CLIMATES *between the* POLAR CIRCLES *and the* POLES.

Length of Days.	Latitudes.		Length of Days.	Latitudes.	
Months.	D.	M.	Months.	D.	M.
1	67	21	4	78	30
2	69	48	5	84	05
3	73	37	6	90	00

An EXPLANATION *of the most useful Terms used in Geography and Astronomy.*

1. Zenith is that point of the Heavens that is right over head.

2. Nadir is that point right under feet, being directly or diametrically opposite to the Zenith.

3. Zenith's Distance is the number of degrees that the sun or any star wants of ninety degrees, when they are upon the Meridian or greatest height.

4. Altitude is height. Meridian Altitude is the greatest altitude, or height, at twelve o'clock.

5. Declination is the distance of the sun, or any star, from the Equator, or Equinoctial, counted on the Brazen Meridian in degrees, and is called North or South, according to which side of the Equinoctial the Declination is.

6. Right Ascension is an arch of the Equinoctial contained between the sign Aries ♈ and the degree of the Equinoctial that is cut by the Brazen Meridian when the sun, or star, is brought to the Meridian.

7. Oblique Ascension is that arch or degree of the Equinoctial contained between the Sign ♈ and the degree of the Equinoctial which is cut by the Horizon at the rising of the sun, or star.

8. Oblique Descension is just the reverse, being the degree of Equinoctial cut by the Horizon at the setting of the sun, or star.

9. Ascensional Difference is the difference of degrees between the Right and Oblique Ascension, which converted into time, by allowing fifteen degrees for every hour, shews how much the sun, or star, rises or sets before or after six : that is, subtract the Oblique from the Right Ascension, tells the ascensional difference.

10. Amplitude is an arch of the Horizon contained between the true east and west points at the rising and setting of the sun, or stars, counted in degrees from the east and west points of the Horizon where they rise and set, and is called North and South Amplitude accordingly.

11. Azimuth is in effect the same as Amplitude, save only with this difference, that whereas Amplitude is only at rising and setting, Azimuth shews the distance from the east and west points, at any time when the sun, or stars, are above the Horizon.

Note. Azimuth is not expressed alike by all authors: some call it always North or South Azimuth, and reckon the Azimuth from these two points eastward or westward. Others reckon it from the east and west points, either northward or southward, which I think is best, they being the two points that Azimuth is nearest to, in our or any lesser latitude, at any hour ; however, it matters not which, if you mind this one rule ; suppose I say, the sun has sixty degrees Azimuth from the north eastward, it is the same as if I say he has thirty degrees Azimuth from the east northward.

12. Elevation of the Pole is the same as Latitude. There are three sorts, viz.

Latitude of a place is its distance from the Equator, either north or south, numbered in degrees on the Brazen Meridian ; or in other words, it is the Elevation of the Pole above the Horizon.

Latitude of Navigation is the distance of a ship from the Equinoctial, counted on the Meridian : so that if a ship sails towards the Equinoctial, she is said to depress the Pole ; and if she sails from the Equinoctial, she is said to raise the Pole.

Latitude of a Star is its distance from the Ecliptic, being an arch of a circle of longitude, reckoned from the Ecliptic towards its Pole, either north or south.

13. Longitude is also of three sorts, viz.

Longitude of a place is an arch of the Equator intercepted between the first Meridian (or point Aries ♈) on the Equator and the Meridian of the place.

Longitude of a Star is an arch of the Ecliptic, counted from the beginning of Aries to the place where the star's circle of longitude crosses the Ecliptic ; so that it may be said to be the star's place in the Ecliptic, counted from the point Aries, which cannot exceed a hundred and eighty from the Equinoctial Point.

Longitude in Navigation is an arch of the Equator contained between the first Meridian and the Meridian the ship is in.

Note 1. Longitude of places differ according to what first Meridian they are counted from ; for some place their first Meridian at Gratioso, others at Teneriff, and others at Ferrol.

Note 2. In order to find the longitude of any place on the Globe, only observe whether it be east or west ; if eastward, then count so many degrees from the point or sign Arie ♈ on the Globe to the right hand ; if westward, count so many degrees towards the left, which will be the east or west longitude required : and the difference of the longitude of any two places is no more than their distance from each other counted in degrees on the Equator, or any parallel of latitude in proportion. But,