EMS Annual Meeting Abstracts
Vol. 10, EMS2013-536, 2013
13th EMS / 11th ECAM

The upgraded Kipp & Zonen LAS MkII large aperture scintillometer instrument specifications

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The Kipp & Zonen LAS MkII, a commercial 15cm large-aperture scintillometer (LAS) has been completely redesigned for improved performance and ease of operation. The instrument specifications and improvements are presented here. The instrument is lighter, with reduced power use, an intelligent heater, and a brighter LED emitter. The initial opto-mechanical alignment of the emitter or detector at the lens focus is easily performed with one adjustment along the optical axis. A larger detector area allows easier instrument setup and alignment in the field with riflescopes co-aligned with the optical axis.
Fully digital processing and an in-built data logger with keyboard and display, shows real time data and settings to the user in the field. The frequency range is extended and more stable, with low noise, as the calibration circuit is disconnected while logging data. An additional input for 3 external met sensors allows calculation of the sensible heat flux, H, as well as the refractive index structure parameter Cn2.