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[6] When the local latitude is equal to the complement of the obliquity, one half of the orb whose midpoint is the equinox point will rise in one stroke and there will be no co-ascension for it; in the other half, the entire equinoctial will rise. In localities whose latitude is greater than the complement of the obliquity, any two arcs that are permanently visible or permanently invisible will have no co-ascensions, but otherwise any two arcs will have co-ascensions, one in reverse order and the other in regular order. When the local latitude reaches the limit, the rotation of the orb being in a spinning manner, the co-ascensions will become completely baseless, since there will be no rising nor setting, and the equinoctial and the horizon will coincide.

[7] Some call the parts of the equinoctial "degrees," and some "units of time," because time is determined by the amount of its motion. This has been a description of the co-ascensions of the [zodiacal] signs—God is all-knowing.

CHAPTER SEVEN
On Determining the Equation of Daylight and the Ortive Amplitude in the Localities

[1] The arc on the horizon between the ascension of any part [of the zodiacal orb] and the ascension of the equinoctial is called the ortive amplitude of that part. It is obvious that the maximum ortive amplitude at the equator is equal to the obliquity. In other localities, the ortive amplitude increases with the local latitude, until the local latitude reaches the complement of the obliquity, and the ortive amplitude of a quarter of the orb is attained. The ortive amplitude of every quarter of the orb is equal to that of another quarter, one in the sequence [of the zodiacal signs] and the other in counter-sequence. The ortive amplitude of the two northern quarters is like that of the two southern quarters. [Also,] the ortive amplitude of any part is like the

occasive amplitude of its facing counterpart.

[2] The equation of daylight, which is the difference between the meridian of any part and the meridian of the equator, is an arc of the day-circle of that part, to which the equation of daylight is related, between the horizon circle and the declination circle that passes through the two poles of the meridian. Therefore, in the half that is in the direction of the visible pole, that arc will be above the Earth, and in the other half it will be below the Earth. That which is toward the west will be equal to what is toward the east, and that which is above the Earth will be equal to what is below the Earth, like equal declinations, i.e., parts whose distances from the two equinox points are alike in both directions.

[3] From the declination circle that passes through the two poles of the equinoctial, and from the horizon circle, and from the day-circle, a triangle will occur above the Earth or below the Earth: one side of that triangle will be the declination of that part to which the day-circle belongs; one side the ortive amplitude; and one side the equation of daylight. The arc along the equinoctial that rises with the aforementioned arc along the day-circle is also called the equation of daylight; and it is an arc along the equinoctial between two declination circles, one passing through the rising place of the equinoctial and the other passing through the rising place of that part. This arc will be below the Earth for parts whose declination is in the direction of the visible pole; and above the Earth for those whose declination is in the direction of the invisible pole. For the parts whose declination is in the direction of the visible pole, the equation of daylight is added to a quarter revolution, which then becomes half the arc of daylight; for those whose declination is in the other direction, it is subtracted from a quarter revolution, which then becomes half the arc of daylight. Half of the arc of daylight is an arc that rises for half the period of visibility of any part, being one half of the visible segment of any day-circle; the arc

of night is the complement of this arc up to half a revolution—God is all-knowing.

CHAPTER EIGHT

On Determining Degrees of Transit, Rising, and Setting

[1] The degree of transit of any [celestial] part is that degree of the zodiacal orb that transits the meridian along with that part. The degree of rising is that degree that rises with [that part], and the degree of setting is that degree that sets with it. When that part has no latitude, the degree of true position will be exactly the degree of transit, rising, and setting. However, if that part has latitude and is also on the solstitial colure, it transits the meridian circle at the degree of true position. If it is not on the solstitial colure, its degree is one of two kinds: it is either between the first of Capricorn and Cancer or between the first of Cancer and Capricorn.

[2] If [the part] is in the first half, at the time its degree [of transit] crosses [the meridian], the pole of the zodiacal orb is in the direction of the local latitude in the western half. Therefore, one half of the latitude circle that crosses through two parts of the zodiacal orb on the meridian is northwesterly, and one half is southeasterly. This being so, parts whose latitudes are northerly cross the meridian before the degree [of transit], and parts whose latitudes are southerly transit the meridian after the degree.

[3] In the second half [of the zodiacal orb], it will be the opposite: the pole of the zodiacal orb is on the eastern side, and [one] half of the latitude circles crossing parts on the zodiacal orb that are on the meridian is northeasterly and [the other] half is southwesterly. Thus, those whose latitudes are northerly cross after the degree, and those whose latitudes are southerly cross before the degree. It is likewise at the equator: of those between the first of Capricorn and Cancer, the