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Interplanetary scintillation measurements of the solar wind acceleration region using the "Nozomi" X-band beacon

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We made interplanetary scintillation (IPS) measurements using the X-band (8GHz) beacon from Nozomi spacecraft for the period between Dec. 6, 2000 and Jan. 24, 2001. Since the line-of-sight to Nozomi approached to the sun in this period, IPS measurements for Nozomi allow us to observe how the solar wind is accelerated in the vicinity of the sun. The Usuda 64m (ISAS) and the Kashima 34m (CRL) antennas were used for our IPS measurements, and the solar wind speeds were derived from IPS data taken with these antennas. As result, estimated speeds for the solar wind near the equator are found to be almost constant in the distance range between 20 and 60 Rs (solar radii). This fact suggests that the acceleration of observed solar wind completes by 20 Rs.