


Exploring the Solar System III – Telescopes

Exploring the Solar System – III

TELESCOPES



Dr Steve Barrett Norton Priory Feb 2025

Exploring the Solar System III Telescopes

400 Years of Telescopes

First Views

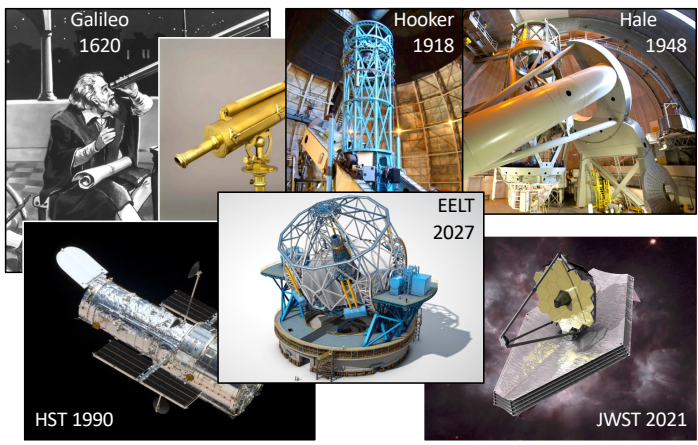
Latest Views

What Next?

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Keeping an Eye on the Universe



Galileo 1620

Hooker 1918

Hale 1948

EELT 2027

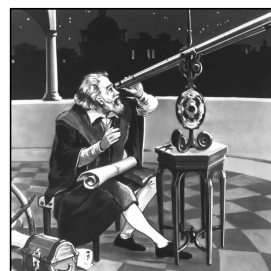
HST 1990

JWST 2021


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Galileo and Jupiter's Moons



" ... our own eyes show us four stars which wander around Jupiter as does the Moon around the Earth "




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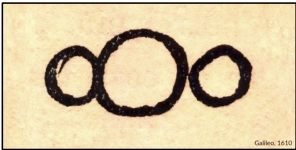
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Galileo and Saturn



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

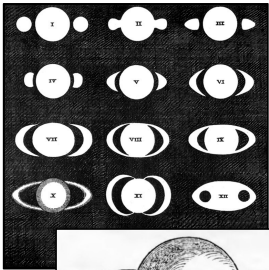


Galileo, 1610

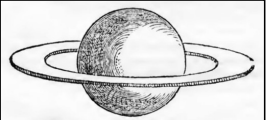


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The Shape of Saturn




Galileo, 1610



Huygens 1659




Hubble 2003

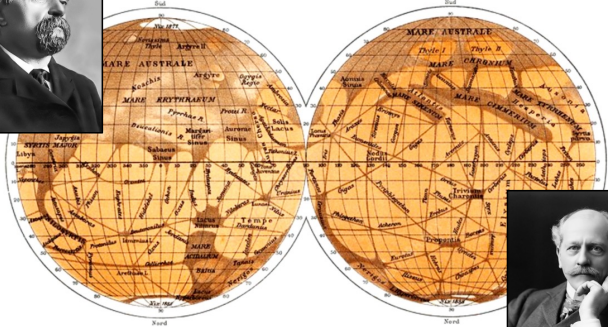



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Canals on Mars



Schiaparelli 1880s





Lowell 1890s




7

Canals on Mars



Lowell 1906

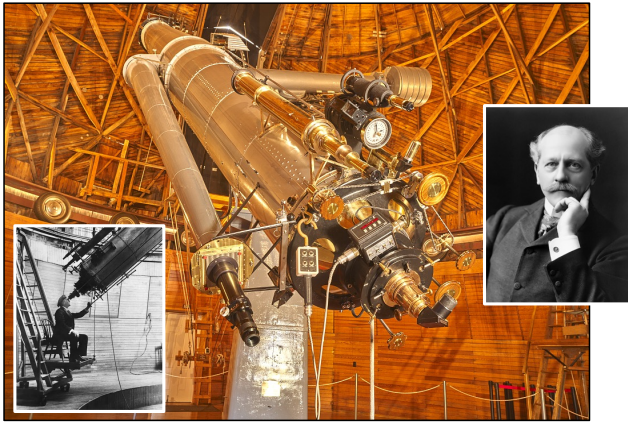
"... there can be no doubt that living beings inhabit our neighbor world"



