

## Solar Dust Rings

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We present a history of solar dust rings detected during the solar eclipse as humps of thermal emission at the wavelengths of 1.65, 2.2 and 10  $\mu\text{m}$  near the heliocentric distance of 4 solar radii, firstly discovered by MacQueen<sup>[1]</sup> and Peterson<sup>[2]</sup>, independently, and later confirmed by Lena et al.<sup>[3]</sup> and Mizutani et al.<sup>[4]</sup>. However, these features have not been detected in the 1998 eclipse by Ohgaito et al.<sup>[5]</sup>. A mystery of appearance/disappearance of such thermal excess near the Sun still remains as an unsolved problem.

We report here our solar eclipse observation of July 22, 2009 to search for such excess feature near the Sun by using the ship in the Pacific Ocean 550km far away from the Japanese main island. Although the bad weather prevented us from getting a significant scientific result unfortunately, the trial of the solar eclipse observation on the ship provides us a useful tool for the future observation during the solar eclipse.

### References

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