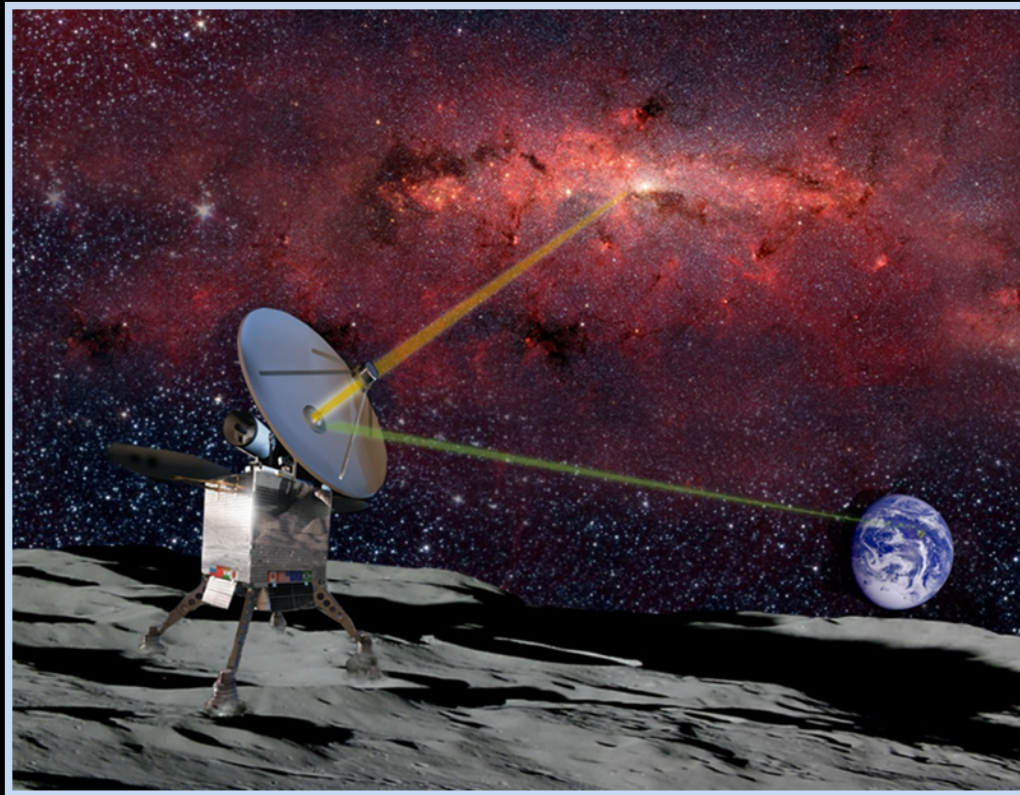


International Lunar Observatory Galaxy First Light Imaging Program

Galaxy Forum USA – 4 July 2008 – Santa Clara, CA
Steve Durst

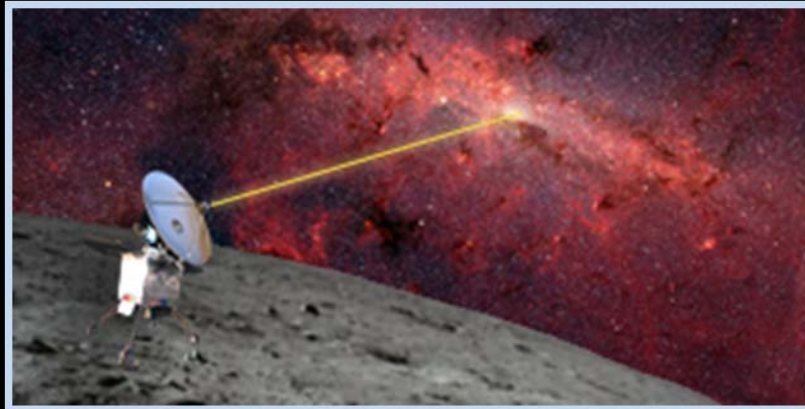


Why Galaxy Education, Consciousness & Awareness is Important for the 21st Century:

