Astrology in polar regions and on the southern hemisphere

by Dieter Koch

Traditional methods for calculating horoscopes and drawing charts unfortunately do not suit all geographic regions equally well. Especially birth places near and beyond the polar circles are problematic, that is on latitudes near 66°34 north or south and beyond. Birth places on the southern hemisphere, too, are prone to confuse astrologers, as soon as there are questions regarding the concrete view of the sky.

The following topics will be examined briefly:

1. What are the polar circles?
2. Odd behaviour of the MC/IC in polar regions
3. Odd behaviour of the ascendant/descendant in polar regions
4. Births near the polar circle and births at geographic latitudes higher than 60°
5. Problems with astrological houses in polar regions
6. Horoscopes of the southern hemisphere
7. Links

1. What are the polar circles?

For observers who do not live in equatorial regions, the sun rises much higher in summer and makes a greater arc than in winter. For observers of equatorial regions, the sun is seen at times in the north and at times in the south.

The further one goes north, the less high rises the sun at noon, and the shorter becomes the diurnal arc. Especially around the winter solstice (21 December), the sun is seen only near the horizon and only for a short time. If one stands on the arctic circle around that date, the sun appears only around noon on the southern horizon and shortly thereafter disappears again.

Around the summer solstice (21 June) it is the other way round. The further north one goes, the longer becomes the diurnal arc, and the nocturnal arc becomes shorter. On the arctic circle, the sun does not set even at midnight, but can be seen on the northern horizon as the so-called "midnight sun".

The arctic circle (northern polar circle) is defined as the geographic latitude on which the sun does not rise at the winter solstice any more, and does not set on the summer solstice. This is the case at the latitude 66°34N. The southern hemisphere also has a polar circle, the antarctic circle, and one can observe the same phenomena there.

Strictly speaking, this theoretical definition of the polar circles is only approximately correct. Because of the strong refraction of the sun light near the horizon (atmospherical refraction), the midday sun is visible at the winter solstice even a little north of the polar circle. And the midnight sun can be observed at the summer solstice even a little south of the polar circle.

A special situation exists exactly on the north or south pole. During the whole day, neither a rising nor a setting of the sun can be observed. The sun remains at nearly the same height for 24 hours. Around the summer solstice (21 June), it has an almost constant altitude of 23°26' above the horizon. Near the equinoxes (21 March and 23 September), again, it crawls along the horizon for 24 hours.

2. Odd behaviour of the MC/IC in polar regions

North of the arctic circle, the sun does not rise on the winter solstice (at 0° Capricorn), but stays *under* the horizon even at noon. From this it follows that an MC at 0° Capricorn, i. e. at the point of the winter solstice, is not above, but *below* the horizon. At he same time, accordingly, the IC must be *above* the northern horizon. As a matter of fact, for some time every day, the MC is below the horizon in polar regions, while the IC is above the horizon at the same time. That concept of Astrology, where
MC = above = concious
IC = below = unconcious/subconscious
does not seem to work here all the time.

In such cases, the whole lower half of the horoscope, i. e. the half from the ascendant to the descendant, is in fact *above* the horizon, whereas the whole upper half of the horoscope, from the descendant to the ascendant, is *below* the horizon. In chart drawings of Astrodienst, the two celestial hemispheres are labeled with "above the horizon" and "below the horizon" in such cases.

