

# Theoretical and Experimental Investigation of Gravity Waves Features using Meteo Radar Observation of Atmosphere

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In 2015 an Anti-Hail System was launched by DELTA with Tbilisi State University (resumed after 25 years gap). This system is equipped with modern radar Meteor 735CDP10 of firm SELEX ES with special software. It has the capability of pulse-to-pulse beam steering allowing for systematic scanning experiments to study the horizontal structure of the backscatters as well as to measure the radial velocities for each beam direction. Gravity wave parameters can be retrieved from these horizontally resolved radial wind variations by applying velocity azimuth display and volume velocity processing. These Parameters are compared with the theoretically defined ones in atmospheric-ionospheric regions, caused by zonal local nonuniform winds (shear flows).