

The Jovian remote sodium emissions: Three-week successive observations in 1999

Hiroaki Misawa[1], Noritoshi Washio[1], Shin Takahashi[1], Hiromasa Nozawa[1], Akira Morioka[2], Shoichi Okano[3]

[1] Planet. Plasma and Atmos. Res. Cent., Tohoku Univ., [2] Planet. Plasma and Atmos. Res. Cent., Tohoku Univ., [3] PPARC, Tohoku Univ.

A series of optical imaging observations of Iogenic sodium (NaI) gas emission has been made for about three weeks in the desert area of central Australia in September, 1999. Two transportable telescope systems have been used simultaneously; one was a narrow field optical system (FOV: 30 Jovian radii), while the other was a wide field one (FOV: 1000 Jovian radii). The observations have been successfully carried out more than 70 percent of the campaign period. We present the results of data analysis, particularly morphological feature of the remote NaI emissions and the daily variations. In addition, release processes of the NaI particles are discussed based on the Monte Carlo simulation method.

A series of optical imaging observations of Iogenic sodium (NaI) gas emission has been made for about three weeks in the desert area of central Australia in September, 1999. Two transportable telescope systems have been used simultaneously; one was a narrow field optical system (FOV: 30 Jovian radii), while the other was a wide field one (FOV: 1000 Jovian radii). The observations have been successfully carried out more than 70 percent of the campaign period. We present the results of data analysis, particularly morphological feature of the remote NaI emissions and the daily variations. In addition, release processes of the NaI particles are discussed based on the Monte Carlo simulation method.