

Exploring the Solar System III – Telescopes

Exploring the Solar System – III

TELESCOPES

Exploring the Solar System III

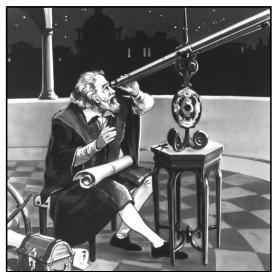
The collage illustrates the evolution of astronomical instruments:

- Galileo 1620**: A black and white portrait of Galileo Galilei looking through a telescope.
- Hooke 1918**: A close-up of a gold-colored telescope eyepiece mounted on a tripod.
- Hooker 1918**: The large blue truss structure of the Hooker telescope at Mount Wilson Observatory.
- Hale 1948**: The interior of the Hale Telescope dome, showing the large white telescope mount.
- Hubble 1990**: A photograph of the Hubble Space Telescope against a dark background.
- ELT 2028**: An architectural rendering of the European Extremely Large Telescope (ELT) in its observatory dome.
- JWST 2021**: An artistic rendering of the James Webb Space Telescope, showing its gold-coated mirror segments against a star-filled background.

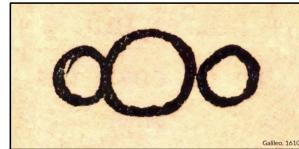
The image consists of three panels. The top left panel is a black and white engraving of Galileo Galilei, an elderly man with a beard, sitting on a stool and looking through a large telescope mounted on a stand. The bottom left panel is a handwritten astronomical observation log from 1613. It contains several columns of Latin text and numerous small hand-drawn stars and celestial bodies, likely representing the positions of Jupiter's moons over time. The right panel is a quote from a 19th-century book titled 'Galileo and Jupiter's Moons' by Sir John Lubbock. The quote reads: "... our own eyes show us four stars which wander around Jupiter as does the Moon around the Earth".

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Galileo and Saturn



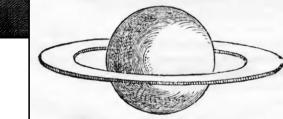
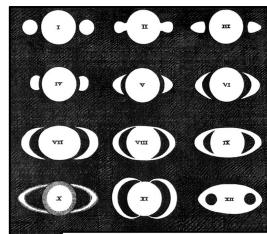
"The first sight that I had of Saturn was of three round stars ... that in the middle considerably larger than the two lateral ones"



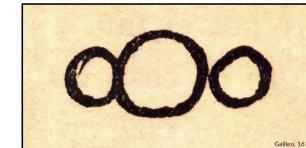
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The Shape of Saturn



Huygens 1659



Galileo 1610



Hubble 2003



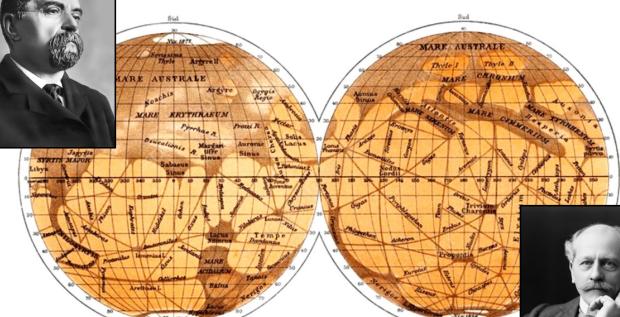
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Canals on Mars



Schiaparelli 1880s



Lowell 1890s



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Dr Steve Barrett

Canals on Mars



"... there can be no doubt that living beings inhabit our neighbor world"

