THE SOLSTICES
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Some of you have asked what the solstices are physically, so pardon if this gets technical and too much like school. I try not to be technical in my blogs, but this is an exception. And I include some diagrams to help spell it out.

Our Earth orbits the Sun in essentially a large circle that takes one year to go around. That one-year circle or orbit describes a horizontal plane around the Sun called the Ecliptic or Zodiac. Earth sits in the ecliptic like a spinning top. However, the Earth does not sit up in its orbit with its north pole pointing straight up toward the north pole of the ecliptic. Instead it is tilted in its orbit by about 23.5 degrees. Earth has a perpetual list or tilt.

The upshot of that tilt is that at the summer solstice Earth is tilted directly at the Sun and all cities with a northern latitude get more sun and those cities in southern latitude get less. The reverse is true at the winter solstice. Earth is at the opposite side of its orbit and all cities in southern latitude get more sun while we in North America freeze. It is all because of that 23.5 degree tilt. This is why it is summer in Australia at the winter solstice and winter in Australia at the summer solstice.

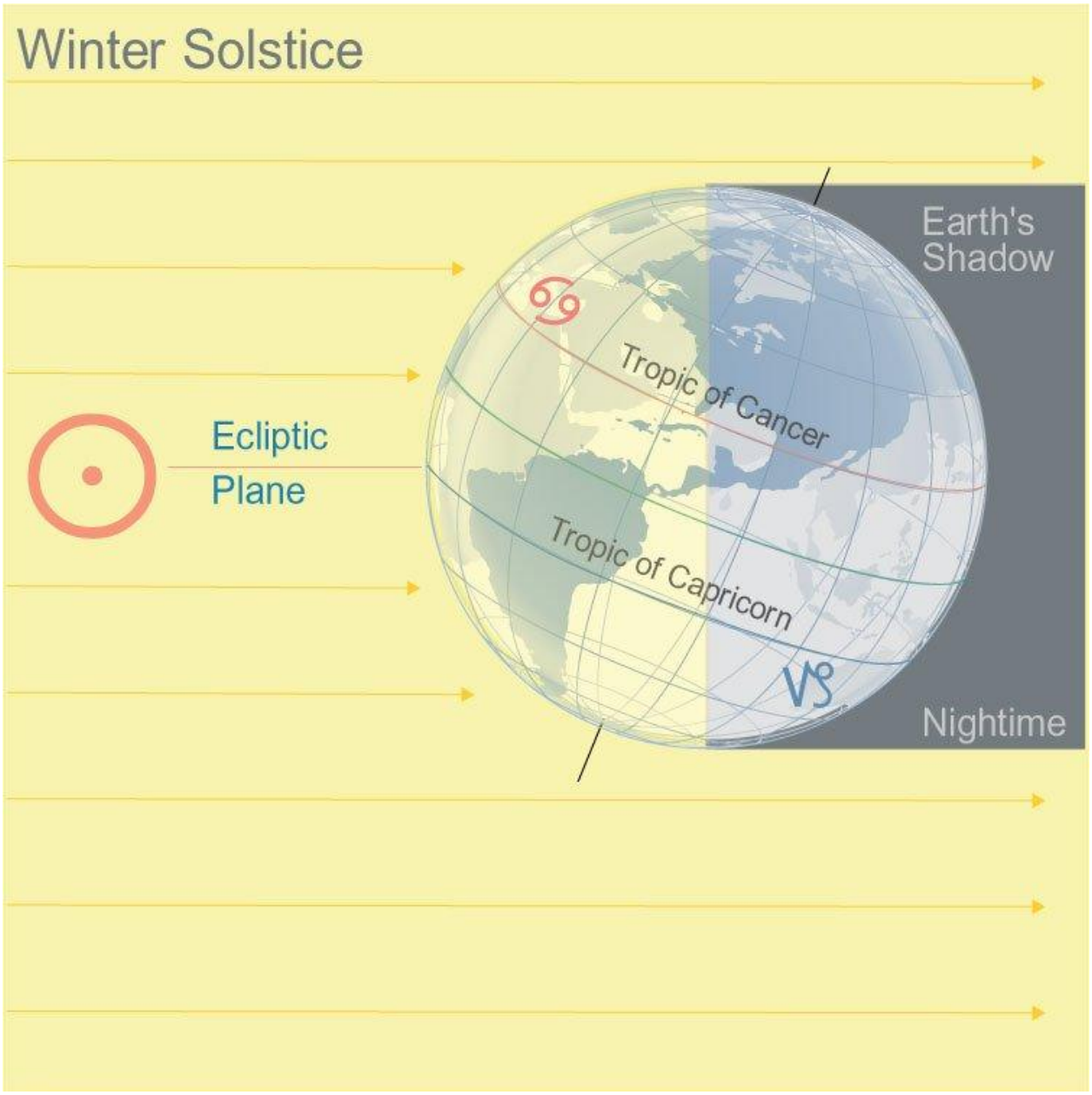
It follows that at the spring and fall equinox that Earth is midway between the solstices, thus equal parts of day and night. These four points, the two solstices and the two equinoxes define the tropical zodiac used by most western astrologers.

