



Flight Plan for: 08 April 2022, RF11

POLAR 6

Take Off: 09:30 UTC
Duration: 04:33 Hours

Pilots: James Steward
Noah Hladiuk

Crew:

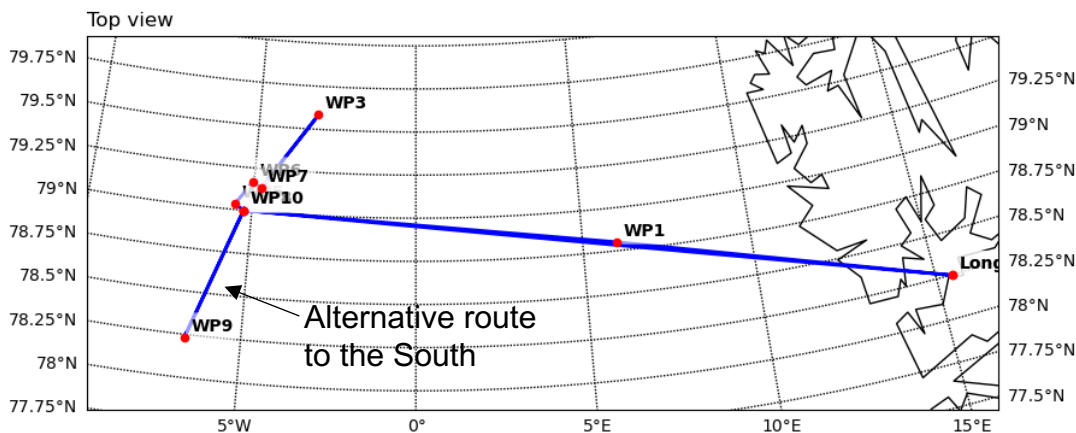
Mission PI	Johannes Schneider
AWI	Dennis Ludwig
CVI	Bruno Wetzel
ALABAMA/Trace gas	Philipp Joppe
PMS	Elena De La Torre Castro
Aerosol/HERA	Jonas Schaefer

Waypoints:

Longyearbyen	78.245	15.482
WP1	78.800	6.030
WP2	79.000	-5.250
WP3	79.584	-3.126
WP4	79.000	-5.250
WP5	79.033	-5.528
WP6	79.169	-5.045
WP7	79.136	-4.780
WP8	79.000	-5.250
WP9	78.675	-5.903
WP10	79.000	-5.250
Longyearbyen	78.245	15.482

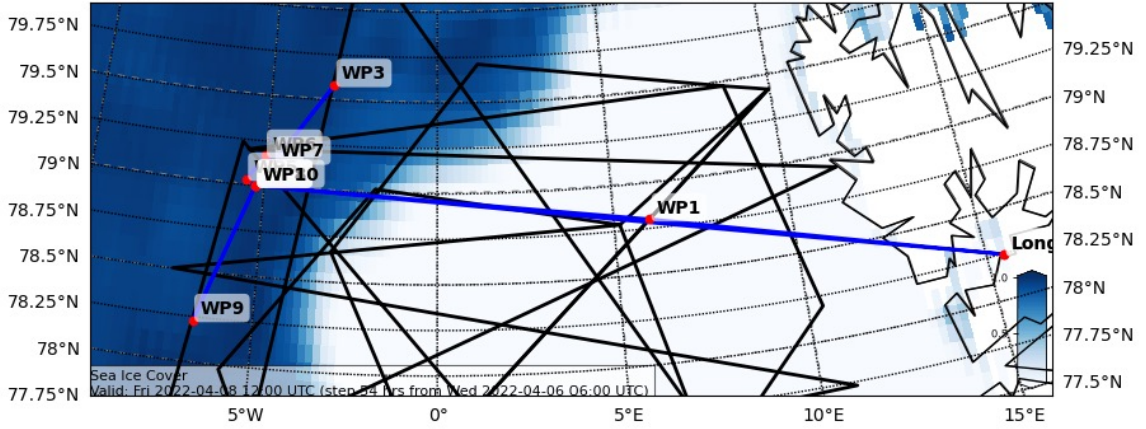
(alternative waypoint only)

Overview Map:

