

ASTAR 2007 / Polar 2 payload

Category	Instrument	Method	Measurement	Institute	PI
Aerosol extinction, radiance & irradiance	Sun photometer	Sun photometer	Spectral aerosol extinction coefficient	AWI Bremerhaven	Herber
	Spectral albedometer	Spectral albedometer	Spectral Radiance (up and downward)	IfT Leipzig	Wendisch
	Radiation sensor	Up- and downward radiation sensor	Spectral selected radiation (downward) and up- and downward radiation	AWI Bremerhaven	Birnbaum
Vertical aerosol profile	AMALI	Aerosol Mobile Airborne Lidar (upward or downward looking)	Backscatter ratio and extinction coefficient at 532 nm	AWI Potsdam	Neuber
Cloud microphysics	FSSP-300 2D-C	Particle spectrometer & imaging probes	cloud element size distribution, particle shape	LaMP	Gayet
	CPI	Cloud particle imager	cloud element size distribution, particle morphology	LaMP	Schwarzenböck
	PN	Polar nephelometer	Scattering phase function	LaMP	Gayet
Aircraft data	Aircraft position data	Polar 2 basic sensor instrumentation	Aircraft position data	Optimare	Garbrecht
	Atmospheric state	Polar 2 basic sensor instrumentation	Pressure, temperature, wind	Optimare	Garbrecht
	CR-2	Frost point hygrometer	humidity	AWI/NIPR	Herber / Wada