

Arecibo Management Partners

SRI International

Universities Space Research Association

Universidad Metropolitana



- Became operational in 1963.
- Is the largest single dish radio telescope in the world.
- Supports research in atmospheric science, astronomy, & planetary science.

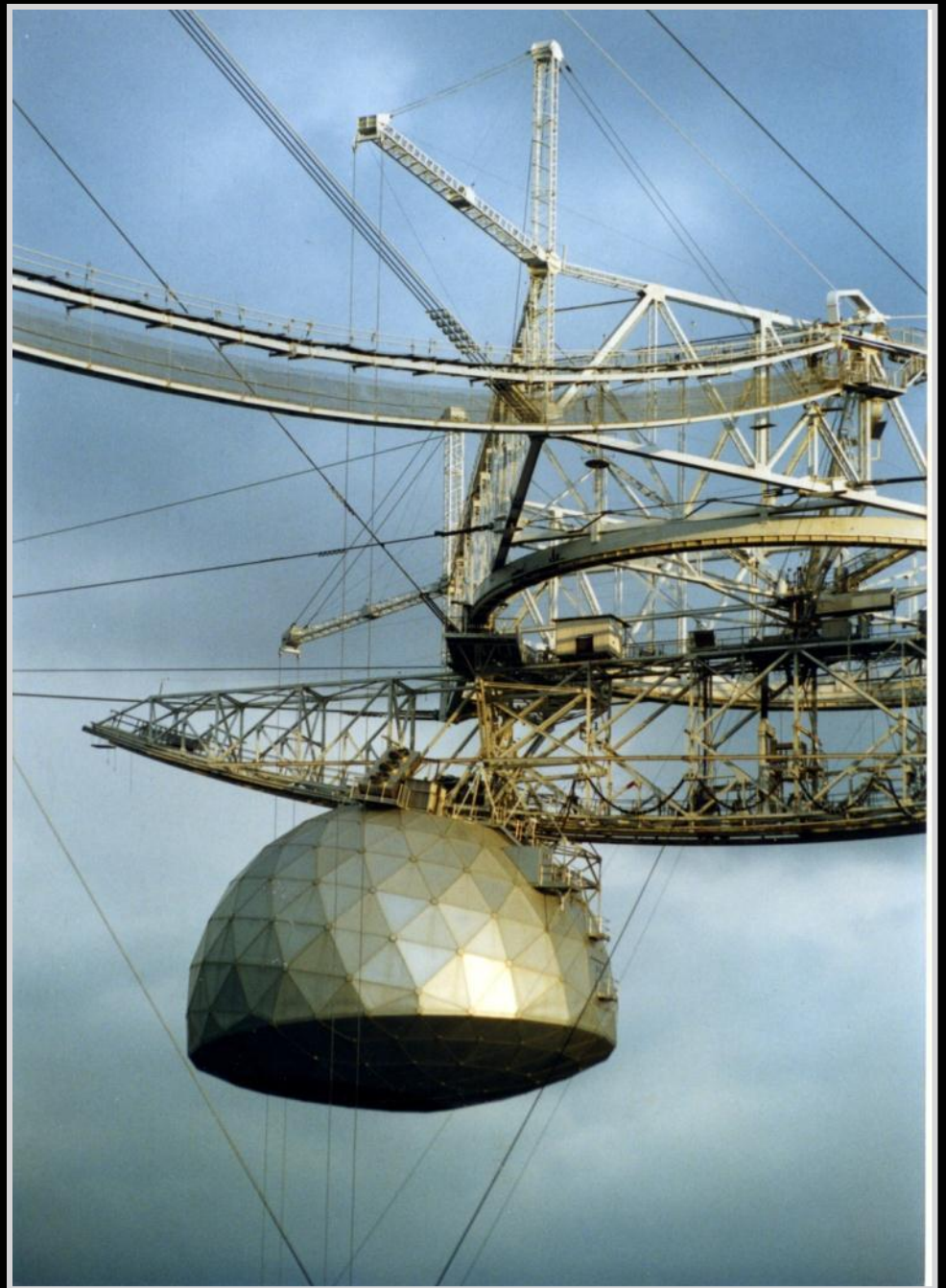


The 430 Antenna

- 96 ft. in length.
- It receives and transmits radio waves of 430 MHz.
- Main instrument used to study the ionosphere.

