



Czech International Network of Multipath Ionospheric Doppler Shift Measurements

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In the last couple of years we developed, constructed and installed several ionospheric Doppler shift measuring systems. They are devoted to studies of short-period gravity waves and long-period infrasound in the ionosphere in relation to various Earth's surface, atmospheric and ionospheric phenomena. The system in the Czech Republic covers western part of the country and consists of five 3.59 MHz and three 4.65 MHz transmitters and two central receivers in Prague. Transmitting frequencies of individual transmitters are shifted by 4 Hz in order to avoid overlap. Another system, which consists of three radio paths with central receiver in Hermanus, was installed in the southernmost South Africa in 2010 and a similar system began to work in the northern South Africa with receiver in Louisville in 2013. Another three-path system was installed in Tucuman in the northwestern Argentina in 2012. The newest system consisting of three transmitters and two well-spaced receivers was installed in the northern half of Taiwan in October 2013. Examples of results will also be presented.