

EXPLORING OF THE SHORT PERIOD OSCILLATION IN THE QUIET FILAMENTS

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Authors analyzed sources of false Doppler velocity signals of high frequencies (10mHz and higher) in observations of filaments. In ground-based observations, spectrograph's noise and image shifting at the spectrograph's entrance slit are the main causes of the false signal. It is shown, that using differential methods and telluric lines as reference lines significantly reduces the influence of the first factor. Periodical image shifting along the spectrograph's slit can be compensated during data reduction (high spatial resolution is helpful in this case). Analogous image motions across the slit are the most probable source of spurious oscillations. Analysis of simultaneous fluctuations of continuum and magnetic field is useful to distinguish artificial oscillations. In some cases detected high-frequency oscillations appear to be real.