An integrated system for detection and classification of icing fog and drizzle

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Droplet Measurement Technologies have developed instruments for measuring the size distribution of fog and drizzle droplets using single particle light scattering and imaging. The Fog Monitor is an aspirated single particle optical spectrometer that classifies water droplets over the size range of 2 to 50 µm and the Meteorological Particle Spectrometer (MPS), developed for the US National Weather Service, measured precipitation from 50 to 3100 µm. The MPS also measures the fall velocity of drizzle and snow. The ice accumulation rate on power lines, wind turbines and other structures is highly dependent on the size distribution of supercooled droplets and drizzle and this new, integrated system provides realtime information for assessing the potential for hazardous ice buildup.