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The Cabauw Experimental Site for Atmospheric Research (CESAR): New developments.

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The measurement program of the CESAR consortium covers a wide range of atmospheric observations including soil water, boundary layer meteorology, clouds, aerosols, thermodynamic profiles, radiation, greenhouse gasses and infra-sound. Atmospheric Boundary Layer observations are performed by KNMI at Cabauw, the Netherlands, for more than 40 years. Time series of more than 25 years exists of all the components of the surface energy budget and of wind, temperature and humidity along the 213m meteorological tower. The last few years new measurements are added to the observational program, and the quality of existing observations has been improved. The potential of the current boundary layer observational program will be discussed with an example of a fog event. It is shown how observations of visibility, radiation and turbulence helps to describe and better understand the dynamics of a fog layer.