

ASGV1 EX 5.2 (Shape of the Earth)

The shape of the earth can be determined by measuring the altitude of the stars (especially Polaris) as one travels northward. Since its altitude (above the horizon) gets higher the further northward one travels, the Earth must be curved.

Its curvature in the east-west direction can be inferred from the differing times of sunrise & sunset for observers at different longitudes. Note that this requires some other method of measuring times: one cannot use a sundial to measure (independently) the time of sunrise & sunset!