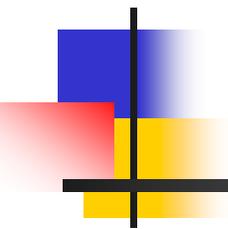


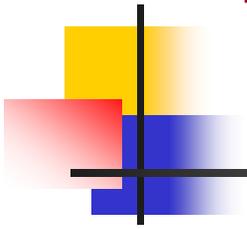
Observing Facilities of Taiwan and in the Neighborhood



Wen-Ping Chen
NCU/Astronomy Program

March 21, 2003
STAR & TELESCOPE VIII

National Infrastructure



Possible Models ---

- Observing Facilities, e.g., NOAO
- Managing Consortium, e.g., AURA
- Umbrella Organization, e.g., NAOJ, NAOC

AURA (Association of Universities for Research in Astronomy)



AURA is a consortium of universities, and educational and other non-profit institutions, that operates world-class astronomical observatories that we term "centers."

Our members are 30 U.S. institutions and 6 international affiliates. We view ourselves as acting on behalf of the science communities that are served by our centers, and as trustees and advocates for the centers' missions.



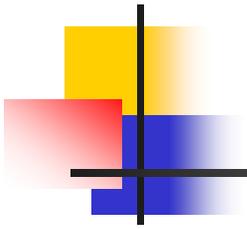
AUI (Associated Universities, Inc.)



Associated Universities, Inc., ([AUI](#)) is a not-for-profit corporation based in Washington, DC. It was founded in 1946 by nine northeastern universities to manage major scientific facilities. AUI currently operates the [National Radio Astronomy Observatory](#) under a cooperative agreement with the [National Science Foundation](#).



More --- Government Buffering Agents



- Some make sense ...
 - DoE \leftrightarrow national labs,
 - e.g., MIT \rightarrow Lincoln Lab
 - UC \rightarrow Lawrence Livermore Lab
 - \rightarrow Los Alamos Lab
 - U Chicago \rightarrow Argonne Lab
- Some less obvious ...
 - NASA operates centers, e.g., GSFC, directly
 - but Caltech \rightarrow JPL?

Japan

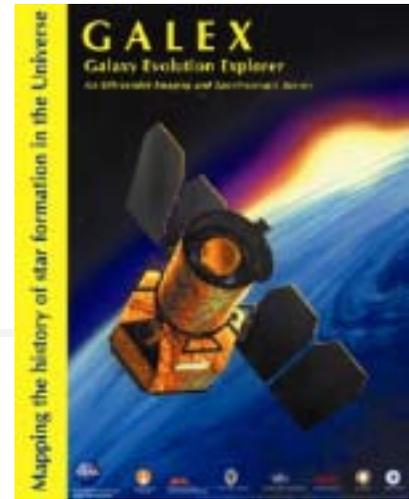


- Nobeyama (野邊山) millimeter 45 m dish + array (10 m x 6)
- Okayama (岡山) (1.88 m)
- Subaru (8 m), e.g., 1.3 m IRSF at SAAO Nagoya U)





한국천문연구원
Korea Astronomy Observatory



Korea

- Bohyunsan Obs (1.8 m)
- Taeduk Radio Ast Obs (TRAO, 45 m)
- KVN (Korean VLBI Network) + Japanese VLBI
- GALEX (Galaxy Evolution Explorer)
UV imaging/spectroscopy
<http://www.srl.caltech.edu/galex/>
- 4 astronomy/space science journals

China



- BAO (2.16 m, 60/90 Schmidt); ShAO (1.56 m)
- Seshan (25 m); Urumqi (25 m)
- LAMOST (Large Sky Area Multi-Object Fiber Spectroscopic Telescope)
4 m; 4000 fibers; $v \sim 20.5$ mag in 1.5 hrs
with 1 nm res www.lamost.org
- SST (Space Solar Telescope) 1m; res 0.1''
- Re-infrastructured ...

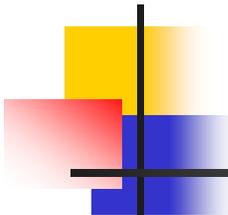


Taiwan



- SMART/SMA (Sub-Millimeter Array) (6m x 8; baseline 8-508 m; 180-900 GHz)
- AMiBA (1.2m/0.3m x 19; on a 6 m fully steerable platform; 90 GHz) *really an experiment*
- TAOS (0.5 m x 4)
- LOT (Lulin One-meter Telescope)
- TON (Taiwan Oscillation Network)
- TEN (Taiwan Earth-Shine Network)
- Maidanak 1 m

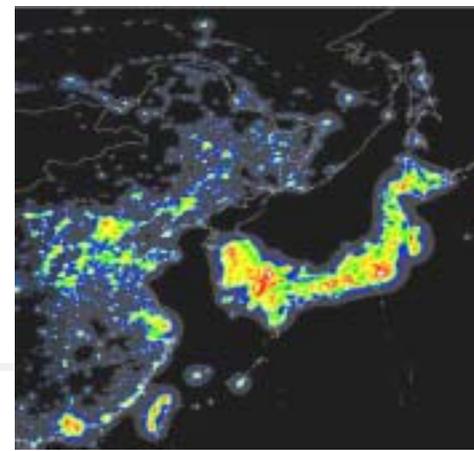




NCU Efforts

- IR camera for the LOT (with Nagoya U.)
Instrumentation capability (design, fabrication, testing, calibration)
- Supernova Lookout Telescope (?)
- Pan-Asia 2.5 IR Telescope (?)
- Space Astronomy --- X-ray spectroscopy
- Training students

How the neighbors are looking ahead?



- Yunnan Obs 2.3 m OIR at Gaomeigu 高美古
- PMO 盱眙 1.2/1.0 m Schmidt for NEOs
- BAO 興隆 1 m + ...
- Australia ?
- Pan-Asia 2.5 m IR telescope (site?)
- Okayama 1.88 m → 3.5 m (?)