Lowell 1906

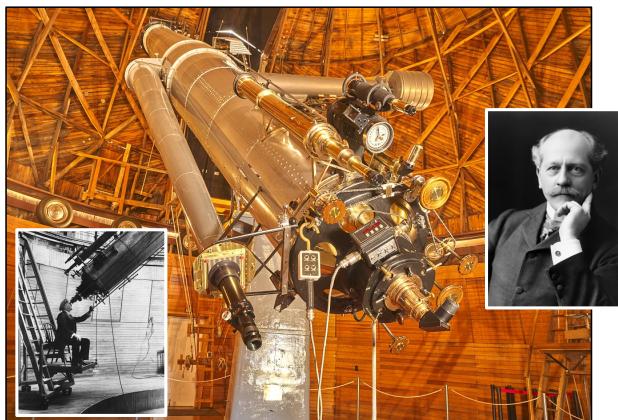


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Droitwich U3A 4 Apr 2025

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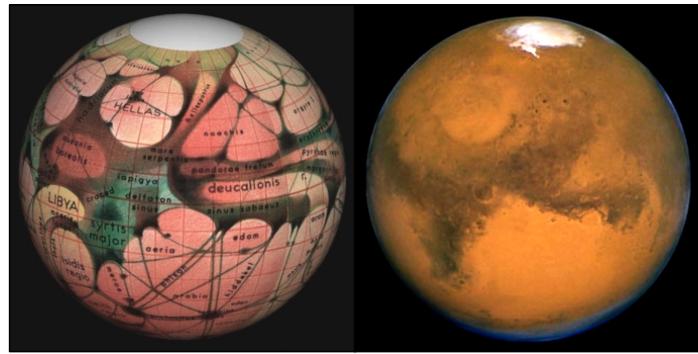
Lowell Observatory



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Canals on Mars



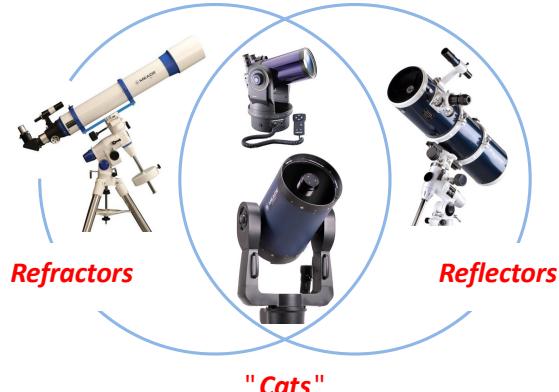
Antoniadi 1894

Hubble 2003

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Amateur Telescopes



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Amateur Telescopes

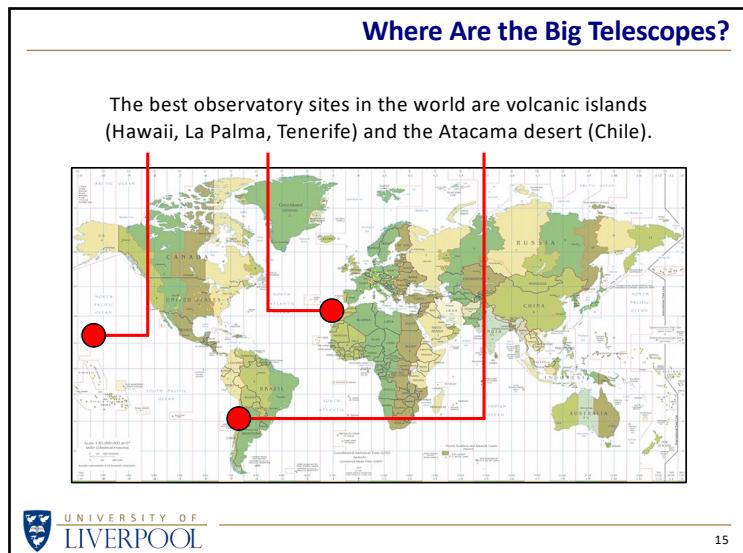
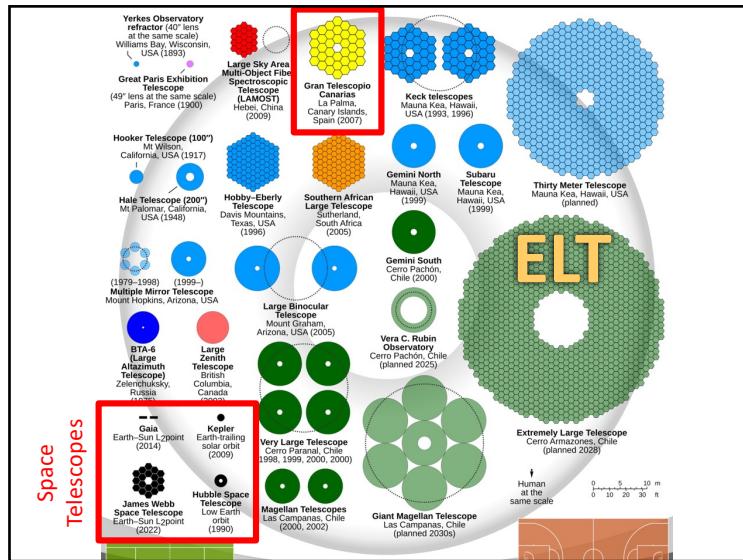
Some amateur telescopes are very big and very expensive.



