Spectral observations of coronal waves

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With modern imaging and spectral instruments observing in the visible, EUV, X-ray and radio wavelengths, the detection of oscillations in the solar outer atmosphere has become a routine event. These oscillations are considered to be the signatures of a wave phenomenon and are generally interpreted in terms of magnetohydrodynamic (MHD) waves. With multi-wavelength observations from ground and space-based instruments, it has been possible to detect waves in a number of different wavelengths simultaneously and, consequently, to study their propagation properties. Observed MHD waves propagating from the lower solar atmosphere into the higher regions of the magnetized corona have the potential to provide an excellent insight into the physical processes at work at the coupling point between these different regions of the Sun. In this talk I will review the current status of spectroscopic observations of waves in the solar atmosphere. We will also point out the difficulty in the interpretation of waves through imaging observations alone. Keywords: UV radiation; EUV; transition region; corona; waves; Spectroscopy