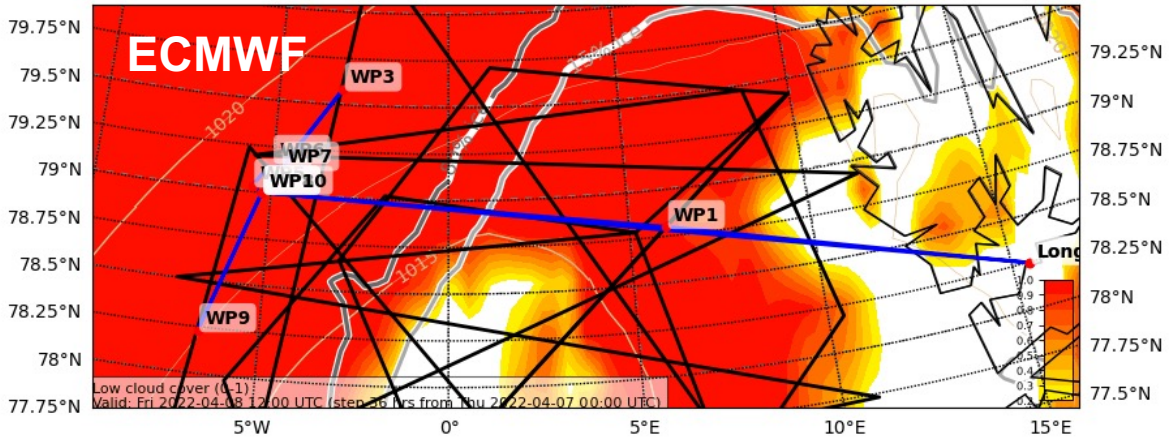




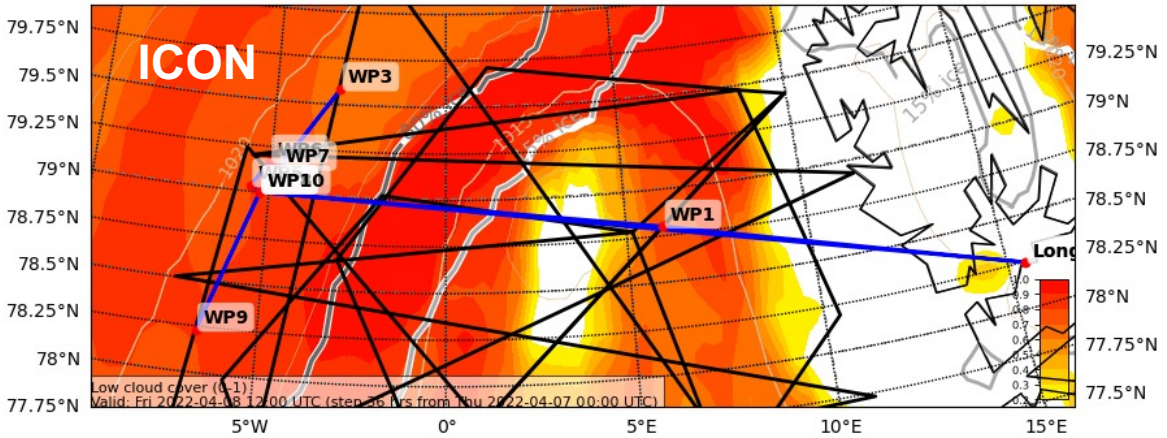
Sea Ice Cover Forecast (0-1) (default)
Valid: 2022-04-08T12:00:00Z (initialisation: 2022-04-06T06:00:00Z)

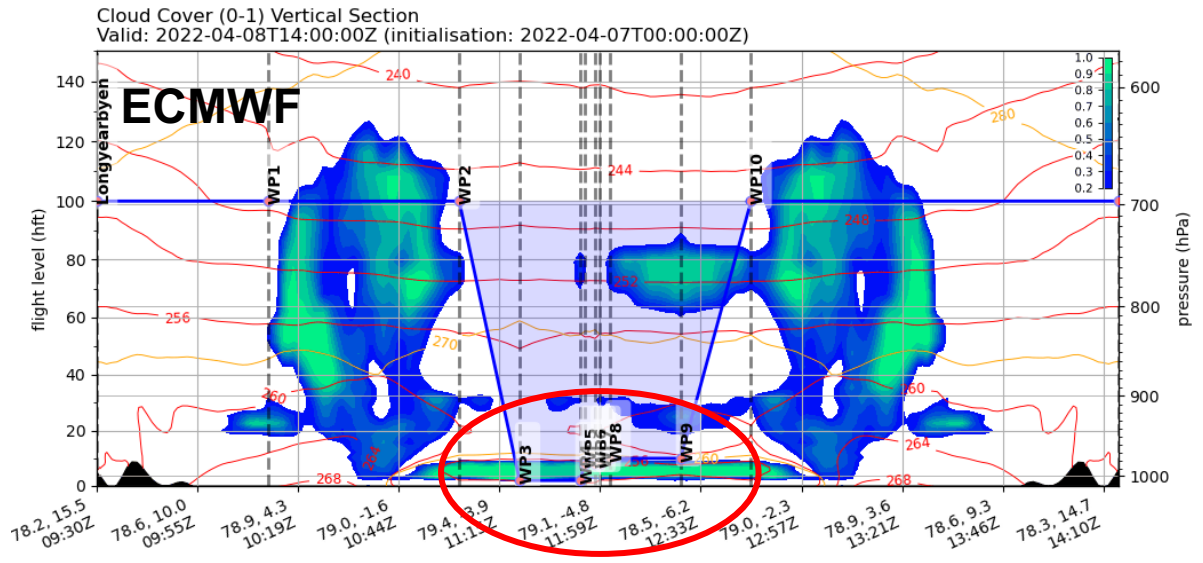


Cloud Cover (0-1) and Mean Sea Level Pressure (hPa) (LOW)
Valid: 2022-04-08T12:00:00Z (initialisation: 2022-04-07T00:00:00Z)

