

SOLAR NETWORKS – poster produced by Barbara Poppe – The Boulder Solar Observatory is on the NOAA campus at 325 Broadway, Boulder, Colorado. Funding shortages have not allowed a continuous solar observing program, but the site is available for special projects.

HISTORY OF THE RAZDOW TELESCOPE

In 1965, NASA was worried about sending astronauts into space, knowing that in space there were dangerous particles which come from the Sun. So they established the Solar Particle Alert Network (SPAN) to provide warnings of hazardous solar particle events. SPAN consisted of a network of solar observatories around the world so observations could be made continuously. The telescopes were designed and built by the Razdow Manufacturing Company in Newark, New Jersey.

By 1967 Boulder became one of the SPAN observatories when it received its Razdow. The telescope would be used to observe solar flares and related solar phenomena. Using a Hydrogen-alpha filter that blocks most of the light, an observer could look through an eyepiece at the Sun, and a 35-mm camera could take constant film footage of the Sun. A TV camera was also mounted to the telescope and projected the Sun's image on a monitor located in the Space Environment Center operations room.

The Razdow telescope was a valuable part of Space Environment Center history of service for over 30 years. On September 14, 1999, the telescope was moved to this new observatory. The telescope will remain in operation here, providing the Space Environment Center Space Weather Operations with real-time imagery of the Sun.

PHOTOGRAPHING THE SUN

The Razdow was equipped with a 35-mm camera for filming the full disk of the Sun. While patrolling, pictures were taken each second. Changes in the features seen here can alert observers that the Sun is about to erupt and send particles and energy our way.

SUNSPOT DRAWINGS

One of the products produced at the Boulder Observatory was a daily sunspot drawing. These drawings were done by hand as Galileo did them over 400 years ago.

USAF OBSERVING NETWORK

In the 1970s, the U.S. Air Force established the Solar Optical Observing Network (SOON). The SOON took over for the SPAN and replaced the Razdow telescopes with automated state-of-the-art optical instruments. This network continues operations today at observing sites around the world, watching and alerting NOAA and U.S. Air Force forecasters.

Original text by Helen Coffey (dated 19 December 2005)

SOLAR NETWORKS



The Razdow Telescope was a valuable part of Space Environment Center history of service for over 30 years. On September 14, 1999, the telescope was moved to this new observatory. The telescope will remain in operation here, providing the Space Environment Center Space Weather Operations with real-time imagery of the Sun.



PHOTOGRAPHING THE SUN

The Razdow was equipped with a 35-mm camera for filming the full disk of the Sun. While patrolling, pictures were taken each second. Changes in the features seen here can alert observers that the Sun is about to erupt and send particles and energy our way.

HISTORY OF THE RAZDOW TELESCOPE

IN 1965, NASA was worried about sending astronauts into space, knowing that in space there were dangerous particles which came from the Sun. So they established the Solar Particle Alert Network (SPAN) to provide warnings of hazardous solar particle events. SPAN consisted of a network of solar observatories around the world so observations could be made continuously. The telescopes were designed and built by the Razdow Manufacturing Company in Newark, New Jersey.

BY 1967 Boulder became one of the SPAN observatories when it received its Razdow. The telescope would be used to observe solar flares and related solar phenomena. Using an Hydrogen-alpha filter that blocks most of the light, an observer could look through an eyepiece at the Sun, and a 35-mm camera could take constant film footage of the Sun. A TV camera was also mounted to the telescope and projected the Sun's image on a monitor located in the Space Environment Center operations room.



USAF OBSERVING NETWORK

In the 1970's, the U.S. Air Force established the Solar Optical Observing Network (SOON). The SOON took over for the SPAN and replaced the RAZDOW telescopes with automated state-of-the-art optical instruments. This network continues operations today at observing sites around the world, watching and alerting NOAA and U.S. Air Force forecasters.