The Gregorian Dome

- Houses the secondary and tertiary reflectors
- Provides a frequency coverage between 300 and 10,000 MHz.
- It has the radar transmitter used to study planets, asteroids, and comets





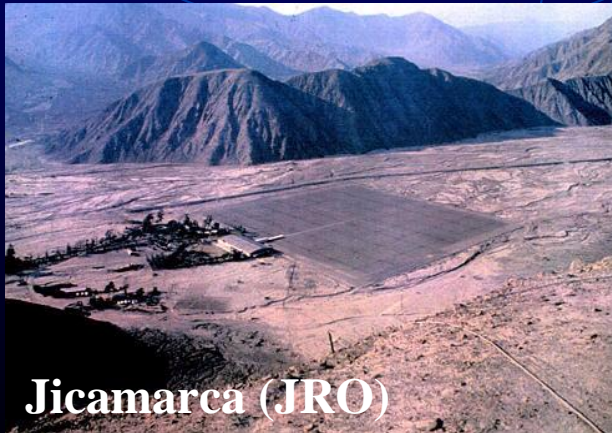
Millstone Hill (MH)



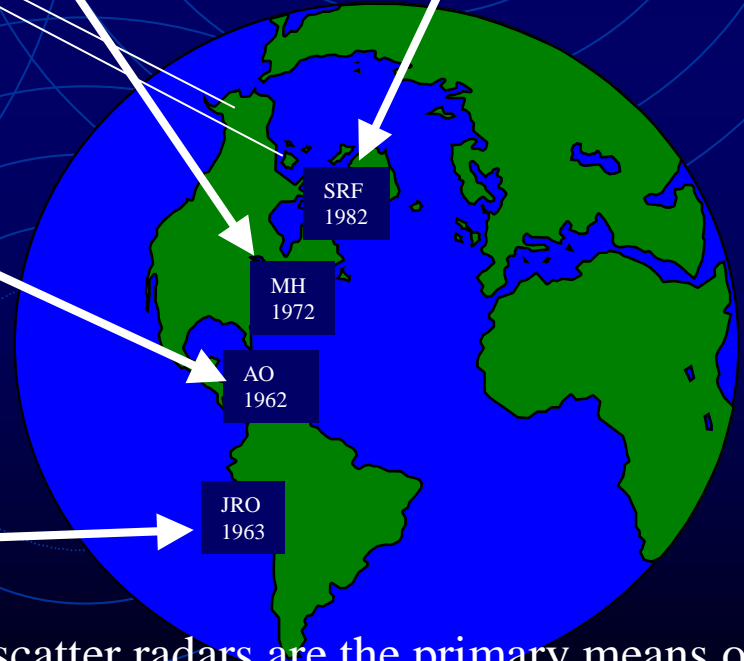
Sondrestrom (SRF)



Arecibo (AO)



Jicamarca (JRO)

