

Maria S Merian 0205 (05 February 2020)

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1. Objective

Today's plan was to launch the cloud kite again but then it was decided to postpone a launch to tomorrow. We steamed southeast and northward towards the Halo track/Meteor race track region. Tomorrow morning, we will meet with the Meteor and acquire calibration data.

2. Synoptic Situation

Some clouds in the morning and also later

3. Cruise-day Elements

Approx. Time (local)	Operation	Latitude	Longitude	Comm
08:30	Cloudkite launch			
13:00	Arrive at WP 11°39.70'N/56°44.70'W			7kn, uCTD 30'
16:00	Cloudkite recovery			
20:00	Arrive at WP			8kn, MVP
Thursday 6 th				
9:00	Arrive at WP 12°10.00'N/58°05.00'W			kn, MVP

Inter-calibration: no

CTD Stations: no

Overflights: no

4. Instrument Status

Operational:

Ocean – ADCP 38 & 75kHz; TSG; X-Band Radar; Underway O2, Chl-a (spectrometer); Incubation (PP; filtration); Nutrient/lab analysis; CTD/O2 +rosette; Moving vessel profiler; Microstructure sonde; Ferrybox pCO2; MIMS (O2/Ar, DSMS), underway CTD

Glider ifm09; ifm 03; ifm12 (see <https://gliderweb.geomar.de/> -> swarm 12;

Atmosphere – Halo Wind Lidar; Disdrometer; W-Band Radar. MRR (rain), sun photometer, Cloudcamera; SMPS (Aerosol; ship based); radiosondes; DWD Metrology package (incl. radiation); ARTHUS Raman Lidar; Splash drone (atmospheric state parameters); – MPCK+ (atmospheric state parameters+cloud microphysics; Cloudkite); Mini MPCK (atmospheric state parameters and fluxes; Cloudkite); SMPS (Aerosol; Cloudkite)

No functioning: MVP cable broken; Ceilometer

5. Outlook

3 x Bio CTD at 12° 25.126'N/ 57° 14.700'W (responsible: MPI-MM), Same location Deep CTD to calibrate Meteor CTD (responsible: MPI-MM Meteor/GEOMAR), start steam along Halo Circle for airplane overpasses calibration/synergy towards luv of BCO (13° 18.450'N, 58° 43.540'W) – go along straight line after 17:30 (end of flight time), 115nm (responsible Uni Cologne, Uni Hohenheim) Cloudkite flying (responsible: MPI-DS).

6. Figures