In the northern geographic hemisphere that great circle at 23.5 degrees of north geographic latitude (or declination) is called the Tropic of Cancer. This is the geographic latitude that most directly receives the Sun's rays at the summer solstice.

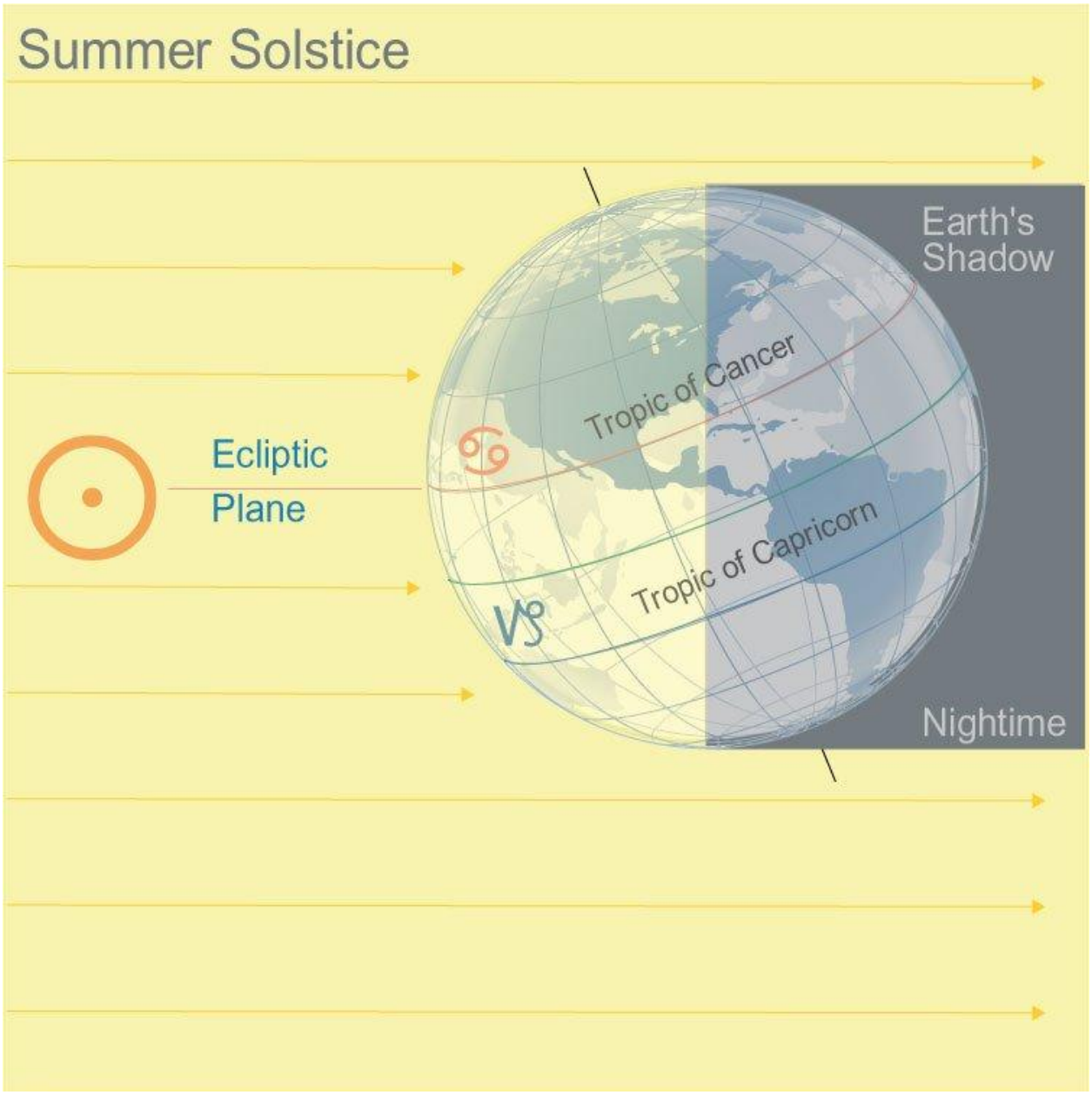
In the southern geographic hemisphere that great circle at 23.5 degrees of south geographic latitude (or declination) is called the Tropic of Capricorn. This is the geographic latitude that most directly receives the Sun's rays at the winter solstice. See the diagram.

