



## QUASI-MONOCROMATIC GRAVITY WAVES OBSERVED OVER SÃO MARTINHO DA SERRA (29°S) BRAZIL

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### ABSTRACT

Quasi-monochromatic atmospheric gravity waves are gravity waves propagating with almost the same horizontal wavelength. Two cases of quasi-monochromatic gravity waves were observed on 20<sup>th</sup> July and 20<sup>th</sup> August, 2017 at Southern Space Observatory (SSO) at São Martinho da Serra (RS) (29,44°S; 53,82°W). All-sky observations showed that the horizontal wavelength was between 28 to 40 km and the propagation direction varying from N to W, indicating that the possible wave source was moving along the night. Wind effects also can change wave directions and those conditions will be discussed. The possible wave source was associated to a cold front.

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