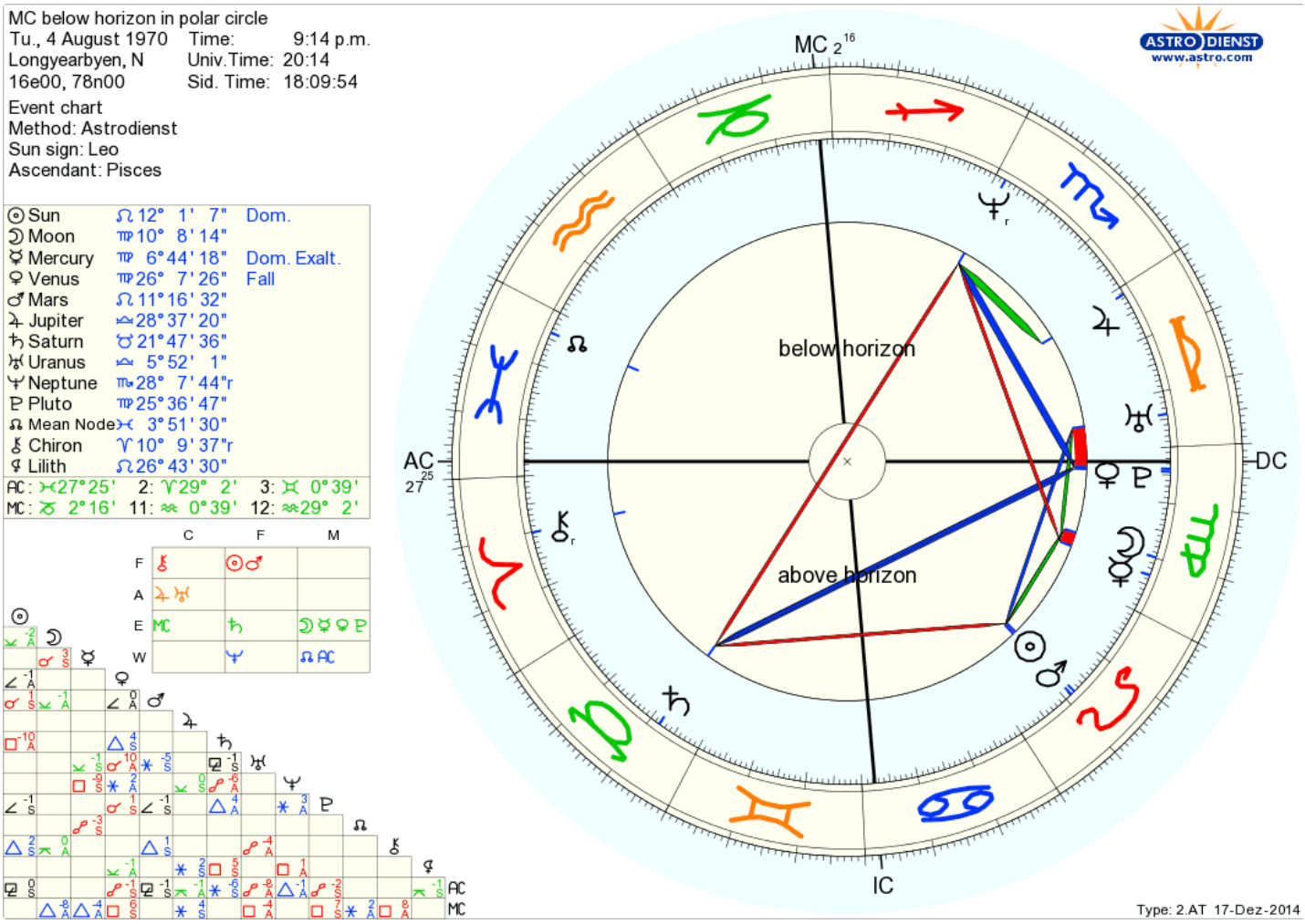

Figure: Astrodienst chart drawings indicate if the MC and the upper half of the horoscope are below the horizon.

The question arises whether MC and IC should be switched here, making the MC the IC and vice versa. The dilemma is not easy to solve. Although an MC at 0° Capricorn is below the horizon, this point of the zodiac has reached its *highest* culmination in that moment. It just did not make it above the horizon. Likewise, the position 0° Cancer, although it is above the horizon at the same time, has reached its *lower* culmination in that moment. Its highest culmination is reached 12 hours later, when it stands significantly higher in the sky in southern direction.

Astrodienst decides depending on the selected house system whether or not MC and IC should be switched. The house systems of Campanus, Regiomontanus and Polich-Page, by their philosophy, seem to recommend it. Others do not (e. g. the Meridian or Azimuth system). With some house systems, the situation is ambiguous (Koch houses, Placidus, equal systems).

3. Odd behaviour of the ascendant/descendant in polar regions

For hours during which the MC is below the horizon, traditional formulas yield an ascendant which is not on the eastern, but on the western half of the horizon. However, this result is not really correct. All celestial points that are on the western half of the horizon are, as a matter of fact, setting, whereas all points on the eastern half of the horizon are rising. As the ascendant is by definition the "rising" degree of the zodiac (from Latin *ascendens*) , it can not be on the western, but must be on the eastern half of the horizon. For this reason, we have to add 180° to the ascendant in that case.

Thus the ascendant jumps by 180° twice a day. Some Astrology software does not handle this case correctly, therefore sometimes yielding an ascendant which is 180° off.