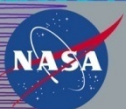
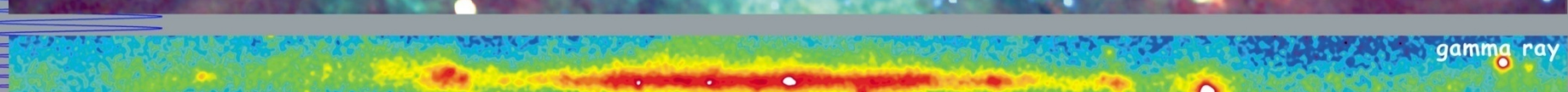
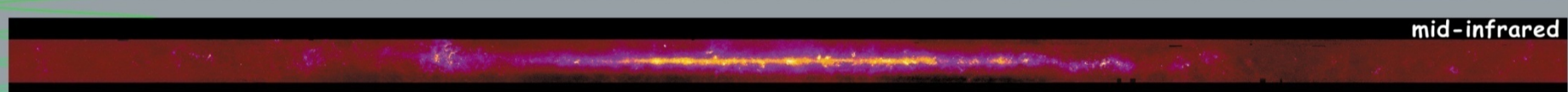
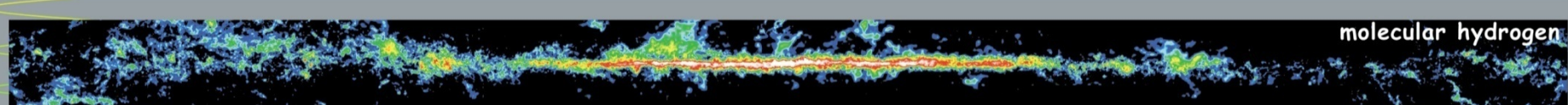
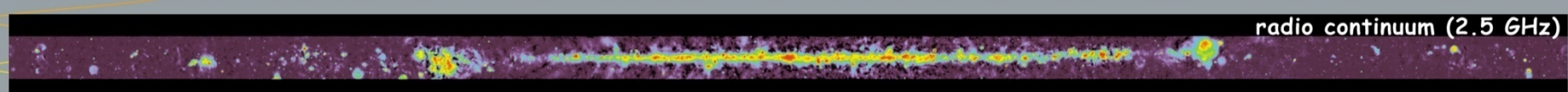
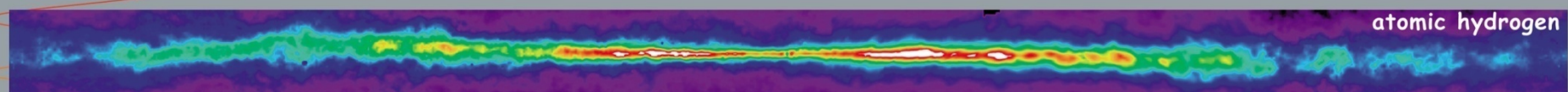
- 1. Education – for primary, secondary higher, and highest education: Knowledge, understanding of humanity's place in the Universe – our Milky Way Galaxy occupies a mid-position domain between Solar System finiteness and Cosmos infinity**
- 2. Astrophysics / Astronomy – Galaxy studies internationally are of increasing interest and value; study of our local stellar neighborhood for familiarity; center / central 10 parsecs with supermassive black hole is most dynamic region of Milky Way**
- 3. History of Human Civilization / Archaeoastronomy**
- 4. NASA, World Space Agencies – 21st Century Program and Policy Development Advance through Galaxy understanding**
- 5. Galacticity – may be as important for the 21st Century, as is Relativity to 20th**