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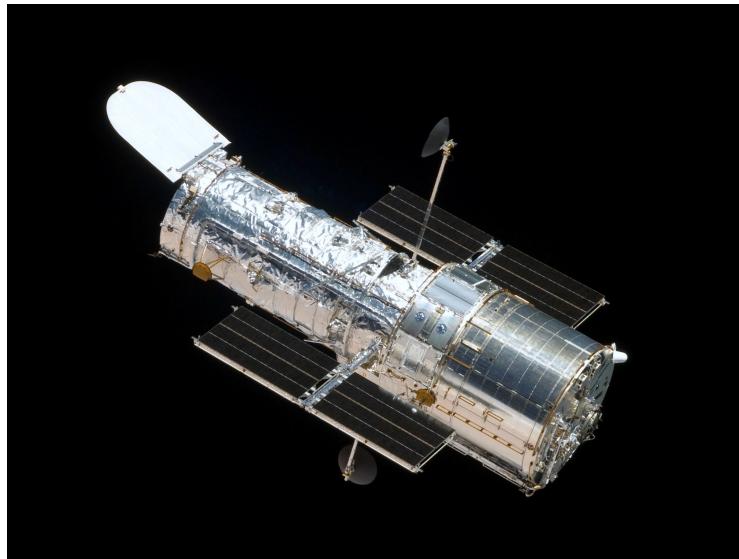


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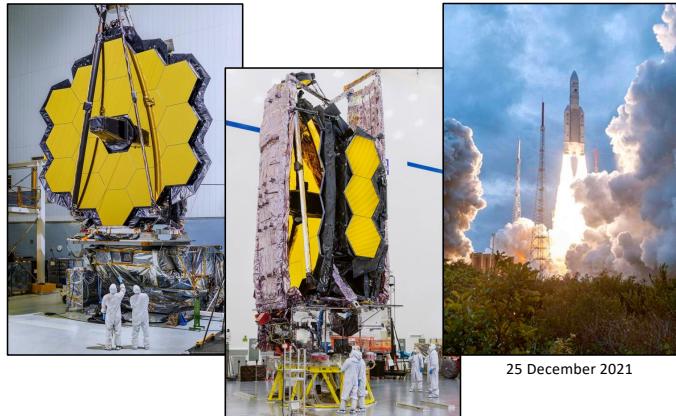
Higher Than a Mountain Top



