

Groups See Sun Darken

July 30 2009



Eclipse photo by David Cornfield, a member of the MIT cruise ship tour group, shows the "diamond ring" effect as the sun emerges from totality. Photo / David Cornfield

Two MIT Alumni Association groups led by MIT professors were rewarded with clear skies - just barely - for the total eclipse of the sun on July 22, possibly the most-watched eclipse in history. The eclipse path crossed much of Asia and the western Pacific, and the period of totality, when the sun's disk was completely obscured by the moon, was the longest of the 21st century.

One group, led by Professor Richard Binzel of the Department of Earth, Atmospheric and Planetary Sciences, observed the eclipse in China from the shores of Dishui Lake, southeast of Shanghai. Binzel, as quoted on the Alumni Association blog, said, "The clouds thinned, just enough, minutes before totality! Spectacular view of the eclipse, with thick

clouds interfering for about one minute during the 5 minutes 43 seconds of totality. Forty minutes later, pouring rain."

Binzel and his tour group were featured on the CBS Evening News, and Binzel was also quoted in an article about the eclipse on CNN. A second tour group, led by physics professor Edmund Bertschinger, viewed the eclipse from a cruise ship that went to the exact point in the Pacific where the eclipse duration was greatest: six minutes and 39 seconds.

Bertschinger wrote in an e-mail to the MIT News Office that, "The cruise ship set sail from Kagoshima, Japan, with lots of rain. It rained the day before the eclipse. The clouds thinned by the morning of the eclipse, yet we had rain sprinkles before first contact (when the moon begins to cover the sun). During most of the period leading up to totality the skies were clear as seen from the ship, and during and after totality they were clear. The next day it rained heavily. So we got lucky with the weather.

"This eclipse had a lovely round corona without long streamers - a very unusual configuration during [solar minimum](#). When the moon fully covered the sun, and especially when it ceased fully covering the sun, we saw a spectacular diamond ring (see photo). We also saw shadow bands in the minute before second contact (the beginning of totality). The one thing experienced eclipse watchers will most remember is the spectacular diamond ring at third contact. There were no sunspots, very little chromospheric activity, and two tiny prominences visible on the edge of the [sun](#).

"Two days after viewing the eclipse we met with the mayor of Hiroshima and exchanged greetings and gifts. Mayor Tadaoshi Akiba PhD '70 spoke to us about his peace initiative to eliminate nuclear weapons by 2020."

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