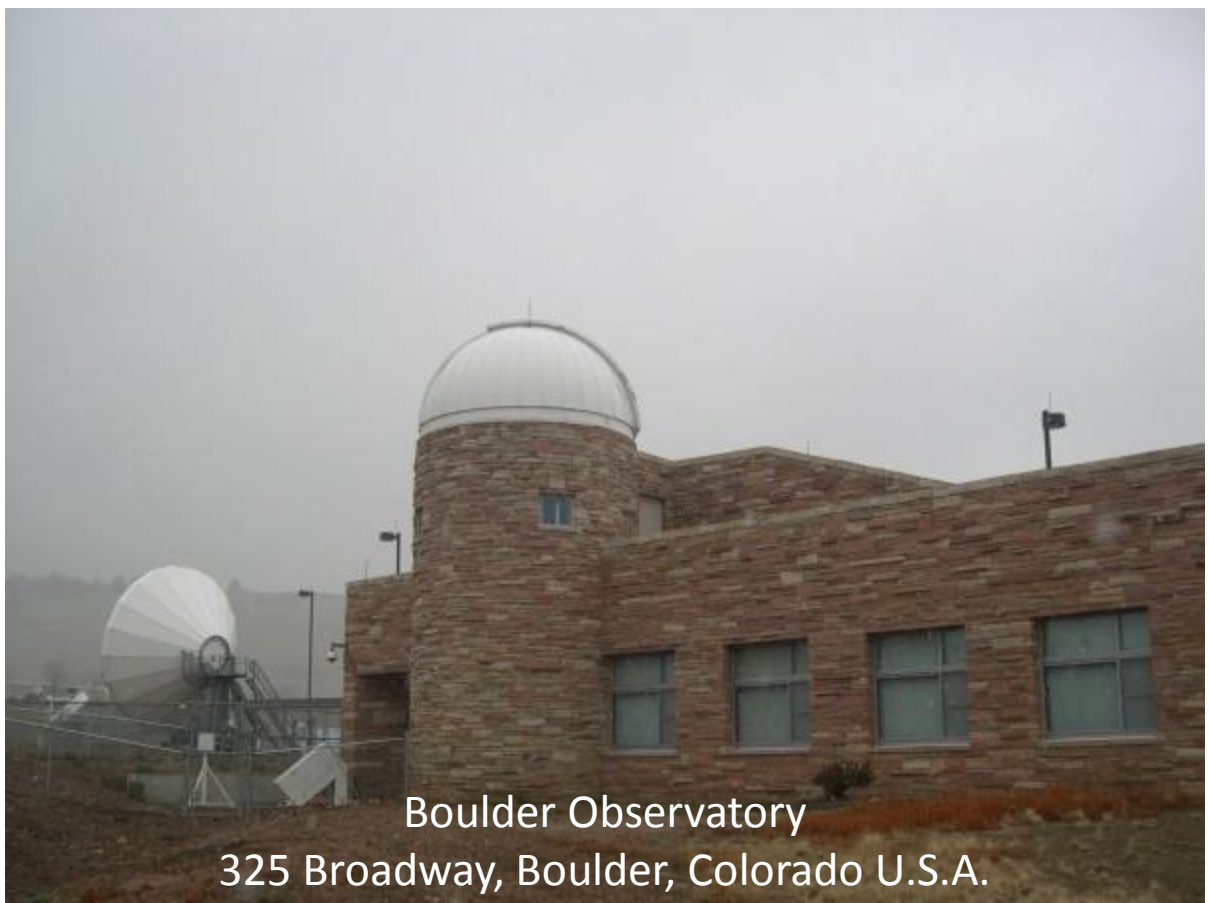


SUNSPOT DRAWINGS

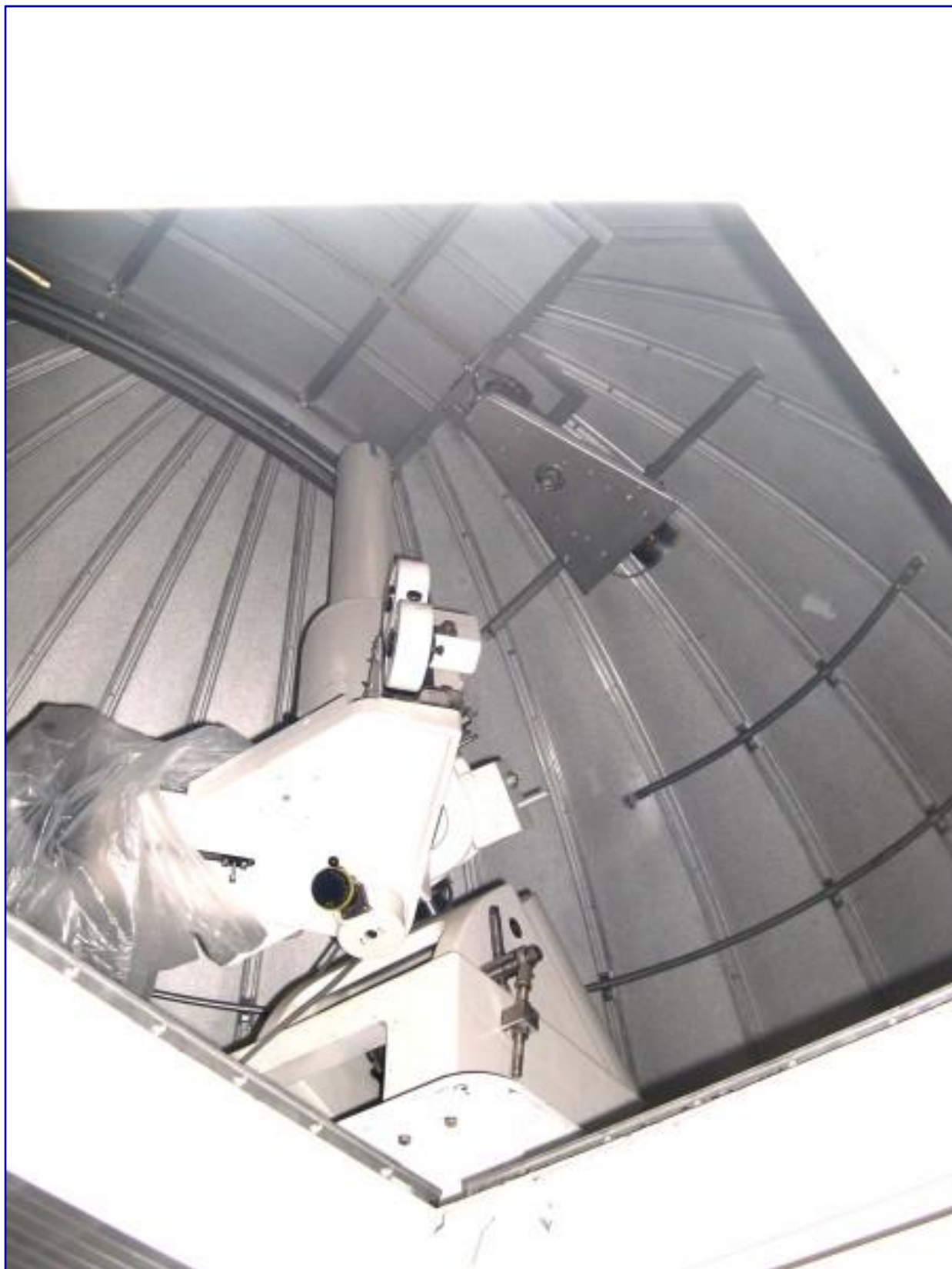
One of the products produced at the Boulder Observatory was a daily sunspot drawing. These drawings were done by hand as Galileo did them over 400 years ago.



Razdow telescope on display



Boulder Observatory
325 Broadway, Boulder, Colorado U.S.A.



Razdow telescope in the Boulder Observatory dome