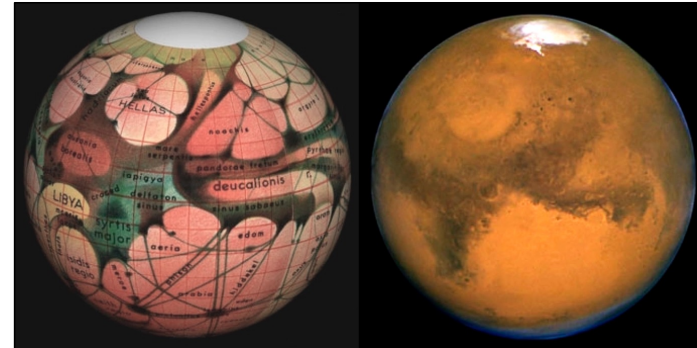
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Lowell Observatory



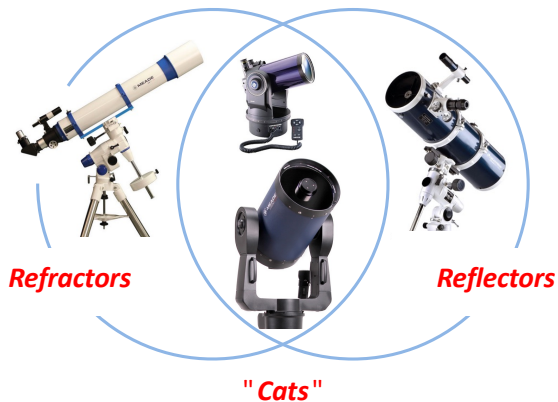
Canals on Mars



Antoniadi 1894

Hubble 2003

Amateur Telescopes

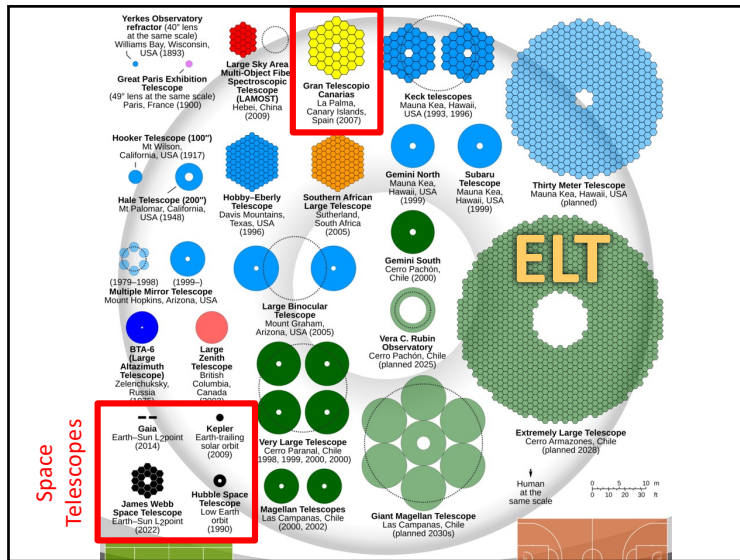


Amateur Telescopes

Some amateur telescopes are very big and very expensive.



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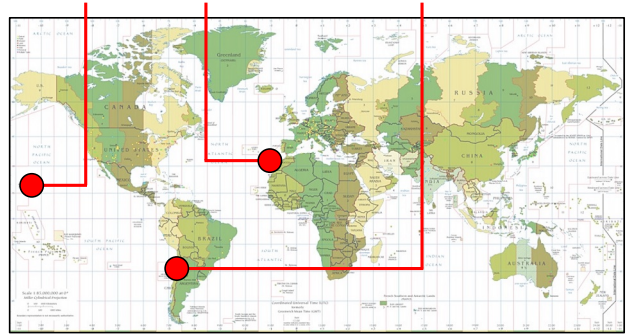


Hale Telescope

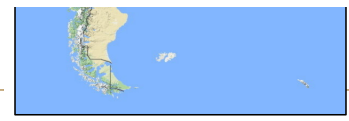


Where Are the Big Telescopes?

The best observatory sites in the world are volcanic islands (Hawaii, La Palma, Tenerife) and the Atacama desert (Chile).