The winter solstice is the point where Earth is the most tilted away from the Sun for those of us in the northern hemisphere. This is the longest night and the shortest day. From the moment of the winter solstice the Sun starts to move northward and each day after that is a few minutes longer.

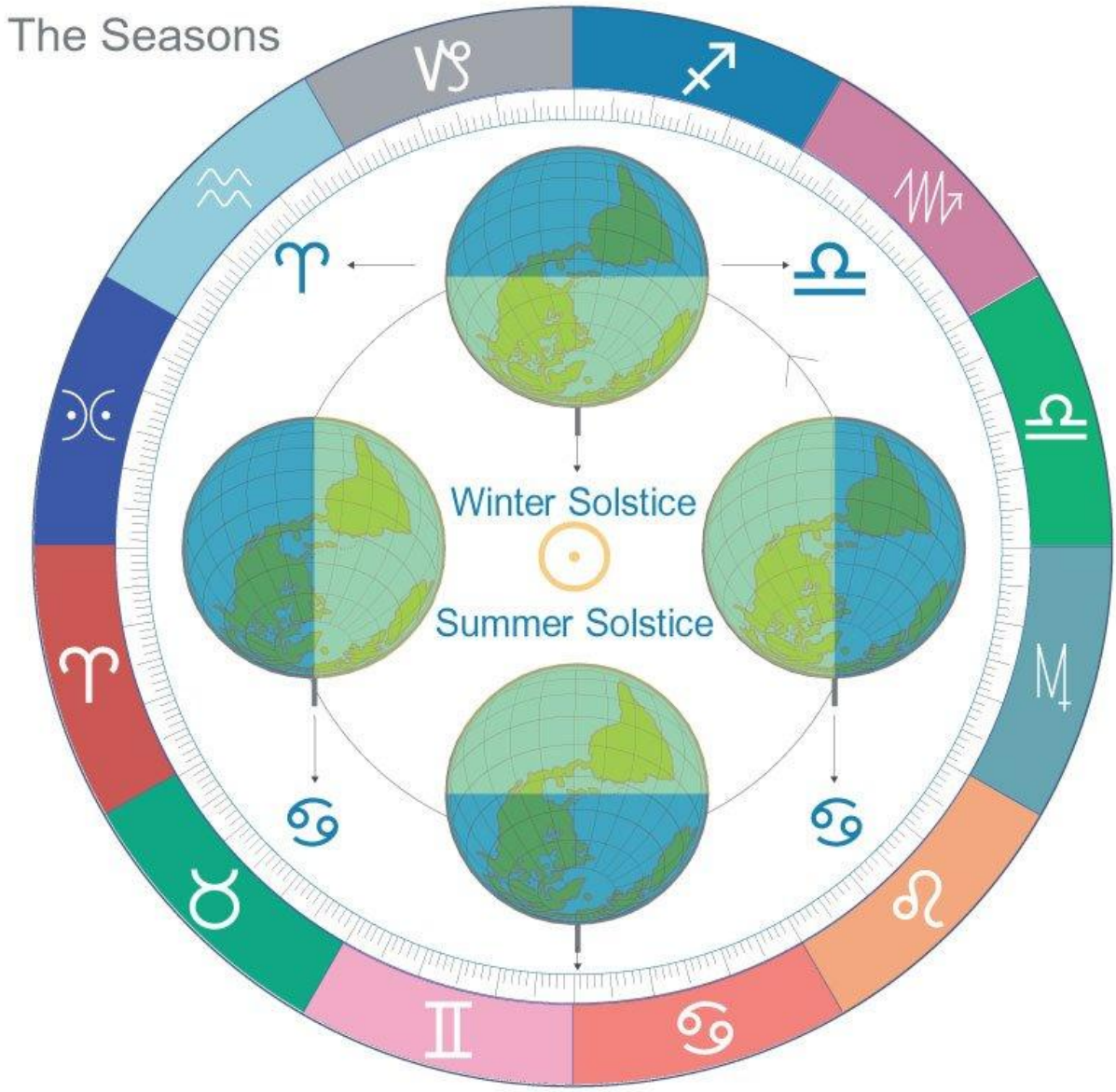
Is it no wonder that in the past the winter solstice was celebrated and I mean celebrated? The Sun returns, the darkness gets no longer, the days grow with sunlight from this point onward. Even though I have my iPhone and iPad and so on, the sheer physical event of the solstices still control our lives. We measure time by the motions of the Sun, Earth, Moon, and planets. Is it so hard to understand that astrologers like myself take these celestial movements seriously?