While the MC is below the horizon, the ascendant is also *retrograde*. The reason is that, in this case, the zodiac intersects the horizon not in southern, but in northern direction. This can be understood with the help of the following figure.

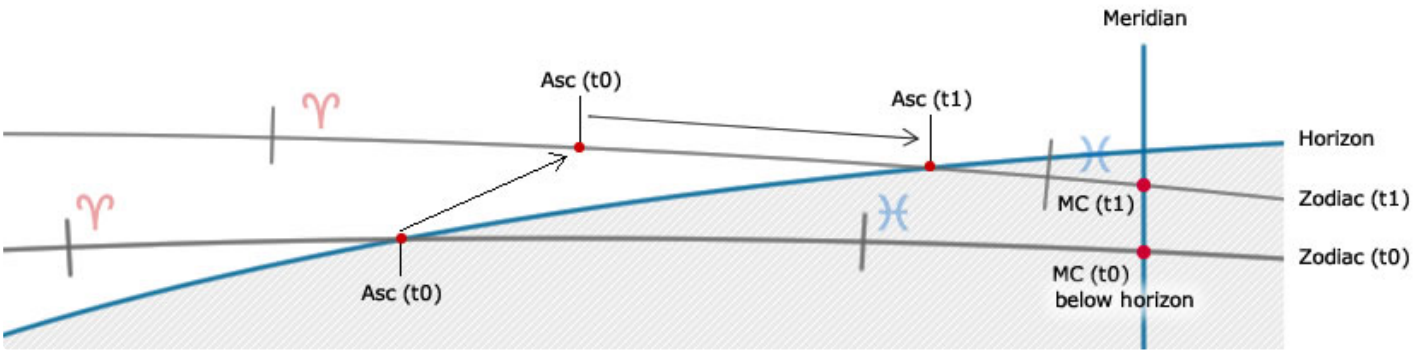

Figure: If the zodiac intersects the horizon in the „wrong“ direction, a retrograde ascendant results. The ascendant moves back from point Asc(t0) to Asc(t1).

In addition, it turns out that the ascendant always changes its direction when it does the 180° jump. Furthermore, it turns out that precisely at this point, it forms an exact conjunction with the MC or IC.

So the ascendant moves forward and backward, and it jumps. In fact, it does not reach all degrees of the zodiac. Consider this: On the summer solstice (21 June) the sun never sets. This means that the position 0° Cancer never reaches the horizon. And this holds true for the whole year. Thus north of the arctic circle there is never an ascendant near 0° Cancer. Equally there is never an ascendant near 0° Capricorn, because this region of the zodiac always stays below the horizon in polar regions. This can be understood from the fact that the sun never rises when it is near this point around the winter solstice.

The movement of the polar ascendant can be illustrated with a concrete example (see figure below). As a point of observation we choose Longyearbyen, the capital of Svalbard, which is at 78° N. On 1 January 2000 at 3:21pm the ascendant is in conjunction with the IC at 29° Leo. In the following hours the ascendant moves in direct motion, until it reaches the MC (south) at 1° Scorpio at 7:07am the next day. Then it jumps by 180° to 1° Taurus (to the north) and becomes retrograde. At 3:16pm it reaches the MC again at 29° Aquarius. After that it jumps to the opposition again and returns to direct motion.

The example shows, that for the latitude 78n there can be only ascendants in the range between 29° Leo and 1° Scorpio as well as between 29° Aquarius and 1° Taurus. The ascendants that are possible at this geographical latitude thus are in regions of ca. +- 31° around the equinoctial points (0° Aries and 0° Libra). In the range around the autumnal equinox (0° Libra) the ascendant goes in direct motion, in the range around the vernal equinox (0° Aries), however, it is retrograde.