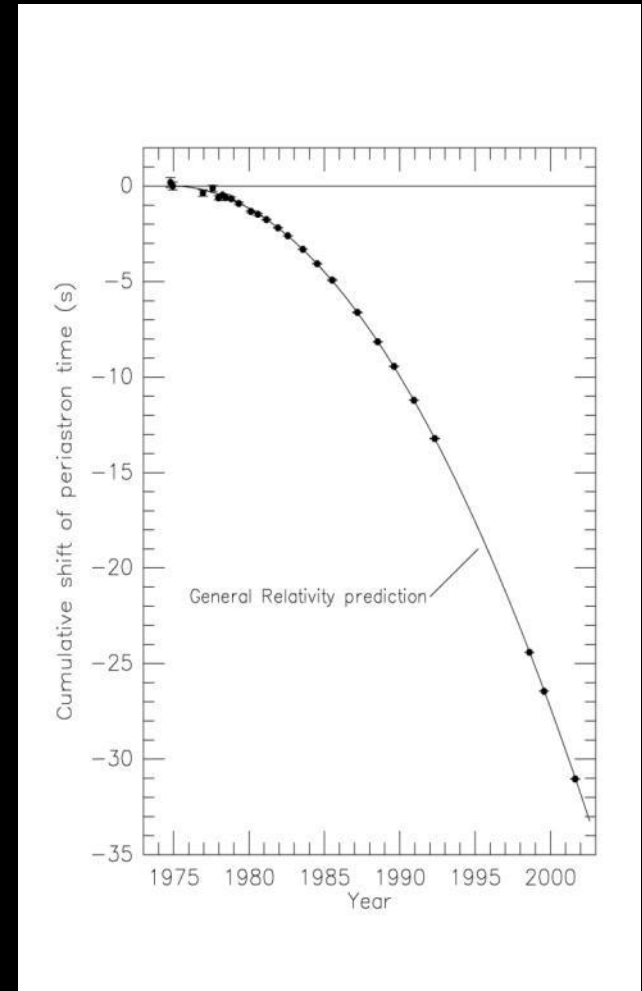


Incoherent scatter radars are the primary means of making ionospheric and upper atmospheric observations

Important Research at the Observatory

■ Binary Pulsar

- In 1974, Russ Hulse and Joe Taylor discovered the binary motion of PSR 1916+13 revealing evidence that the system is losing energy by the emission of gravitational radiation, just as predicted by Einstein's theory of General Relativity.
- In 1993, Hulse and Taylor received the Nobel Prize in physics for "the discovery of a new type of pulsar, a discovery that has opened up new possibilities for the study of gravitation."



NOBEL PRIZE WINNERS



NOBEL PRIZE WINNERS 1993



Russell A. Hulse

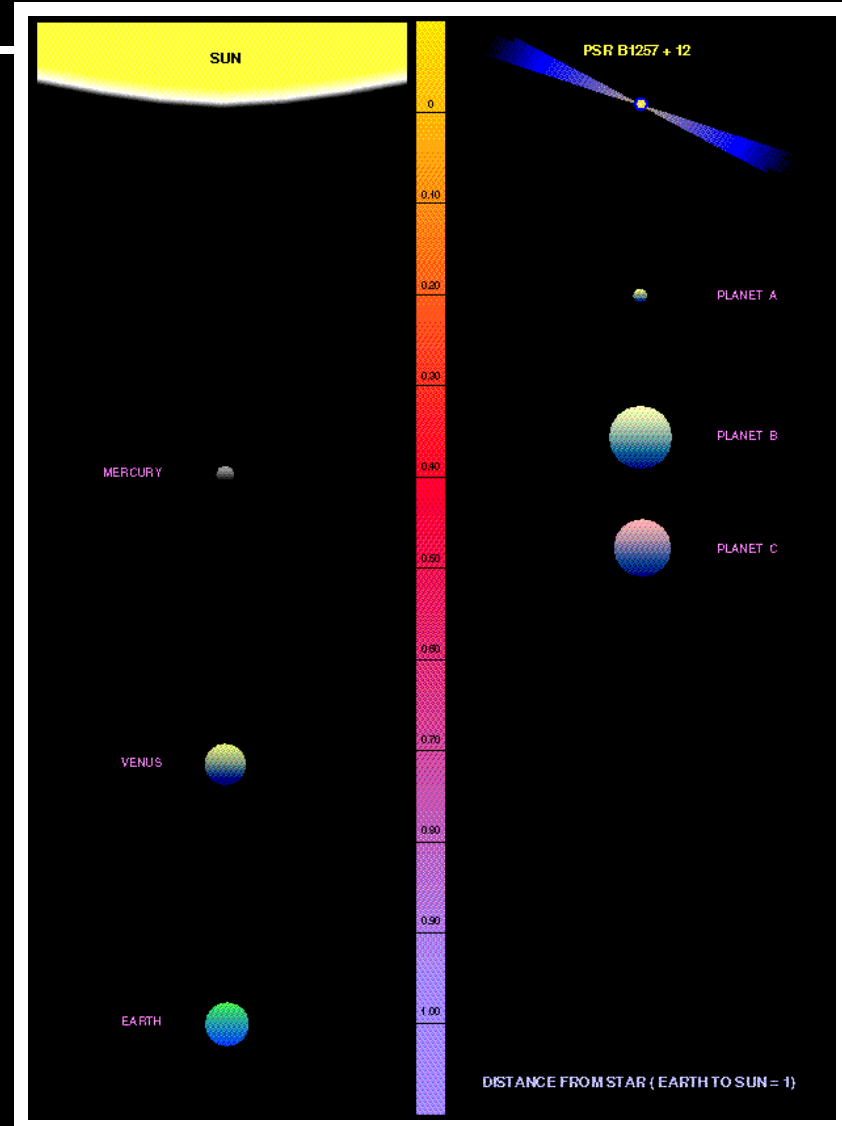


Joseph H. Taylor Jr

Important Research at the Observatory

■ First Extra-Solar Planets

- In 1992, Alex Wolszczan and Dale Frail used precise pulsar timing measurements to detect the first ExtraSolar planetary system. The pulsar's motion can be explained by the presence of at least 3 planets in tight orbit around the pulsar.
- The 1996 Beatrice Tinsley Prize of American Astronomical Society was awarded to Wolszczan for his precision timing of the pulsar planets.