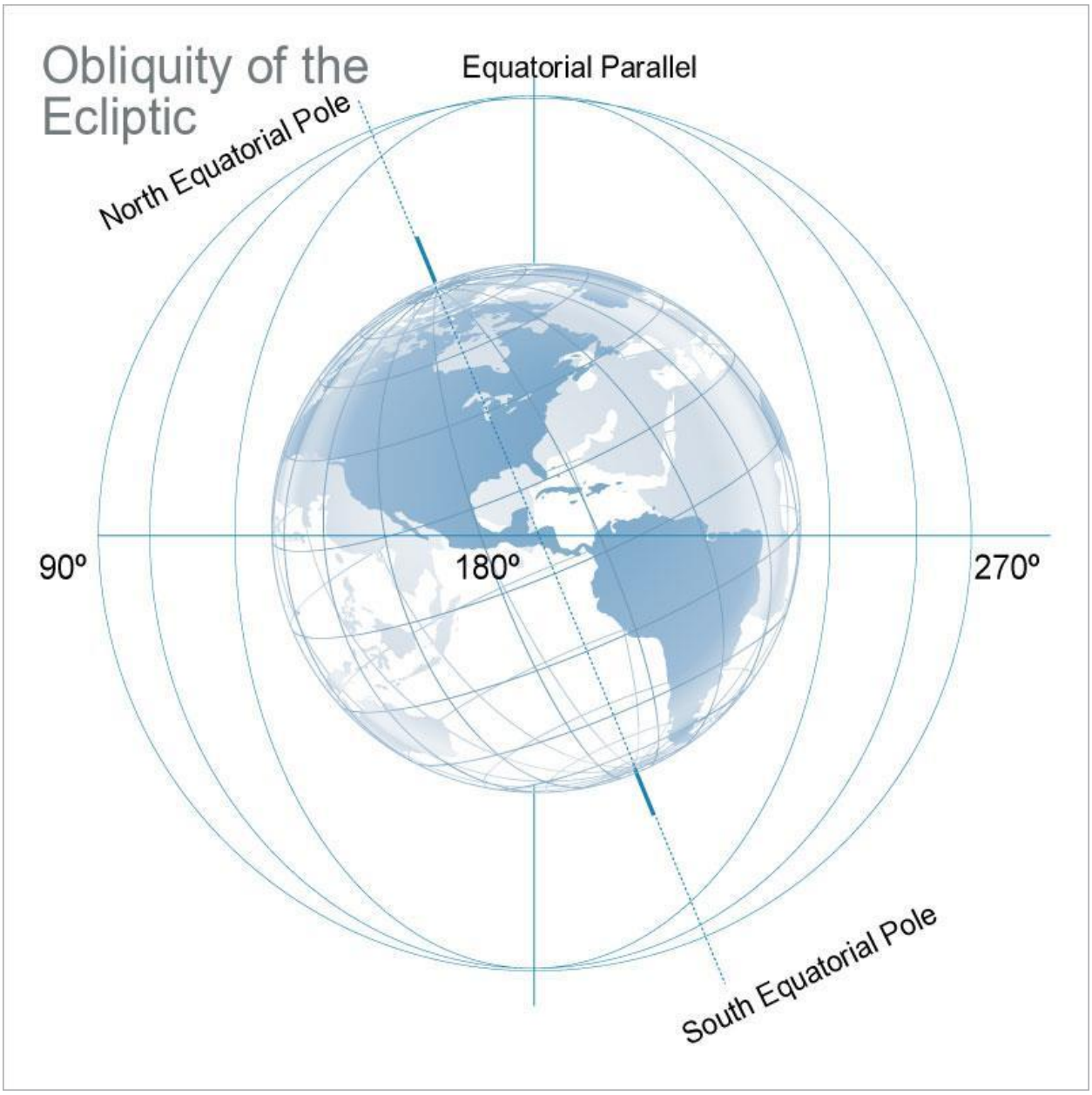
Here we see how at the winter solstice Earth is tilted away from the Sun and direct rays from the Sun strike the earth at all geographic latitudes at the Tropic of Capricorn.



Here we see how at the summer solstice Earth is tilted directly toward the Sun and direct rays from the Sun strike the earth at all geographic latitudes at the Tropic of Cancer.



This diagram shows the tropical zodiac and four positions for Earth in the year, the two solstices and the two equinoxes. Notice the Earth is fixed in its direction so that the north geographic pole tilts directly at the Sun at the summer solstice and directly away from the Sun at the winter solstice.



This diagram shows how Earth is tilted in its orbit by about 23.5 degrees. The result of this is that at the summer solstice the north geographic pole is tilted toward the Sun, and at the winter solstice the south geographic pole is tilted toward the Sun.