

# The Longitude Dial at TCU

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## Science and Art Converge in Fort Worth

In May of 2015, Texas Christian University unveiled a new sundial just west of University Drive on the northern edge of campus. The monument was commissioned by Joseph I. O'Neill III in honor of his wife Marion Jan Donnelly O'Neill, an alumnus of TCU. To call this installation a "sundial" doesn't do it justice, and in fact, the project's designer, William Andrewes refers to his instrument by its more correct description - a longitude dial. It is a solid work of art, engineered to have no moving parts, and constructed with the permanence of granite, slate, and limestone. The weight and scale of this piece is wonderfully at odds with its function, marking the ephemeral passage of time.



*Each of Andrewes' Longitude Dials is custom made for the location on earth where it will reside. In this case, [32° 42' 39.19"N, 97° 21' 38.83"W](#)*



*TCU Horned Frog marks North*

*The dial is located near the intersection of University Drive and West Cantey Street in front of TCU's Walsh Center for Performing Arts.*





## Leave your watch at home

The gnomon's shadow tells time accurately to the nearest minute. The photo at left was taken when the shadow marked 12:00 pm CDT on May 4, 2016. The outer ring (right) on the dial instructs how many minutes to add or subtract from the observed time based on the day of the year; in this case, it accurately gave a time of 11:57 am after subtracting 3 minutes.



## What goes up, must come down

When the gnomon's shadow falls on the dial's central dotted line, the sun has reached its highest point in its rise from the east. This point in the sky is known as the meridian and denotes the time of local noon. From this point on, the sun is setting to the west.



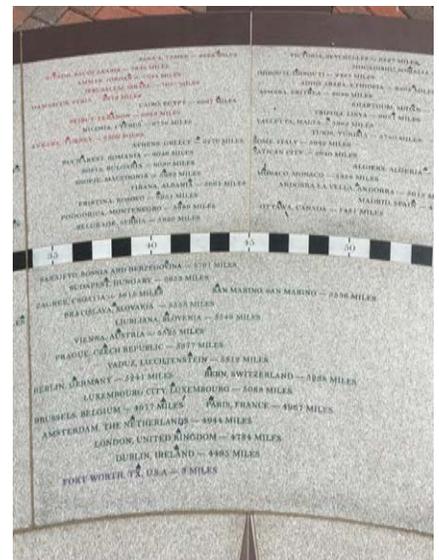
## Look out below

With the sun exactly on the meridian, sunlight is able to pass through a narrow slot in the south-facing pillar of the dial's pedestal (inset), revealing the current date and zodiacal location of the sun in the sky.



## Four corners of the earth

The distance to 196 capital cities can be found on the outer ring of the compass rose, which is inlaid on the floor of the plaza surrounding the dial's pedestal. Cities are color coded by continent.



For more information about Longitude Dials, please visit the designer's website at [www.longitudedial.com](http://www.longitudedial.com).