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A study on a slight change of velocity structure using ambient noise before and after Pohang earthquake(Mw 5.4)

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Pohang earthquake(moment magnitude 5.4) happened in November 15, 2017. 9 short period stations were installed and vertical green function was calculated from ambient noise before and after earthquake using deconvolution method. 6 short period stations were installed additionally after Pohang earthquake. Surface wave of vertical green function derived from ambient noise after earthquake arrived later than that before earthquake. We calculated velocity structure from dispersion curve of green function derived from ambient noise. Also we applied travel time tomography using aftershocks of Pohang earthquake. results from two methods showed the structure of Heunghae basin well. 3D velocity structure was applied to improve locations of aftershocks.