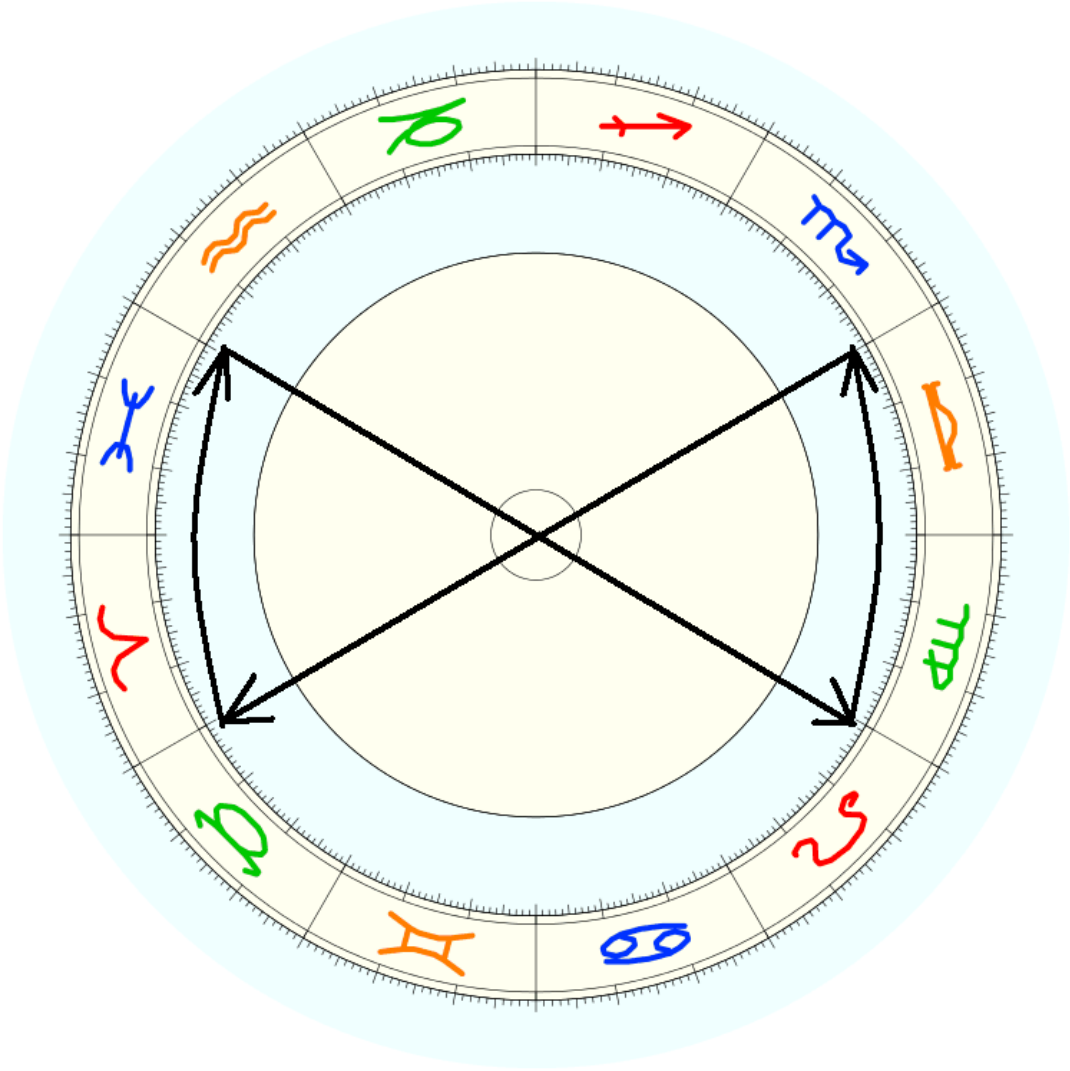

Figure: Motion of the ascendant during 24 hours at the geographic latitude 78N (Longyearbyen)

Generally speaking, ascendants tend to stay near the equinoctial points in polar regions, however a lot more often near the autumnal point (0° Libra) than near the vernal point (0° Aries). Incidentally, ascendants near the autumnal point are generally more frequent than ascendants near the vernal point. This can be understood from the fact that vernal zodiac signs rise rise gently, resulting in a fast rising of large parts of the the zodiac. On the other hand, the autumnal zodiac signs rise steeply, and as a consequence only a short part of the zodiac can rise in the same time. The situation is opposite on the southern hemisphere. There, the signs around 0° Aries rise more slowly, and the signs around 0° Libra faster.

The range of possible ascendants (and descendants) becomes smaller the more north one goes. Near the north pole, the ascendant jumps to and fro between 0° Aries and 0° Libra, otherwise not moving at all. First it stays at 0° Aries for 12 hours, however wandering along the horizon from north to south; then it jumps to 0° Libra and stays there for another 12 hours, again wandering from north to south.

However, since the cardinal directions are not defined exactly at the north pole and since south is in all directions, as it were, there is no meridian either and no MC. And since the ascendant and the descendant are neither rising nor setting points, they actually cannot be distinguished. Of course, strictly speaking, this is true only for the mathematical north pole. And for even a minute deviation, south is already clearly defined. However, when one is actually standing on the north pole, then one probably imagines that one is there *exactly*.

