KV Climatology. REPORT

**4/1/2015 - 9/30/2015**. Developed an approach to homogenization and preprocessing of wind profilers multi-year observations for statistical study of boundary layer wind regime in Maryland. Results presented and discussed at 40th Annual Meeting of American Association of State Climatologists, Cape May, NJ on June 2015.

**10/1/2015 - 3/31/2016**. Climatologically homogeneous 2010-2015 for Beltsville, MD, Piney Run, MD and 2012- 2015 for Horn Point, MD data set of half hourly wind vector components U & V at altitudes from 200 m to 4000 m above ground with increment 100 m is produced. The next selected wind statistics are obtained: means of wind speed (Scalar, U-zonal, V-meridional, Vectoral); Vectoral mean wind direction, Standard Deviation of wind speed, Wind roses. These Climatic Statistics depend on Altitude, Time of a day (Hour), & Season (Month).

**4/1/2016 – 12/31/2016**. Earlier obtained MD boundary layer wind data and their climatic analysis will be applied for planning and optimization of schedule of research airplane observational flights to obtain more accurate and minimally biased estimates of the greenhouse gases fluxes over Washington-Baltimore corridor. Paper by Vinnikov, K.Y., R.R. Dickerson, X. Ren, and J. Dreessen, (2016). “Maryland wind climatology from wind profilers and its application to planning of airplane observations of greenhouse gases over the Washington-Baltimore corridor” is in preparation.