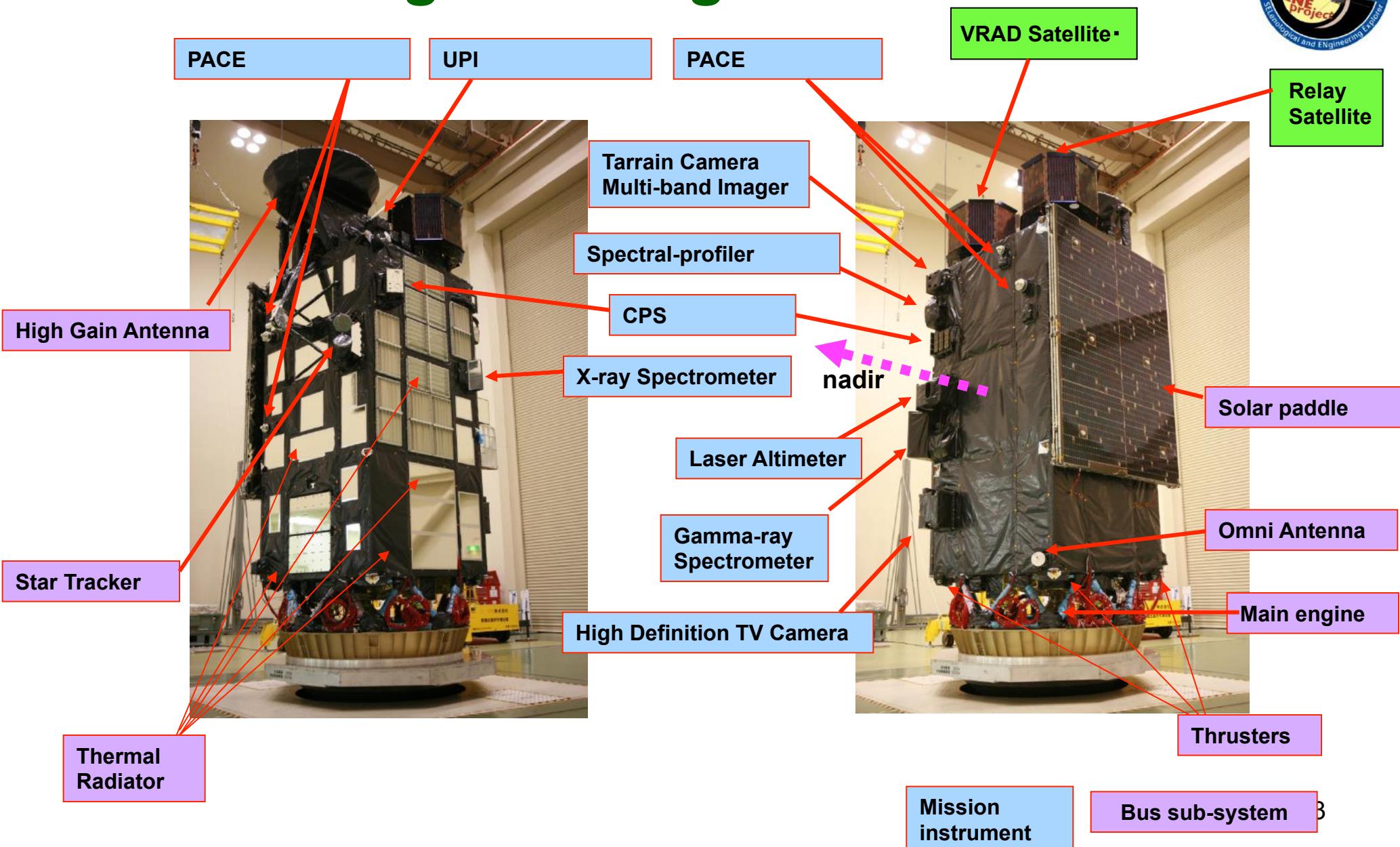
*September 2008-*



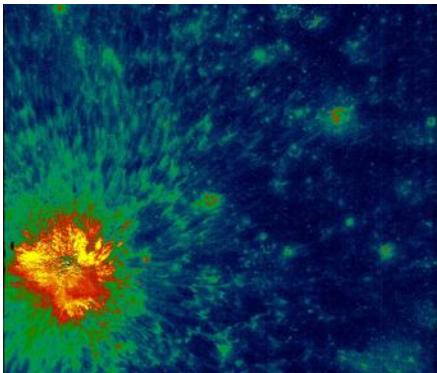
# Mission Instruments

Category	Observation	Instrument	Measurement
Science of the Moon	Element Abundance	X-ray Spectrometer(XRS)	Al, Si, Mg, Fe, etc.-
		Gamma-ray Spectrometer(GRS)	U, Th, K, H etc.-
	Mineral Composition	Multi-band Imager(MI)	mineral distribution
		Spectral Profiler(SP)	mineral composition-
	Topography, Geological Structure	Terrain Camera(TC)	geographical features
		Lunar Radar Sounder(LRS)	subsurface structure
		Laser Altimeter(LALT)	topography
	Gravity Field	Differential VLBI Radio Source(VRAD)	lunar gravity field
		Relay Satellite(RSAT)	far side local gravity field
	Magnetic Field	Lunar Magnetometer(LMAG)	magnetic field
		Electron Energy Analyzer(part of PACE)	surface magnetic field
Science on the Moon	Crustal Activity	$\alpha$ -ray spectrometer of CPS	$\alpha$ particles
	Radiation Environment	Charged Particle Spectrometer(CPS)-	energetic particles
	Plasma Environment	Plasma Energy Angle and Composition Experiment(PACE)-	electrons and ions
	Ionosphere	Radio Science(RS)	ionospheric electrons
Science from the Moon	Solar-Terrestrial Plasma Environment	Uppe-Atmosphere and Plasma Imager(UPI)	earth magnetosphere, aurora
		Wave Receiver(part of LRS)	planetary radiations
Publicity	Earth and Moon	High Definition TV(HDTV)	high-definition movie

