



Maria MITCHELL

(1818 – 1889)

Maria Mitchell was the first professional female astronomer in the United States. In 1847, by using a telescope, she discovered a comet which as a result became known as the 'Miss Mitchell's Comet.'

She was awarded a gold medal from the King of Denmark as a result of her discovery.

She was also the first woman elected to the American Association for the Advancement of Science.

She was actively involved in the anti-slavery movement and supported women's rights efforts.

Maria's Childhood and Early Adulthood

Maria Mitchell was born on August 1, 1818, in Nantucket, Massachusetts, and was one of nine children. Her parents were Quakers.

Maria's parents valued education and tried hard to provide her with the same quality of education as boys received.

Maria's father William, encouraged her to pursue her interest in astronomy while she was young, and taught her how to use a telescope.

Career and Discoveries

Maria worked as a teacher's assistant, and then went on to become the first librarian at the Nantucket Atheneum library from 1836 to 1856.

During her time as a librarian, Maria became very well-read. Maria was continually stargazing at night, studying solar eclipses, the stars, Jupiter and Saturn.

Discovery of “Miss Mitchell’s Comet”

On October 1, 1847, 28-year-old Maria discovered a new comet, previously uncharted by scientists. This became known as “Miss Mitchell’s Comet”. It is known today as; ‘C/1847 T1’.

She was awarded a gold medal from the King of Denmark as a result of her discovery.

This was a huge achievement, and gave her worldwide fame, since the only previous women to discover a comet were the astronomers Caroline Herschel and Maria Margarethe Kirch.



Maria Mitchell’s telescope, on display in the Smithsonian Institution National Museum of American History

Maria’s achievements

Maria became the first professional woman astronomer in the United States, and made several important steps to advance the role of women in astronomy.

In 1848, the American Academy of Arts and Sciences voted her in as their first female member.

In 1850, she was elected to the American Association for the Advancement of Science.

In 1865, Maria became professor of astronomy at Vassar College. She was named as Director of the Vassar College Observatory, where she was granted permission to use the 12 inch telescope, the third largest in America at that time.

Maria became the first woman to be elected to the American Philosophical Society, in 1869.

Maria Mitchell became a much loved and respected educator, and she participated in innovative and exciting projects with her students.

In 1882, they documented Venus traversing the sun, one of the rarest planetary alignments known to man.

Campaigning for women’s rights

Maria was passionate about the rights of women.

In 1873, Maria helped found the American Association for the Advancement of Women, and was elected the society’s president from 1874 to 1876.

In 1873 she attended the first meeting of the Women’s Congress.

Honours and Awards

Maria Mitchell received many honours and awards to recognise her hard work and achievements in astronomy.

The Maria Mitchell Observatory in Nantucket is named in her honour.

Other organisations, vessels and lunar craters that bear her name include the Maria Mitchell Association, also in Nantucket; a World War II ship, the SS Maria Mitchell; and a crater on the moon, “Mitchell’s Crater”.


In 1994, Mitchell was posthumously inducted into the National Women’s Hall of Fame.

On August 1, 2013, the search engine Google honoured Maria Mitchell with a ‘Google doodle’ showing her in cartoon form on top of a roof gazing through a telescope in search of comets.



Maria Mitchell’s Google Doodle

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