

## THE SOUTHERN CROSS: A SOUTHERN SKY SIGNPOST

No matter where you live in the Southern Hemisphere, look in your southern sky for the Southern Cross as soon as darkness falls.

**At temperate latitudes in the Southern Hemisphere, where it's now the winter season, the Southern Cross swings to upper meridian transit – its high point in the sky – at early evening, or roughly 7 pm local time.**

A meridian is the imaginary semi-circle that divides your sky into its eastern and western hemispheres. It is the half of an imaginary great circle on the Earth's surface, terminated by the North Pole and the South Pole, connecting points of equal longitude. The position of a point along the meridian is given by its latitude indicating how many degrees north or south of the Equator the point is. Each meridian is perpendicular to all circles of latitude. Each is also the same length, being half of a great circle on the Earth's surface and therefore measuring 20,003.93 km.

### ETYMOLOGY

The term "meridian" comes from the Latin *meridies*, meaning "midday"; the Sun crosses a given meridian midway between the times of sunrise and sunset on that meridian. **The same Latin stem gives rise to the terms a.m. (ante meridiem) and p.m. (post meridiem) used to disambiguate hours of the day when utilizing the 12-hour clock.**

The Prime Meridian is today located at the Royal Observatory, Greenwich, in London, England, and was established by **Sir George Airy** in 1851. Other meridians are named by degrees East or West from there. By 1884, over two-thirds of all ships and tonnage used it as the reference meridian on their charts and maps. In October of that year, 41 delegates from 25 nations met in Washington, D.C., United States, for the International Meridian Conference. This conference selected the meridian passing through Greenwich as the official Prime Meridian due to its popularity. However, France abstained from the vote, and French maps continued to use the original meridian going through Paris for several decades.

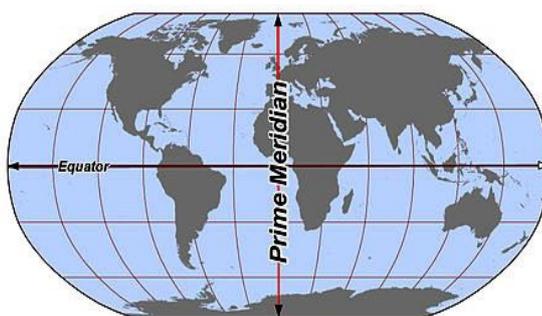
A star reaches its highest point when it crosses the meridian at upper transit, and its lowest point when it crosses the meridian at lower transit.

**Because the Southern Cross is circumpolar – always above the horizon – at all places south of 35 degrees south latitude, people at mid-southern latitudes can count on seeing the Southern Cross all night long, every night of the year. Watch for the Southern Cross to move like a great big hour hand, circling around the south celestial pole in a clockwise direction throughout the night.**

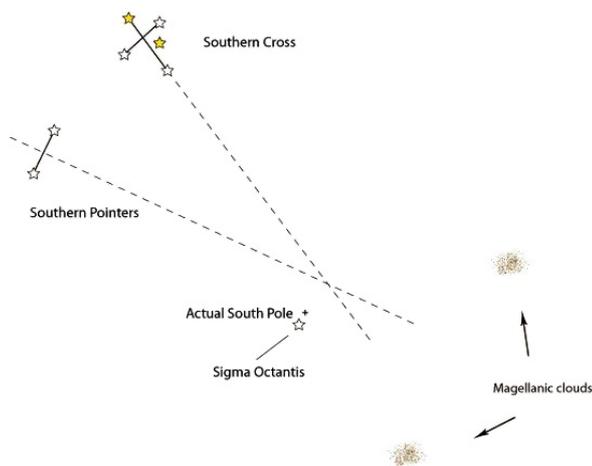
The Southern Cross will sweep to lower meridian transit – its low point in the sky – around 7 a.m. local time tomorrow. AK, with EarthSky and Wikipedia Notes



The Southern Cross as seen from Manila – north of the equator – in 2012.



Meridians run between the North and South



Star-hopping to south pole via the Southern Cross and bright stars Alpha and Beta Centauri



The Prime Meridian Monument in Greenwich