



Wind measurements with smart-phones in the Atmospheric Boundary Layer

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Trajectories from airborne platforms which can move freely with the wind like hot-air balloons, can deliver wind information of the lower atmosphere. To facilitate the collection of these data from moving platforms we have developed an app for smart-phones which can automatically sample position- and time information. Applying a dedicated algorithm leads to useful horizontal wind information. We have evaluated the measurements from the app by launching a parachute with an attached smart-phone underneath from the Cabauw tower in The Netherlands. We have conducted a series of experiments in stable to neutral conditions and we have validated the measurements with mast wind sensor data.