

Sprites and elves observed during Japan winter campaign

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We had conducted the second observation campaign of sprites and elves in winter Japan, from Dec. 1999 to Feb. 2000 (27 nights) . The optical and VLF wave instruments were installed both at two observation sites: Gunma University, Maebashi, Gunma pref. and Tohoku University, Sendai, Miyagi pref.. During the campaign, only two sprites were recorded, which is considerably small number compared to 21 events obtained during the first campaign that carried out from Dec. 1998 to Feb. 1999 (16 nights). This might attribute to the fairly low activity of cloud-to-ground discharges. One of the sprites which was detected in the second campaign appeared above the Pacific Ocean. This results suggest that further consideration should be required to identify the generating mechanisms of sprites.

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