4. Births near the polar circle and births at geographic latitudes higher than 60°

Another interesting special case is given when one is born or lives exactly on the polar circle, i. e. at 66°34N, e. g. in Rovaniemi in Finland. There it happens once a day that the zodiac lies exactly on the horizon for a moment. In this moment, the ascendant is of course undefined; or one could say that the ascendant is "spread" over the whole eastern horizon.

Another odd effect is the following: A bit north of the arctic circle, the MC is below the horizon only for a very short time, and during this very short time, the ascendant must move, with enormous speed, by 180° in backward direction. Also, a bit south of the polar circle, the ascendant moves very fast through the vernal zodiac signs, however in direct motion. In order to know one's ascendant in such a case with certainty, the birth time must be known with high precision.

Generally speaking, for births at geographic latitudes between 60° and 70° and with ascendants in signs around the vernal point, it is very important to know the birth time with high accuracy. The nearer one is to the polar circle, the more important it is.

5. Problems with astrological houses in polar regions

There are different methods to calculate the astrological houses. As is generally known, some of these methodes do not work for geographic latitudes beyond the polar circle, or they work only partially. Even at latitudes north of 60°, some quadrants seem to become extremely small or large for some hours, and astrologers who work with unequal house methods do not feel comfortable with such horoscopes. Is it thinkable that astrological quadrants can be so different in size, and what does it mean, astrologically?

Beyond the polar circles, the methods according to Placidus and W. Koch pose difficult problems. And incidentally, contrary to some astrologer's assertions, the Polich-Page (or "topocentric") method does have some problems, too. And contrary to common consensus, it is not absolutely impossible to calculate Placidus house cusps beyond the polar circles. (see under "7. Links" further below)

Detailed explanations concerning these problems are given in the Astro-Wiki:

- Problems of the Placidus house system
- Problems of the Koch house system
- Problems of the Polich/Page house system

All other methods do not cause major problems, at least as far as the mathematical calculation is concerned.

One phenomenon still has to be considered more closely. As has been said, the special cases described above, where the MC is below the horizon and the IC above the horizon, raise the question whether the MC and IC should be switched, making the IC the MC. In the chart drawings of Astrodienst this is done if one of the house methods Campanus, Regiomontanus, or Polich/Page is chosen, because the philosophy underlying these house methods seems to require it. With other house methods, howerver, there is no theoretical reason to switch the MC and the IC.

Furthermore, it must be noted that if the MC and the IC are switched, the order of the houses will be reversed. In the following chart, where the houses are calculated according to Regiomontanus, the houses are numbered in clockwise order, thus seemingly in the wrong direction.

On the other hand, if a different house method is chosen, like Porphyrius or Meridian houses, then the MC remains in the south, and the houses are numbered as usual in counter-clockwise direction.

