

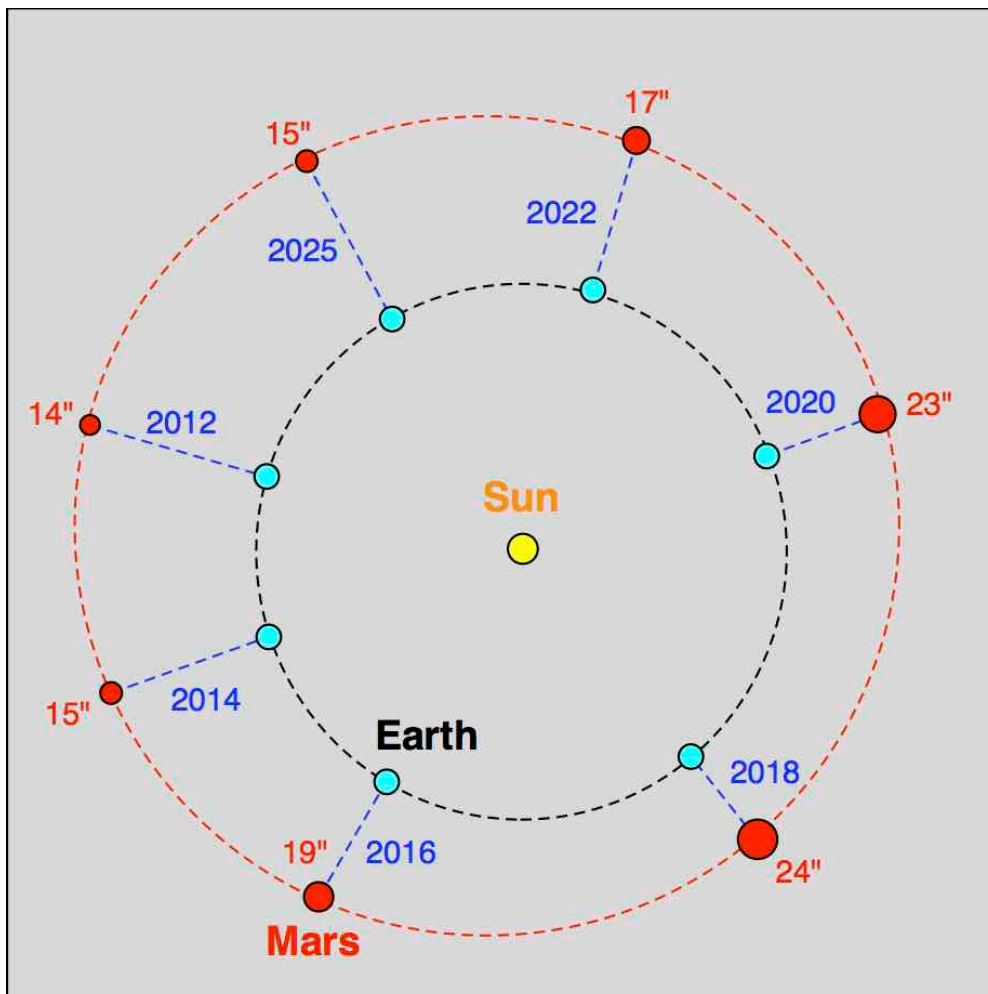
# Mars Opposition - Sunday 22<sup>nd</sup> May 2016

Mars can appear as small as 3.5" in angular diameter or as large as 25.1", depending on the relative positions of the Earth and Mars in their orbits.



Images of Mars by HST

**Mars Oppositions** occur when the Earth passes between the Sun and Mars. Because of the orbit times of the two planets, this occurs about every 2 years and 2 months. Mars' orbital eccentricity is about 6 times greater than the Earth's, so its distance from the Earth and angular size can vary markedly over successive oppositions.