Earthrise Photo : 1968 / Apollo 8



ILO Imaging Galaxy Center



Multiwavelength Milky Way

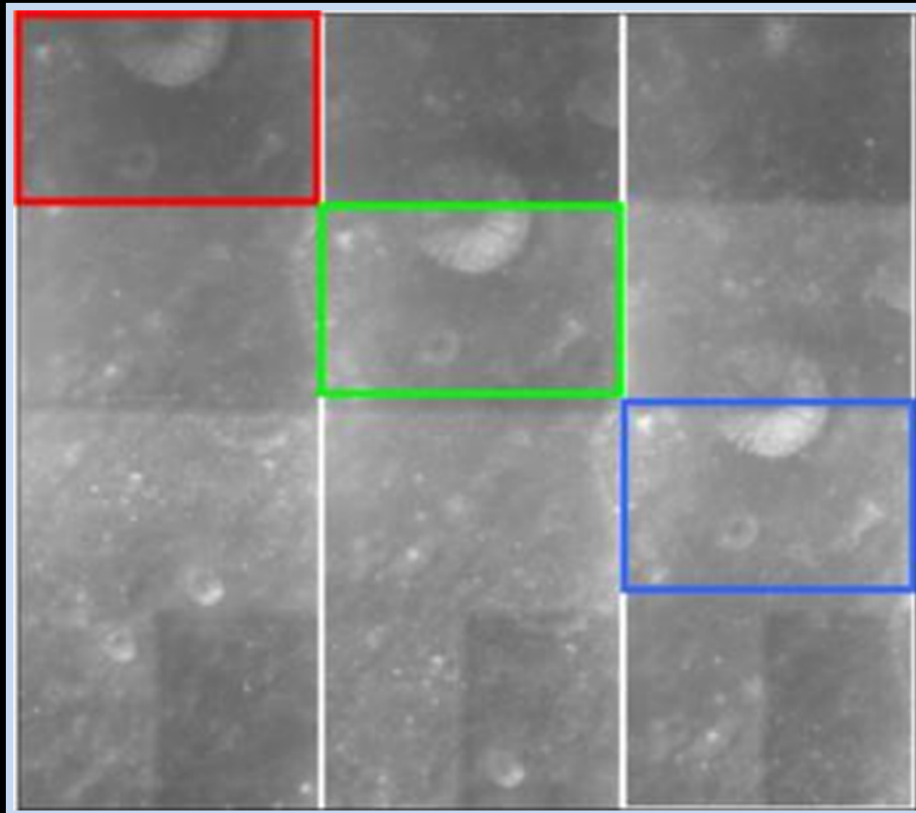
<http://adc.gsfc.nasa.gov/mw>



Near-IR; COBE / DIRBE; 1989-93



Optical; Dr. Axel Mellinger; 1997-99



Multi-spectral: Visible, Near-IR
SMART-1 / AMIE Camera; 2003-06

DIRBE 1.25, 2.2, 3.5 μm Composite



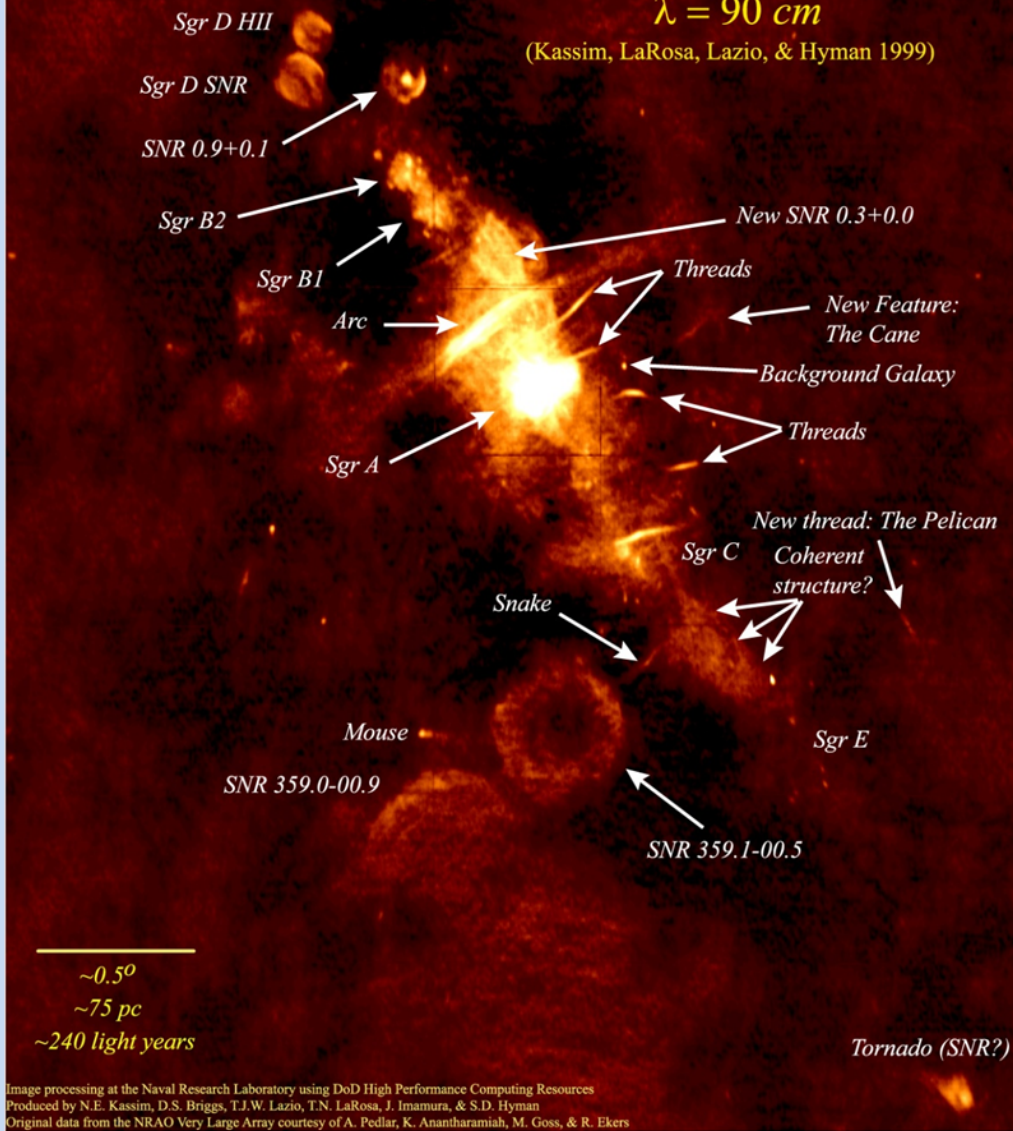
Near-IR; COBE / DIRBE; 1989-93



Wide-Field Radio Image of the Galactic Center

$\lambda = 90\text{ cm}$

(Kassim, LaRosa, Lazio, & Hyman 1999)