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James Webb Space Telescope

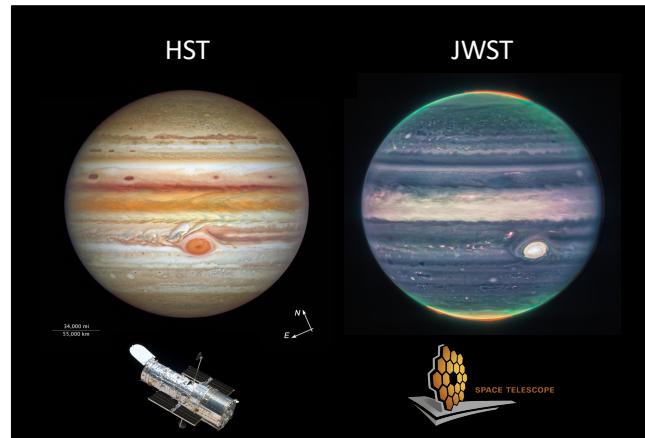


25 December 2021



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Jupiter

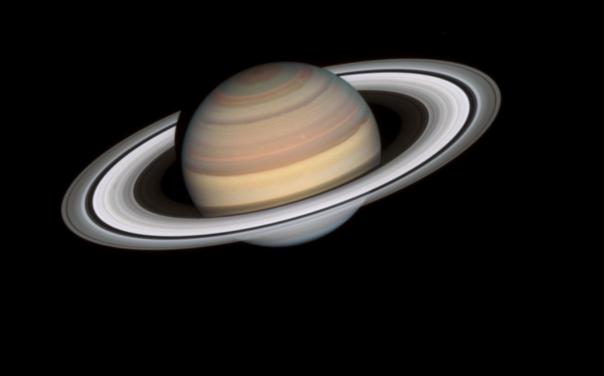


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Saturn

HST



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Saturn

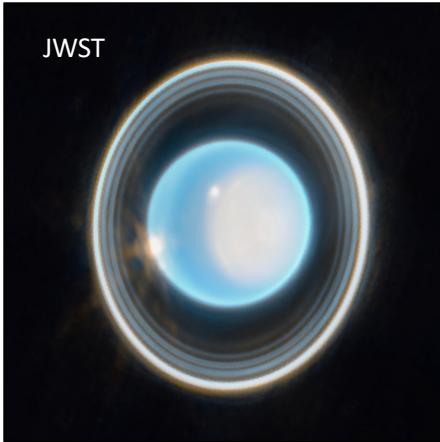
JWST



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Rings of Uranus

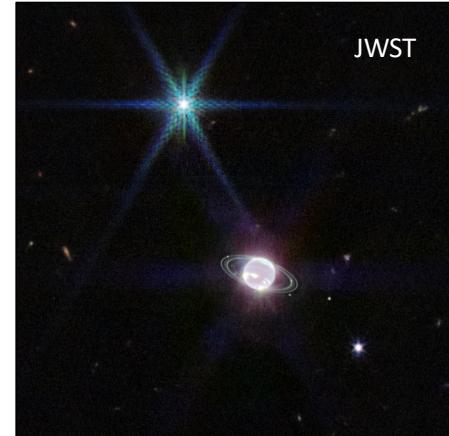
JWST



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Neptune and Triton

JWST



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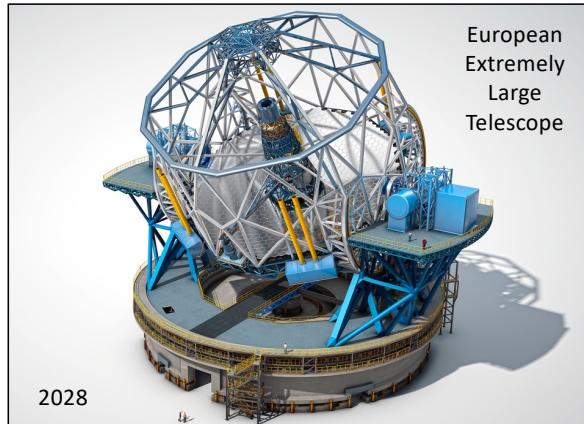
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Under Construction – LSST



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Under Construction – EELT



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Want To Know More?



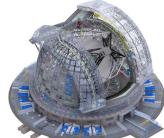
HubbleSite.org



WebbTelescope.org



LSST.org



ELT.ESO.org



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www.liverpool.ac.uk/~sdb/Talks

Dr Steve Barrett

DU3A 4 Apr 2025