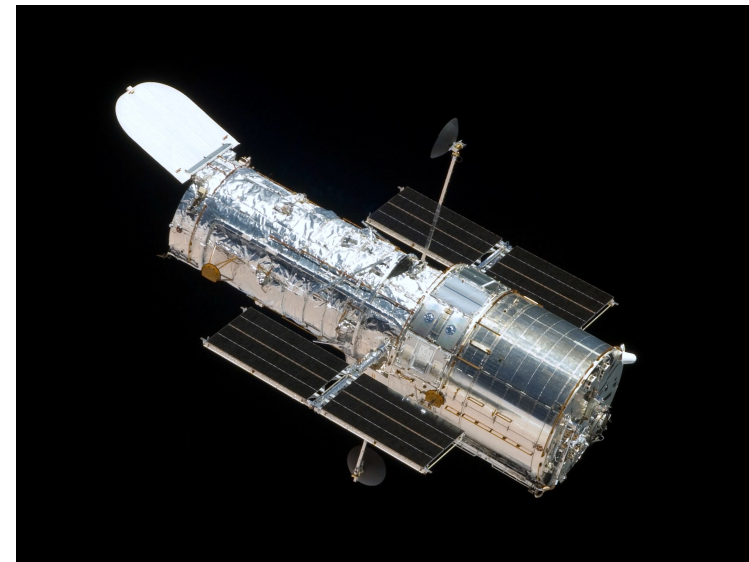


Cerro Pachón

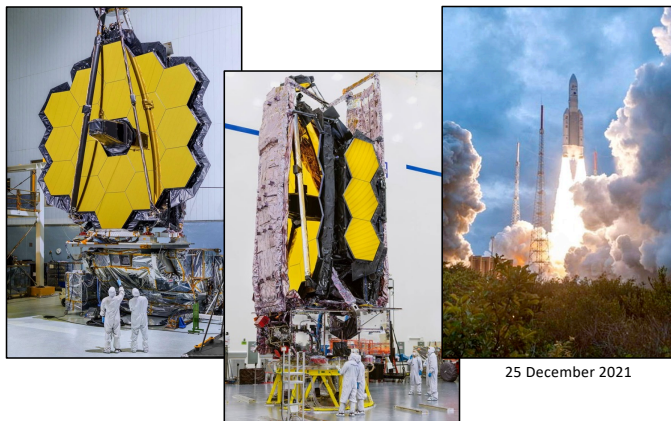


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Higher Than a Mountain Top

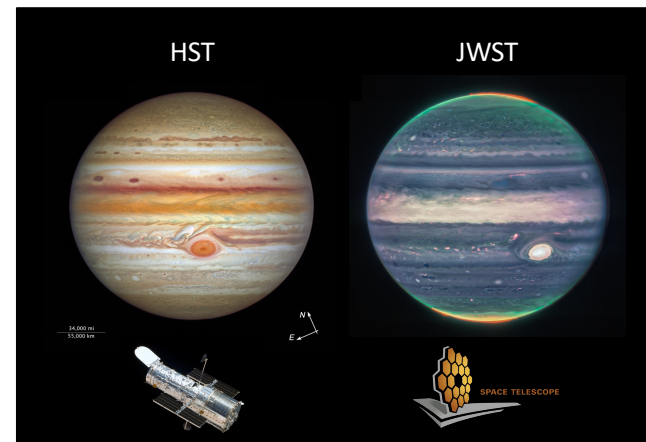


James Webb Space Telescope

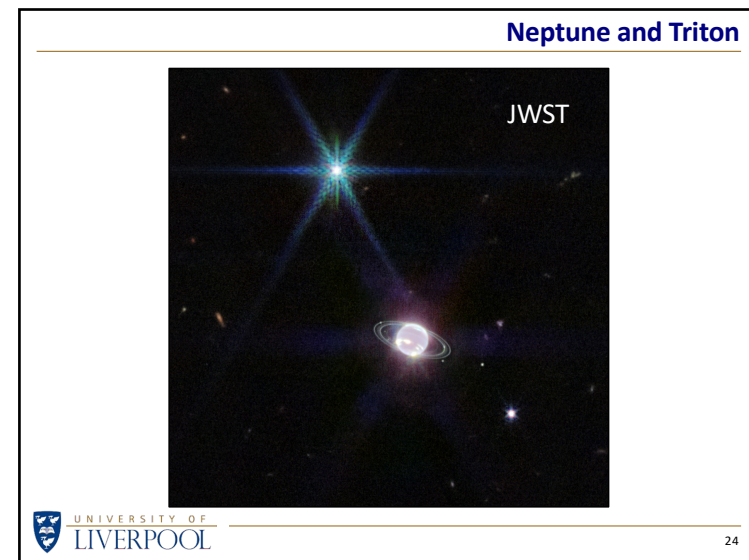
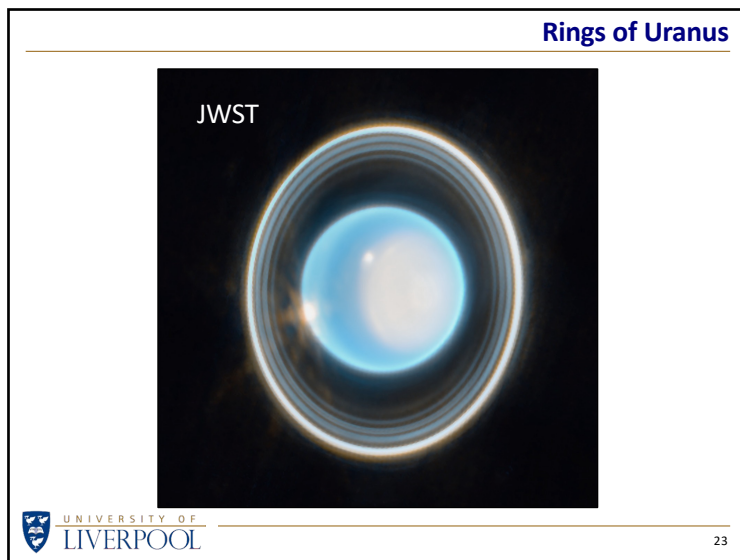
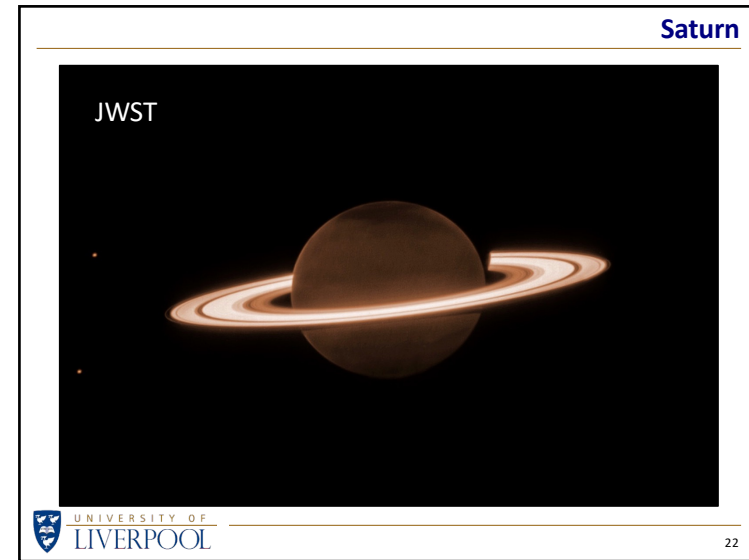
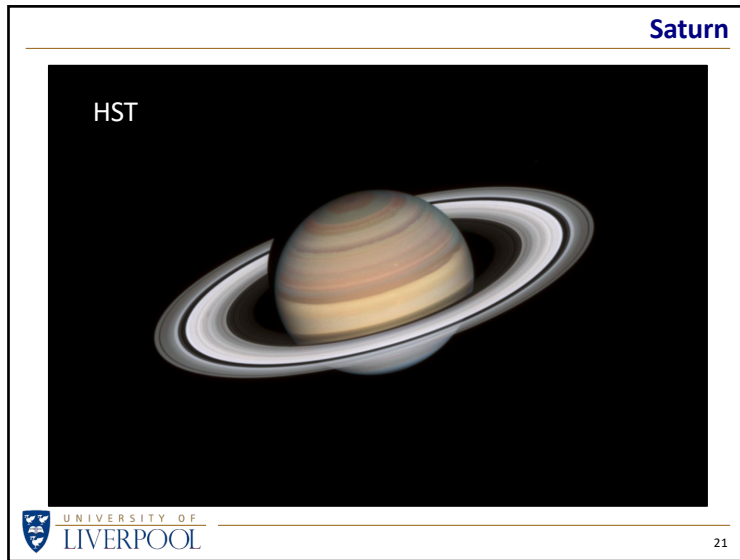


25 December 2021

Jupiter



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Under Construction – LSST

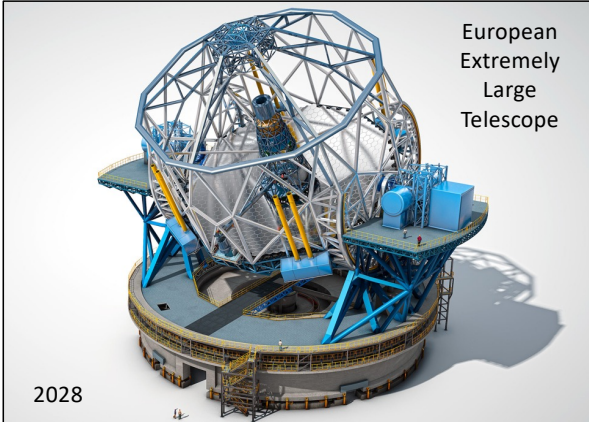


Legacy Survey of Space and Time
2025-2035

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Under Construction – EELT



European Extremely Large Telescope
2028

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Want To Know More?



HubbleSite.org



WebbTelescope.org



LSST.org




ELT.ESO.org

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