

The E.R.S.C. truly simulates the earth's axial rotation and tells the true geographical earth time (E.T.) globally.

I shall prove the truth of the above statement with reference to Singapore, my hometown, and in so doing show the difference between its E.T. and its local standard time. The procedure I am describing has to be done during an equinox (March 22 or September 21) as only then there is equal day and equal night for any place on earth, and the sun would seem to move in a truly east to west direction with reference to the equator and the latitudes during the earth's entire inclined (23.5°) axial rotation while orbiting the sun. It can apply to any place on earth that is close to a longitudinal hour indicator. It is the sun's central position at the hub of the axially rotating earth revolving round it that determines the passing of time. Thus when the sun is at the highest point in the sky it is midday for the place below it, and 12 hours later after the earth has rotated 180° a new day starts again for it.

The E.R.S.C. has to be placed upright on a perfectly horizontal plane at sea-level with its face facing north as shown in the diagram below. In such a position the sun would appear to be moving from east to west in a semicircular course which is in alignment with the upper semicircular daytime rim of the clock-face. In reality it is the earth's rotation from west to east that causes this apparent movement of the sun. Thus the E.R.S.C. actually moves in unison with the rotation of the earth while keeping track simultaneously of the apparent movement of the sun through the relevant longitudinal hour indicator. The true geographical E.T. of Singapore is determined by its bona-fide longitudinal hour indicator 105° E, but its local time is set by the indicator 120° E, which is one hour past its true time. Notice that the E.T. differential between Singapore and its antipode Quito is 12 hours. Like Singapore there are other countries that do not abide by their true E.Ts. set by the closest longitudinal hour indicators, but follow the times set by neighbouring indicators for politico-economic reasons.

The E.T. and the local standard time of Greenwich, London, always tally. This is because the prime meridian (0°) that serves as its longitudinal hour indicator is doubly important as the longitude of reference for global G.M.Ts. Like England there are many other countries also that abide by the E.Ts. determined by the respective longitudinal hour indicators closest to them. In order to co-relate E.Ts. and local standard times refer to "The table facilitating the reading of world standard times through the longitudinal hour indicators of the E.R.S.C."

The ultimate proof validating the E.R.S.C. as such can be demonstrated practically by placing a giant clock-face on the surface of the south pole and simply letting the earth's axial rotation and its revolution round the sun operate the giant clock. This is described with diagrams in the next page on the panoramic E.R.S.C.

Verifying the truth of the E.R.S.C.

In order to visualise the procedure imagine that the E.R.S.C. shown in the diagram* is placed in an east/west direction while facing north in Singapore. Then the longitudinal hour indicator 105° E will be parallel with both the horizontal ground and the rays of the rising sun. This is the starting point of the E.R.S.C.'s simulation of the earth's axial rotation (with reference to Singapore), whereby longitude 105° E tracks the apparent movement of the sun from east to west in a geometrically angular progression. After 6 hours longitude 105° E will point to the midday sun and it will be vertical to the ground, having tracked the sun through 90° . After another 6 hours the indicator would be again parallel with the horizontal and with the rays of the setting sun. In this manner the E.R.S.C. has actually simulated the earth's axial rotation from sunrise (0°) to midday (90°) to sunset (180°) across the sky, which is represented by the semicircular daytime rim of the clock-face. This is true with reference to Singapore.

*The diagram features a geographic clock-face showing only London, Singapore and Quito for the purpose of geographic-geometric clarity.

The geographically true E.T. of Singapore is G.M.T. 6 hours indicated by longitude 105° E. The local standard time of Singapore is G.M.T. 7 hours indicated by longitude 120° E. Note that it is sunset in Quito, Singapore's antipode, and G.M.T. 23 hours in London, both of the previous day because of the International Date Line.

