



PARI

PISGAH
ASTRONOMICAL
RESEARCH INSTITUTE

Astro Advisory

*Notice of an upcoming
astronomical event.*

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THE VERNAL EQUINOX

Rosman, NC (March 7, 2017) – Astronomers at the Pisgah Astronomical Research Institute point out that at 6:29 a.m. EDT on Monday, March 20 the sun will cross the celestial equator in the sky heading north. This will be the first moment of spring.

What is the astronomical significance of this event? At this moment the sun, in its apparent path around the sky, will stand directly over the equator of the earth. It is one of two times during the year when this happens, the other being on the first day of autumn.

These are the two days of the year when the Sun is above the horizon for exactly half the day. Thus, the length of daylight is equal to that of the night (neglecting twilight and atmospheric refraction) and this day is termed the *equinox* from the Latin for “equal night.” After the equinox in March, called the *spring* or *vernal equinox*, the hours of daylight continue to lengthen with the sun above the horizon for a longer time each day. This continues until the *summer solstice* in June (12:24 a.m. EDT on June 21). Following the solstice the days get shorter until at the *fall* or *autumnal equinox* (next at 4:02 p.m. EDT on September 22) when the day and night are once again equal in length.

Since on the vernal equinox the sun stands directly above the earth’s equator, folklore holds that one is able to stand an egg on its end on that day. This old wives’ tale is true; one can stand an egg on its end on that day! However, the tale is only a half truth because, in fact, one can stand most eggs on their ends any day of the year, not just on the vernal equinox. Try it! (It really depends on the characteristics of the egg, not the date.)

About PARI

PARI is a public not-for-profit public organization established in 1998. Located in the Pisgah National Forest southwest of Asheville, NC, PARI offers STEM educational programs at all levels, from K-12 through post-graduate research. For more information about PARI and its programs, visit www.pari.edu.

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