[구SS-04] INTENSITY AND DOPPLER VELOCITY OSCILLATIONS IN PORE ATMOSPHERE

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Due to the simple vertical structure of magnetic field, pores can be exploited to study the transport of mechanical energy by waves along the magnetic field to the chromosphere and corona. For a better understanding of physics of pores, we have investigated chromospheric traveling features running across two merged pores from their centers at the speed about 55 km s-1, in the active region AR 11828. The pores were observed on 2013 August 24 by using high time, spatial, and spectral resolution data from the Fast Imaging Solar Spectrograph (FISS) of the 1.6 meter New Solar Telescope (NST). We infer a LOS velocity by applying the bisector method to the Ca II 8542 Å band and Hα band, and investigate intensity and the line-of-sight velocity changes at different wavelengths and different positions at the pores. We find that they have 3 minutes oscillations, and the intensity oscillation from the line center is preceded by that from the core (-0.3 Å) of the bands. There is no phase difference between the intensity and the LOS velocity oscillations at a given wavelength. The amplitude of LOS velocity from near the core spectra is greater than that from the far core spectra. These results support the interpretation of the observed wave as a slow magnetoacoustic wave propagating along the magnetic field lines in the pores. The apparent horizontal motion and a sudden decrease of its speed beyond the pores can be explained by the projection effect caused by inclination of the magnetic field with a canopy.