

Development of wind sensing coherent Doppler LIDAR at Mitsubishi Electric Corporation ~from late 1990s to 2013.
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ABSTRACT

Since late 1990s, we have been developing the wind sensing coherent Doppler LIDARs. In the history of wind LIDAR, we have offered the following world-first topics, (1) wind sensing using eye-safe (1.5 micron) wavelength region, (2) instrumentation of compact fiber-based LIDAR, (3) product release of the fiber-based pulsed LIDAR, (4) middle-range (8km) wind sensing with the high power fiber amplifier, (5) long-range (10km) and real-time wind sensing using eye-safe wavelength, and (6) ultra-long-range (>30km) wind sensing. Here, we introduce about these topics and shortly describe about our future perspectives.