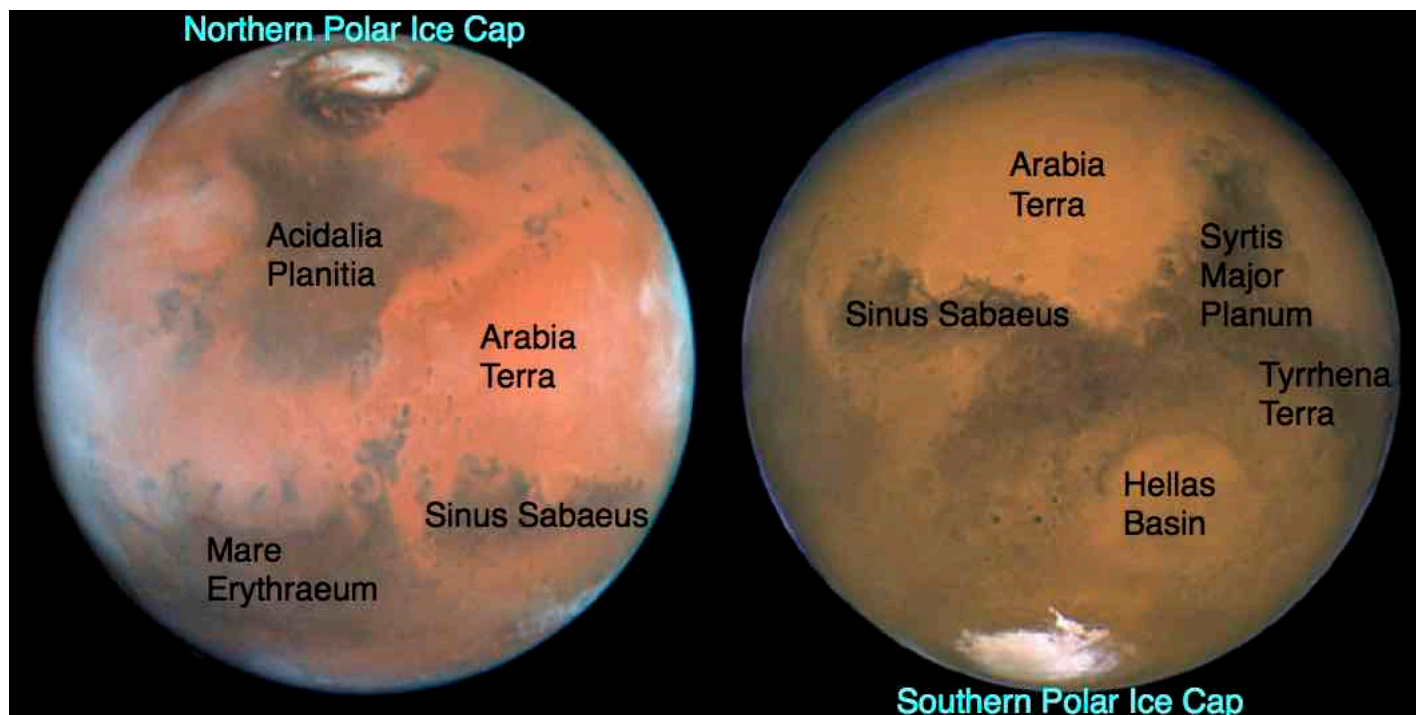


## Mars Opposition Dates 2012-2025

Earlier years are shown as well to compare the time between dates and the increase/decrease in angular size of the planet over time.

Year	Date	Ang. Diameter
2012	3 <sup>rd</sup> March	13.9"
2014	8 <sup>th</sup> April	15.2"
2016	22 <sup>nd</sup> May	18.6"
2018	27 <sup>th</sup> July	24.3"
2020	13 <sup>th</sup> October	22.6"
2022	8 <sup>th</sup> December	17.2"
2025	16 <sup>th</sup> January	14.6"

Some of the surface features of Mars (images by HST) - my labelling:



Rob Horvat (WSAAG)