satellite

GOES VIEWS THE TOTAL ECLIPSE

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On February 26, 1979, people in North America had their final opportunity of the 20th century to view a total solar eclipse within North America.

However, considerable cloud cover over the United States and Canada prevented many viewers a glimpse of the eclipse. Some locations did experience unusual daytime situations. As the sky began to darken, street lights and automobile

headlights came on. The total eclipse lasted approximately 135 seconds, long enough for chickens and birds to roost.

The eclipse path is presented in figure 1. Percentage of total eclipse is also shown as a function of Universal or Greenwich time.

22,000 miles above the equator GOES-EAST, the

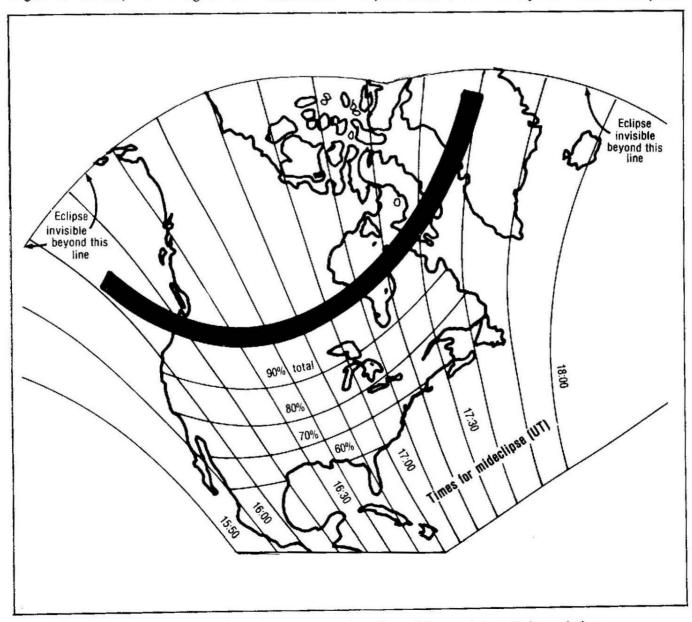


Figure 1. Percent of total eclipse as a function of Greenwich or Universal time.

United States' geostationary meteorological satellite over the Amazon River and the GOES-WEST over the eastern Pacific got a different view of the eclipse; i.e., the moon's shadow over the Northern Hemisphere (figure 2). You can see the moment of the moon's shadow by viewing these daytime visual images. An arrow on each photo depicts the dark shadow on the earth below.

Confirming ground observation, the GOES space cameras verified the considerable cloud cover over the United States and Canada during this rare astronomical event.

Most scientists, however, got their view of the eclipse from aircraft flying above the cloud cover.

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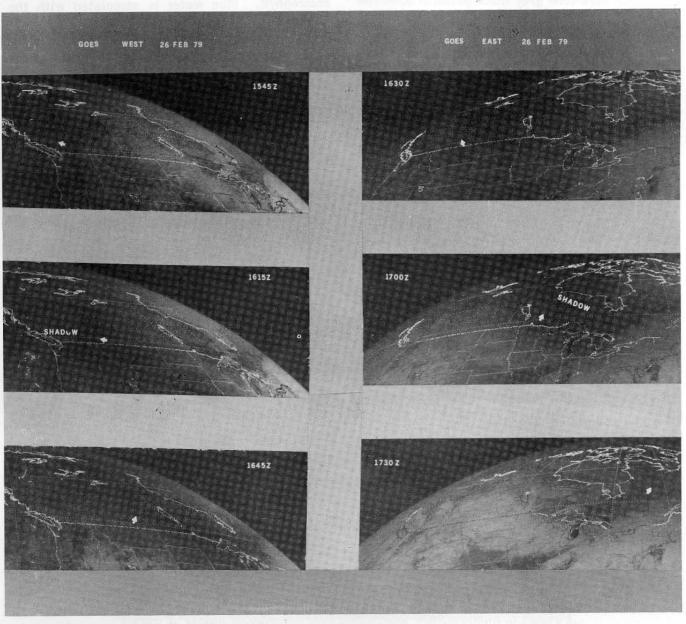


Figure 2. GOES WEST and GOES EAST views of moon's shadow.