Subject: Mars to be closer to Earth then in 60,000 years Posted by Xtrm2Matt on Fri, 01 Aug 2003 16:11:36 GMT

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Quote:Living too close to a neighbor may not be very appealing, but when Earth's neighboring red planet moves closer than it's been in 50,000 years, observers expect nothing but acclaim.

Scientists and amateur astronomers will benefit from the spectacular view of Mars this August as it appears bigger and brighter than ever before, revealing its reflective south polar cap and whirling dust clouds.

On August 27, 2003, the fourth rock from the sun will be less than 55.76 million kilometers (34.65 million miles) away from the Earth. In comparison to the space between your house and your neighbor's yard, that may seem like a large distance, but Mars was about five times that distance from Earth only six months ago.

"Think of Earth and Mars as two race cars going around a track," said Dr. Myles Standish, an astronomer from NASA's Jet Propulsion Laboratory, Pasadena, Calif. "Earth is on a race track that is inside the track that Mars goes around, and neither track is perfectly circular. There is one place where the two race tracks are closest together. When Earth and Mars are at that place simultaneously, it is an unusually close approach, referred to as a 'perihelic opposition'."

Opposition is a term used when Earth and another planet are lined up in the same direction from the Sun. The term perihelic comes from perihelion, the point of orbit in which a celestial body is closest to the Sun. This August, Mars will reach its perihelion and be in line with Earth and the Sun at the same time.

The average opposition occurs about every two years, when Earth laps Mars on its orbit around the Sun. In 1995, the opposition brought Mars 101.1 million kilometers (62.8 million miles) from the Earth, twice as far as this most recent approach.

This composite image of Earth and Mars was created to allow viewers to gain a better understanding of the relitive sizes of the two planets.

"It gets more complicated as the race tracks are changing shape and size and are rotating, changing their orientation," Standish explains. "So this place where the two tracks are closest together constantly changes, changing the opposition closeness as well. This is why a 'great' approach, like the one this month, hasn't happened in 50,000 years. But with the tracks closer together now, there will be even closer approaches in the relatively near future."

Aside from visiting a local observatory, peering through a telescope is the best way to take advantage of this unique opportunity. Since June, Mars has been noticeably bright in the night's sky, only outshined by Venus and the Moon. Observers in the Northern Hemisphere will see it glowing remarkably in the southern sky lying in the constellation Aquarius, best seen just before dawn.

"You're not going to go outside and see some big red ball in the sky. It will look like a bright red

star," said Standish.

The word 'planet' is derived from the Greek expression for 'wanderer.' At such a close distance, Mars remains true to this expectation as it consistently wanders across the night's sky. Tracking the "red star's" movement from week to week is yet another way to appreciate this rare occasion, since Mars appears to dart across the sky in comparison to more distant planets, such as Jupiter.

Although Mars will be closest on August 27, astronomers suggest viewing the planet earlier, as dust storm season is just beginning on the red planet and can obstruct a more detailed view.

Whether you are viewing through a telescope, glancing through a pair of binoculars, or star-gazing outside the city, be sure to take advantage of this once-in-a-lifetime opportunity, for Mars will not make another neighborly visit this close until 2287.

Found this over at the official NASA website, also i've heard people talking about it...

http://mars.jpl.nasa.gov/spotlight/marsClose01.html