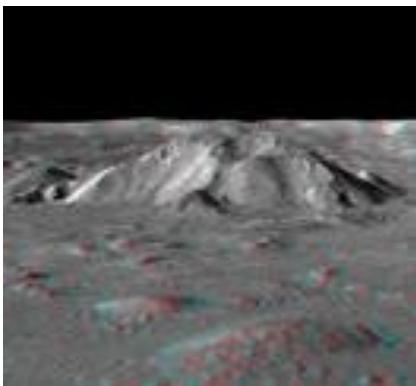
# Flight Configuration



# Typical Observation Data



• Mineralogical Assemblage by Multi-band Imager and Spectral Profiler



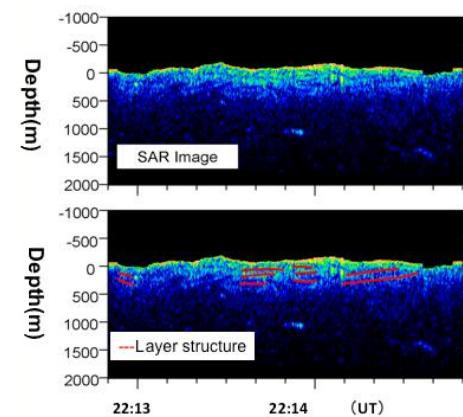
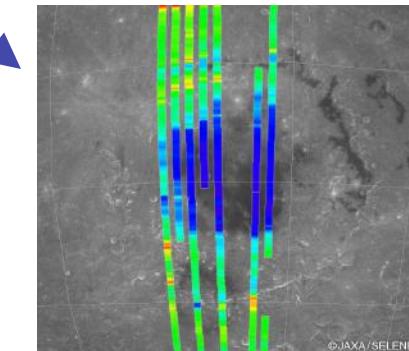
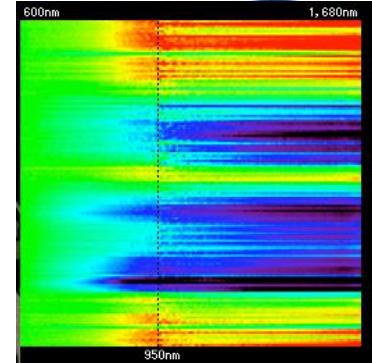
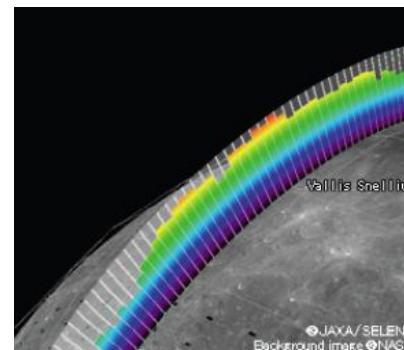
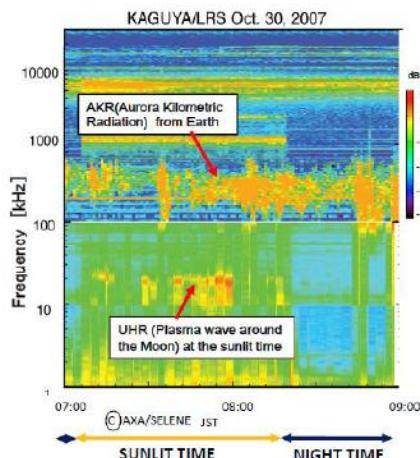
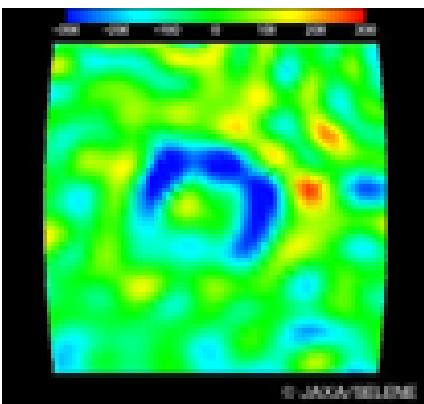
• Two Dimensional Image by Terrain Camera

• Height Distribution by Laser Altimeter

• Subsurface Structure by Radar Sounder Experiment

• Gravity Field Structure in the Far-side by 4-way Doppler Observation

• Electromagnetic Environment by Wave Receivers and Plasma Analyzers





# Mission Operation

2007				2008		
Sep.	Oct.	Nov.	Dec.	Jan.–Oct.	Nov.–	
				System		
Launch				Survival operation for eclipse Yaw-around operation Orbit maintenance maneuver Orbit phase adjustment maneuver		
				Mission		
Critical phase				LISM(SP) calibration site observation CPS calibration HDTV observation (baseline) PACE 15 kV high voltage operation		
						
						
						
						Extended Mission (TBD)
				We are here.		