

Paper Plate Education

"Serving the Universe on a Paper Plate"

Activity: Gemini's Signature

In this activity one can recreate the "signature photograph" of the Gemini Observatory-North in Hawaii and predict what a comparable "signature photograph" of Gemini Observatory-South in Chile would look like. Please see the [Photographic Plate](#) activity for initial instructions.



Photo (above left) courtesy of Dr. Richard Wainscoat; used with permission.

Left of the dome, above, look for the beginning points of four star trails that are defined by the Southern Cross. The two bright stars Alpha Centaurus and Beta Centaurus smear through the bottom half of the Southern Cross after originating below the horizon. This can be seen both in the photograph and in the paper plate model above.



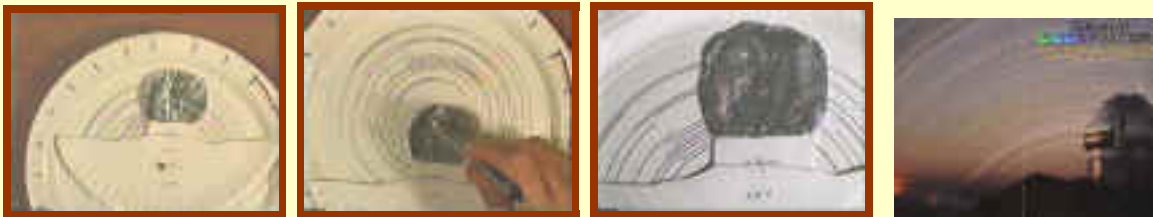
Photos courtesy of Gemini Observatory; used with permission.

In the photographic version of [The Platisphere](#), students predict the star trails created from a long duration exposure. Put a pen in a star hole and sweep an arc, moving the black starfield plate through the number of hours for your exposure time. Return to the starting time and repeat the procedure for each of the stars. Remove the starfield plate to reveal the smear of stars predicted from an exposure of your given duration.



A more technical application of the Platisphere highlights the different photographic results one would get from different latitudes.

[Sorry, text with specific instructions for Gemini's Signature is not yet uploaded. Sample images excerpted from the demo videotape are below.]



Visit the Gemini Observatories website at <http://www.gemini.edu/>.

Contributed by Chuck Bueter.

GLPA Proceedings, 2000, pp. 67-68, and on demo Paper Plate Astronomy videotape.

- Home
- Activities!
- Site Map
- Light Pollution
- What's New?
- Upcoming Events

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