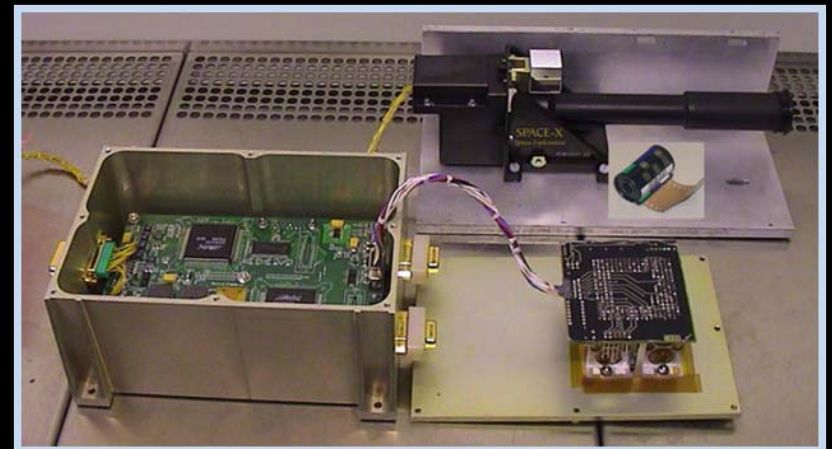
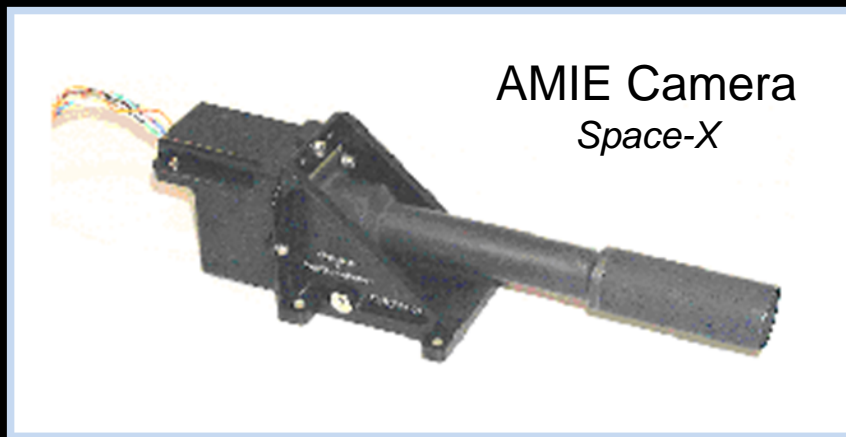




Artists' Rendering, 2008
Robert Hurt / Spitzer Science Center-Caltech / NASA

Instrumentation

- Candidate Instrument – AMIE Camera
- UV / Vis / NIR CCD Imaging Array of 1024 x 1024 pixels
- Field of View – $5.3^\circ \times 5.3^\circ = 738$ parsecs on a side (0.72 pc / pixel)
- Mass = 2 kg



AMIE Electronics



INTERNATIONAL
LUNAR OBSERVATORY
ASSOCIATION

INTERNATIONAL
LUNAR
OBSERVATORY



SPACE AGE
PUBLISHING
COMPANY



Lunar Enterprise Corporation
Hawaii and California, USA

