

STATUS REPORT ON KOREAN ASTRONOMY

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1. PROFESSIONAL SOCIETY

;ß Korean Astronomical Society

- organized in 1965
- member: 480
- publication:
  - "Journal of the Korean Astronomical Society" (in English) published twice a year
  - "Publications of the Korean Astronomical Society" (in Korean and English) published once a year
  - "Bulletin of the Korean Astronomical Society" (abstracts and institution reports in Korean) published twice a year
- meeting:
  - twice a year in spring and fall
- division:
  - Radio Astronomy Division
  - Space Environment Division

;ß Korean Space Science Society

- organized in 1984
- member: 460
- publication:
  - "Journal of Astronomy and Space Science" (in Korean and English) published twice a year
  - "Bulletin of the Korean Space Science Society" (meeting

abstracts and institution reports in Korean)  
published once a year  
-general meeting:  
twice a year in spring and fall

## 2. THE KOREA ASTRONOMY OBSERVATORY ;`A National Observatory;µ

;Ý Organization:

- Space astronomy division (3 Groups)
- Three local observatories
- Planning and management department

;Ý Manpower:

- 110 personnel (42 scientists, 8 engineers, and 60 supporting staffs)

;Ý Annual budget:

- 10,225,000,000 Won (US\$ 8 million)

;Ý Research facility:

- 1.8m optical telescope
- 61cm reflector telescope
- Solar flare telescope
- 1m automatic telescope
- 14m millimeter radio telescope
- Korean VLBI network (KVN) - three sets of 20m dish (to be completed by 2005)

;Ý Major research field

- National astronomical mission
- Theoretical astronomy research
- Observational astronomy research
- Space science research
- GPS research
- Astronomical information research
- International joint use of large optical telescope
- Research on Near Earth Object Patrol (NEOP) and Satellites

## 3. EDUCATIONAL INSTITUTION

;ß School with Astronomy Major - 6 Universities

Chungbuk Nat'l University (CBU)  
Chungnam Nat'l University (CNU)  
Kyungbuk Nat'l University (KBU)  
Kyung Hee University (KHU)  
Seoul Nat'l University (SNU)  
Yonsei University (YSU)

;ß Schools Where Astronomy Courses Are Offered (mostly teachers' colleges)

Junbuk Nat'l University (JBU)  
Junnam Nat'l University (JNU)

Kangwon Nat'l University (KWU)  
Kongju Normal University) (KNU)  
Korea Nat'l Univ. of Education (KUE)  
Pusan Nat'l University (PSU)  
Sejong University (SJU)  
Seoul Nat'l Univ. of Education (SUE)

;ß Research Facility

;Þ Optical Telescope:

- 76cm optical telescope (1 each at KHU and SJU)
- 1m optical telescope (being installed at CBU)
- 61cm optical telescope (1 each at SNU and YSU)
- 40cm optical telescope (1 each at CNU, CBU, KUE, KBU, PSU and SJU)

;Þ Radio Telescope:

- 6m millimeter radio telescope (at SNU)

;Þ Others:

- Survey telescope (0.5m aperture wide-field robotic) (YSU)
- Optical satellite observing facility (40cm auto-tracking) (KHU)

#### 4. RESEARCH ACTIVITY

;ß Observational:

- photometry of variable stars (YSU, KAO, KBU, CHU, SJU, JNU, JBU)
- photometry and spectroscopy of binary stars (YSU, CBU, KAO, KBU, SJU)
- photometry of star clusters, galaxies and galactic clusters (KAO, SNU, YSU, KBU, PSU, KHU)
- spectroscopy of stars, galaxies (YSU)
- solar activities (KAO, SNU, KHU)
- radio spectral lines from interstellar clouds (KAO, SNU, KHU, CNU, SUE)
- radio continuum (KAO, SNU, CNU)
- radio maser lines (KAO)
- UV in clusters and galaxies (YSU)
- spectral lines from planetary atmosphere (KHU, CNU)

;ß Theoretical:

- gravitational lens (KBU, CBU)
- anisotropy of cosmic microwave background radiation (SNU, KBU)
- tidal effect on stars (KBU)
- acceleration of cosmic ray particles (PNU)
- interstellar and interplanetary dust particles (SNU, KWU, CBU)
- dynamical evolution of star clusters (SNU, CNU)
- formation and evolution of galaxies (SNU)
- cosmology (SNU, KAO)
- stellar evolution (YSU)
- magnetohydrodynamics of fluids (CNU)

- planetary atmosphere and ionosphere (KHU, CNU)
- history of astronomy (CBU, KAO, SUE)
- pulsar and black hole model (KAO)
- satellite orbit (YSU)
- earth magnetic field and solar wind (CNU, KHU)

;ß Developmental:

- X-ray detector for Korean Science Satellite(KSS)(CBU)
- FIR imaging spectrograph for KSS (KAO)
- FUV imaging spectrometer for KSS (KAIST)
- Observation technique, calibration, and data pipeline for Galex (YSU)

## 5. INTERNATIONAL COOPERATION PROJECT

- International collaboration with CFHT (KAO)
- Collaboration with NASA in Galex project (YSU)
- VLBI project between Nobeyama and TRAO (KAO)