

Correction for Old GOAT Measures

This article contains an error in wording on page 10 of the print-version of the February 2022 issue. The editorial board would like to thank Rick Luttmann for pointing this out. The term ecliptic plane in the first paragraph in the “Moon Declination” subsection should be replaced by equatorial plane. The angle α is correct for the ecliptic plane, but should be changed to the angle for the equatorial plane. The author provided more explanation below.

From the author: The Earth’s *ecliptic* plane is the plane of Earth’s orbit about the Sun; the Earth’s *equatorial* plane is the plane through Earth’s equator. The angle α between the ecliptic and the Moon’s orbital plane is about 5 degrees; the angle between the equatorial and the ecliptic planes is about 23.5 degrees. The Moon’s declination δ , as ideally measured from Earth’s center, is the angle between Earth’s equatorial plane and the Moon’s center. The angle ψ between Earth’s equatorial plane and the Moon’s orbital plane varies from about 18.5 degrees to 28.5 degrees with a period of 18.6 years due to the precession of the Moon’s orbit. Thus the Moon’s declination δ varies from $-\psi$ to ψ over the Moon’s orbital period of about 27.3 days.

Below is an updated image for figure 5 from the article with the corrected labels.