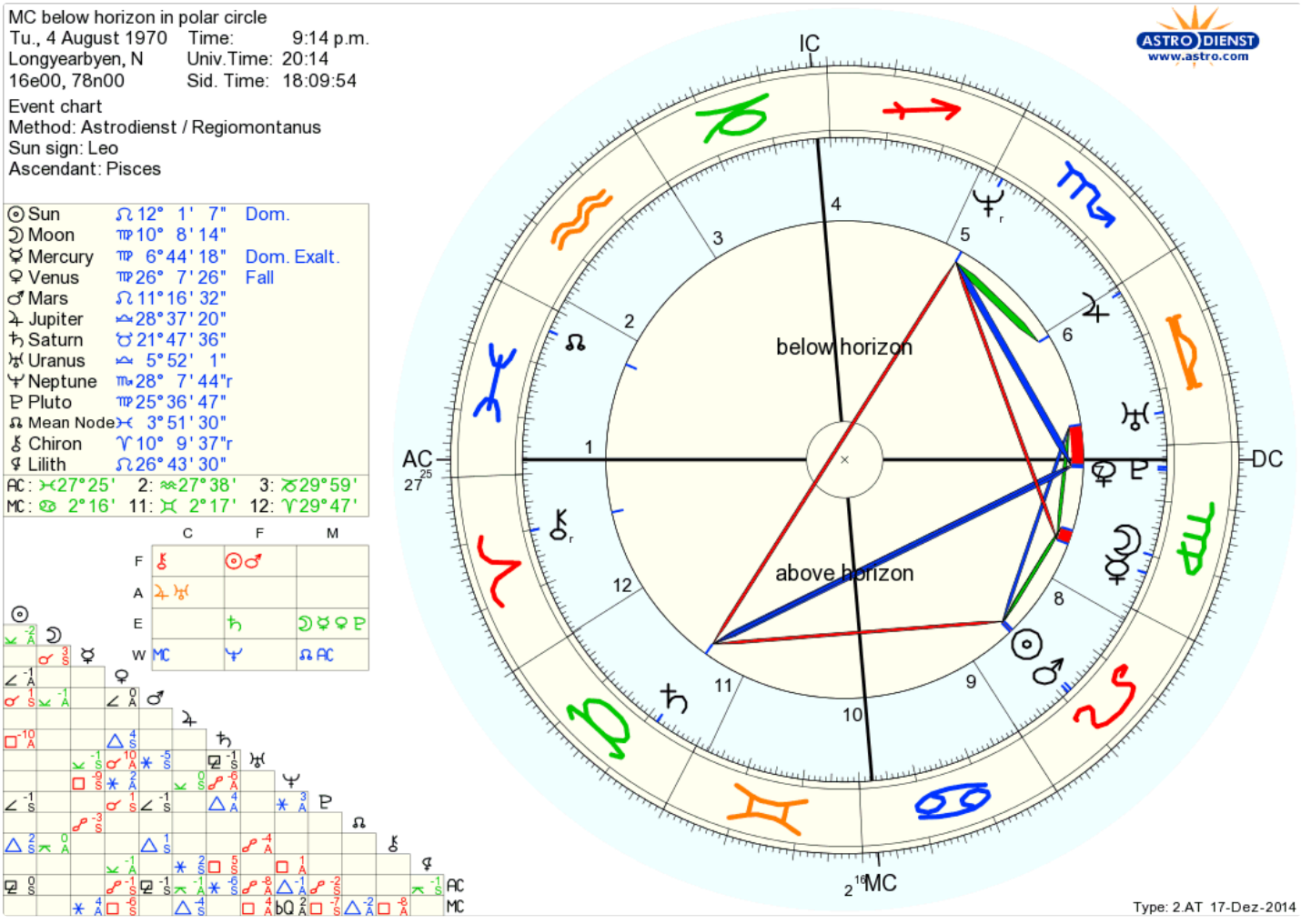

Figure: Polar horoscope with Regiomontanus houses in "reversed" direction (clockwise)

