NOTE

A SOLSTITIAL SITE NEAR PETERBOROUGH?

Acting upon a suggestion from Mr Gordon King of Peterborough Astronomical Society, Earl Fitzwilliam wrote to ask if we would be interested in surveying the two stones called Robin Hood and Little John on the north bank of the river Nene near Milton, Peterborough. Mr King had taken photographs of the midwinter Sun setting over the horizon some two miles away.

In latitude 52° 34' 16'' N, longitude 0° 19' 03'' W, the two stones, still standing about 3ft high but not vertical, indicate an azimuth of about 229° $56' \pm 20'$. About a dozen paces apart, they can only act as a direction indicator, but were they perhaps used as a backsight for a horizon foresight?

Clearly visible from the site is the lowest point of a hollow or low saddle on the horizon. With lowest point at an azimuth of 229° 12′ 54″ and observed altitude 12′ 22″, the col subtends an arc of azimuth of about 40′. Trees obscure the ground on either side of the saddle in the agricultural fields.

For an estimated temperature of $44^{\circ}F$ the correction for refraction at the sunset is about $32' \cdot 6$ and for solar semi-diameter and parallax of respectively $16' \cdot 2$ and $0' \cdot 1$, the "observed" declination is found to be -23° $54' \cdot 9$, which indicates a date of about 1860 B.C. No presently obvious horizon marker was evident upon inspection of the open fields forming the horizon, but this does not mean that a foresight was never erected. Without the evidence of a foresight it cannot be claimed that the two stones were placed for accurate calendrical reasons but undoubtedly they indicate by themselves the winter solstice.

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