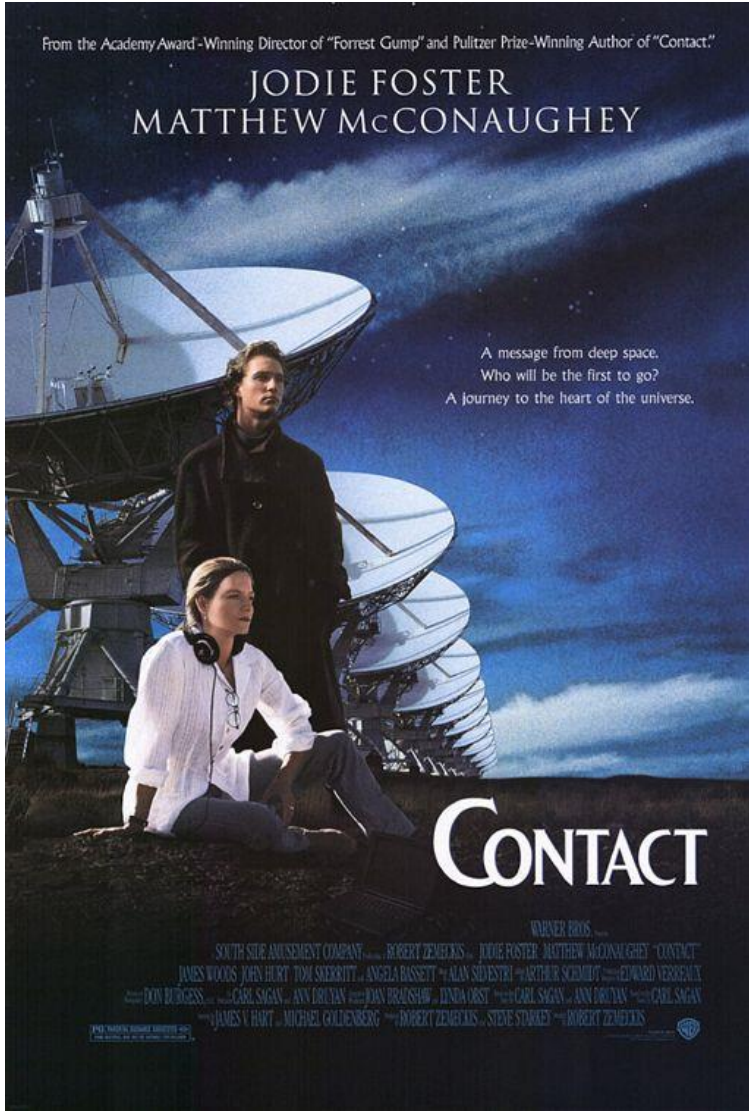


The Angel Ramos Foundation Visitors Center at the Observatory



- *Inaugurated in 1997*
- *Visitor "1 million" reached in 2006*
- *300,000 school children have visited since 1997*

(this is about 50 % of the student population in the public school system)



China FAST Project Visit to the Arecibo Observatory



December 8th, 2011

- A Chinese delegation representing the FAST project visited the Arecibo Observatory facilities on December 8, 2012 and was received by Dr. Robert Kerr, Dr. Juan F. Arratia, and Dr. Sixto González.
 - Ms Xiaoping Zhang, Deputy Director, Guizhou Development and Reform Committee
 - Ms Wei Li, Division Chief, Guizhou Development and Reform Committee
 - Mr. Yuecheng Li, Governor, QianNan City, Guizhou Province
 - Mr. Zhiuog Zhang, Deputy Mayor, Pingtang county of QianNan City, Guizhou Province
 - Ms. YiWang, former Vice Director, NAOC Administration
 - Mr. Bo Peng, Deputy Manager General, Fast Project