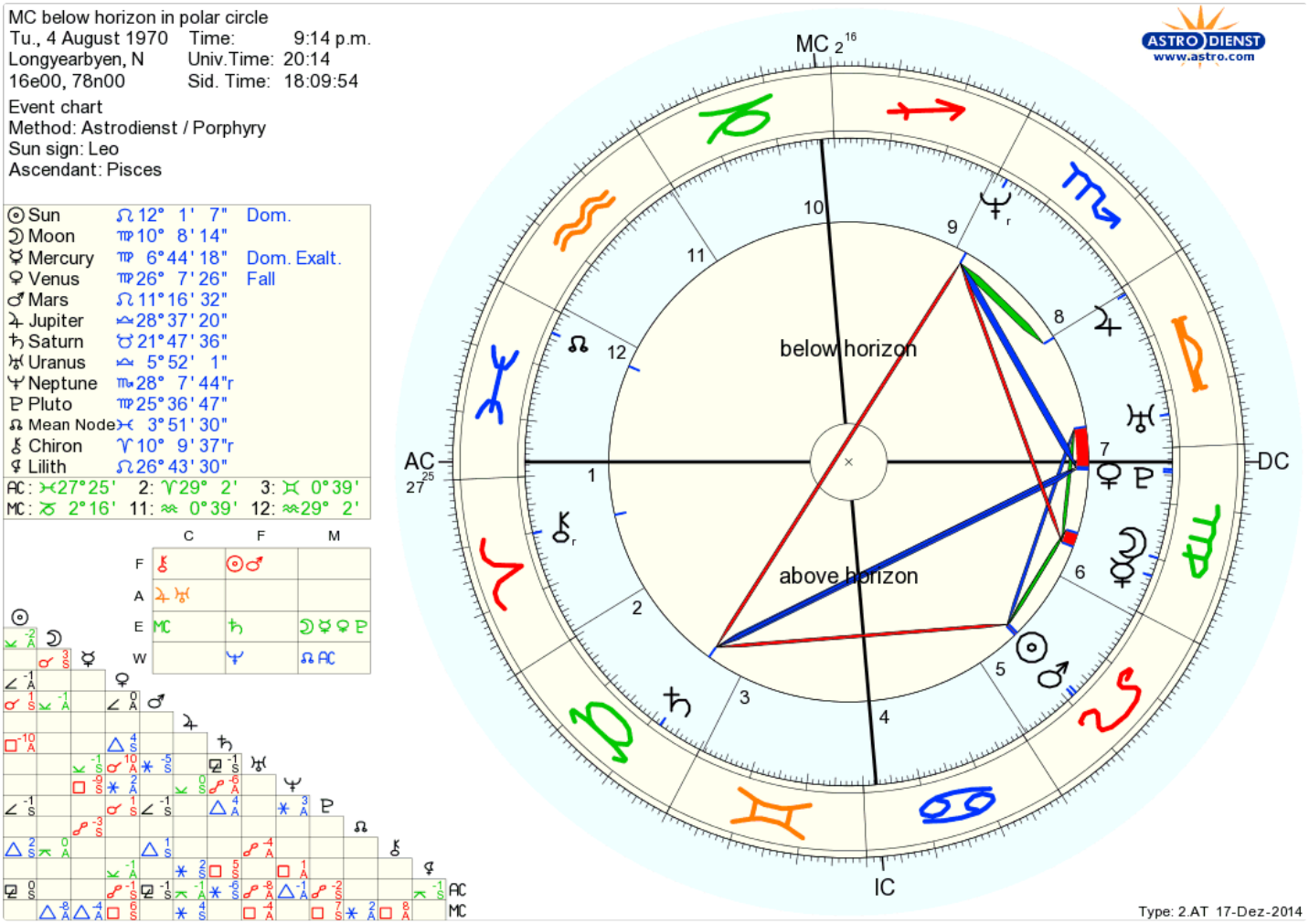

Figure: The same polar horoscope with Porphyry houses in seemingly "correct" order (counter-clockwise).

6. Horoscopes of the southern hemisphere

If one lives in the northern hemisphere and observes the planets, one will usually face towards south, because the Sun and the MC (the culminating degree of the zodiac) are always found in southern direction. Also, the planets are mostly found in the southern half of the sky. The observer may turn to east or west at times, but never to the north.

On the other hand, if one lives in the southern hemisphere and observes the planet, the situation is reverse. The sun always culminates in northern direction, the MC is in the north, and the planets are mostly seen in the northern half of the sky. The observer will therefore usually face towards north and practically never towards south.

For inhabitants of the southern hemisphere, the sun also rises in the east, but it will move over the sky from the right to the left. Also, it is obvious that the ascendant is usually found on the right hand side of the observer, not on the left hand side as is the case in the northern hemisphere.

Furthermore, the zodiac runs in reverse direction, namely in clockwise direction and the zodiacal constellations are seen mirror-inverted.

In contrast with these facts, even Australian, South African, and South American astrologers draw their birth charts in such a way that the ascendant is seen on the left side of the circle, the zodiac signs run in counter-clockwise direction, and no difference can be seen between a northern and a southern birth chart. Thus, southern horoscopes are usually mirror-inverted and therefore not in agreement with visual perception. The ascendant would have to be drawn on the right side, and the zodiac signs would have to be shown in clockwise direction.

The problem can be avoided however, if the observer lies on the ground having the head to the north and the feet to the south. Then the perspective would be roughly the same for inhabitants of both hemispheres. Current natal charts would then even be "correct" for the southern hemisphere.

For births in tropical regions, i. e. between the tropics of Cancer and Capricorn or between the geographic latitudes 23°26S and 23°26N, the situation is a bit ambiguous or depends on the hour. The midday sun is found in northern direction for part of the year, and in southern direction for the other part. And the MC is in northern direction for some hours and in southern direction for the rest of the day.

Since the seasons of the year are opposed to each other in the two hemispheres, some astrologers raised the question whether the zodiac signs should not be reversed, too, in birth charts of the southern hemisphere. E. g. some believe that a person born in March or April, thus in southern autumn, should not rather be considered a Libra than an Aries. As a matter of fact, however, Australian, South African and South American astrologers reject this idea. They are of the opinion that the same zodiac signs must be used for all geographic regions.