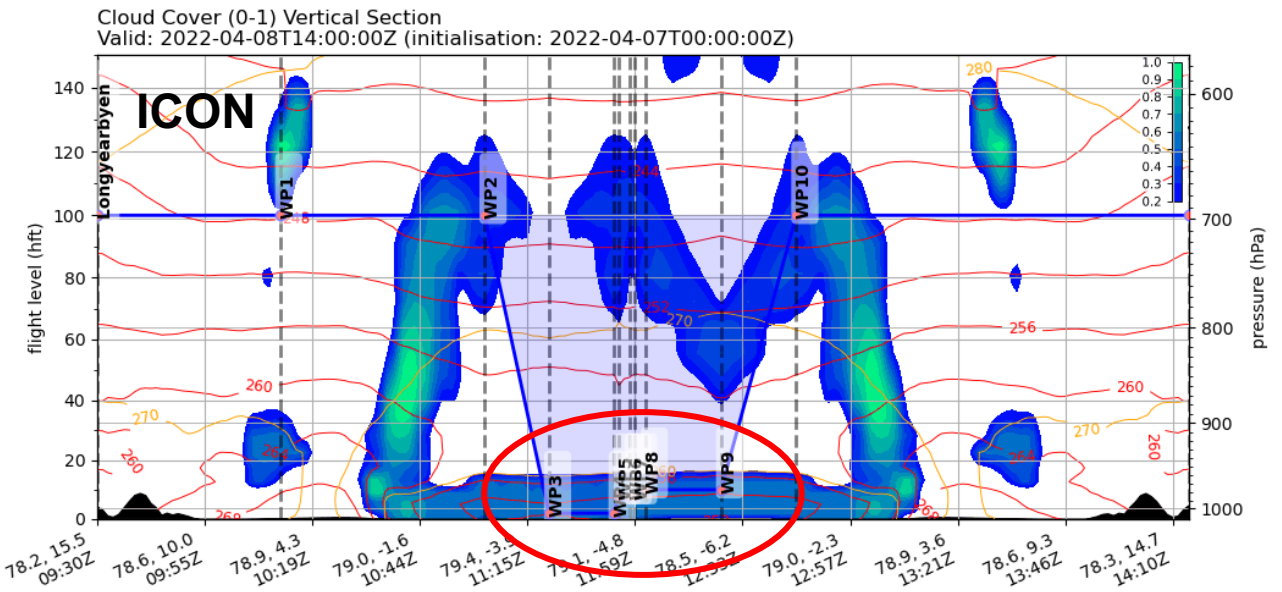


Cloud Cover (0-1) and Mean Sea Level Pressure (hPa) (LOW)
Valid: 2022-04-08T12:00:00Z (initialisation: 2022-04-07T00:00:00Z)





Sea ice



Sea ice

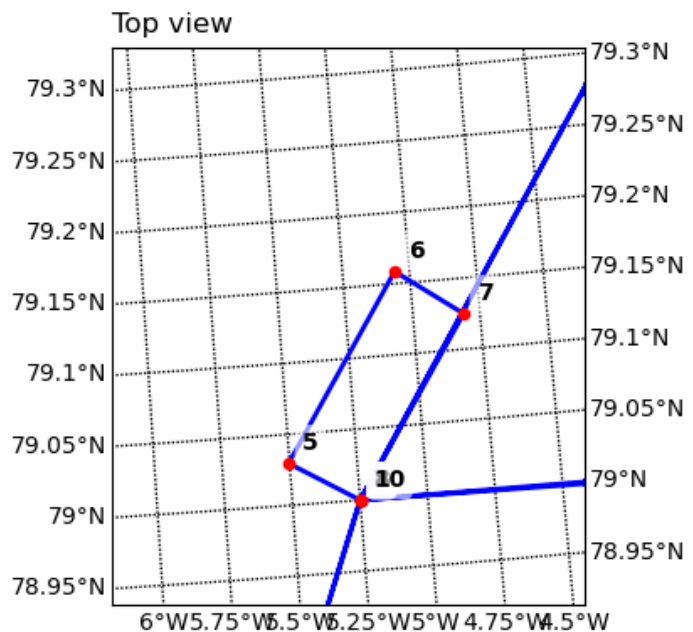


Flight Plan:

	Flight level	distance	speed	leg time	cum. time
LYR-WP1	cruise altitude	118 nm	160 kn	42 min	42 min
WP1-WP2		131 nm	120 kn	46 min	88 min
	(descend into clouds, levels at different heights, approx 10 min each) before WP2: descend to 200 ft				
WP2-WP3	200 ft	42 nm	120 kn	25 min	113 min
	procedure turn			5 min	118 min
WP3-WP4	above cloud	42 nm	120 kn	25 min	143 min
WP4-WP5-WP6-WP7-WP8:	3 „racetracks“, 14 min each, three levels in the cloud				
		72 nm	120 kn	42 min	185 min
WP8-WP1		131 nm	120 kn	46 min	231 min
	(Sampling in clouds at different levels)				
WP1-LYR		118 nm	160 kn	42 min	273 min
	ascend to 14000 ft (5 min), then 12000 ft (5 min), 10000 ft (5 min) 8000 ft (5 min).				

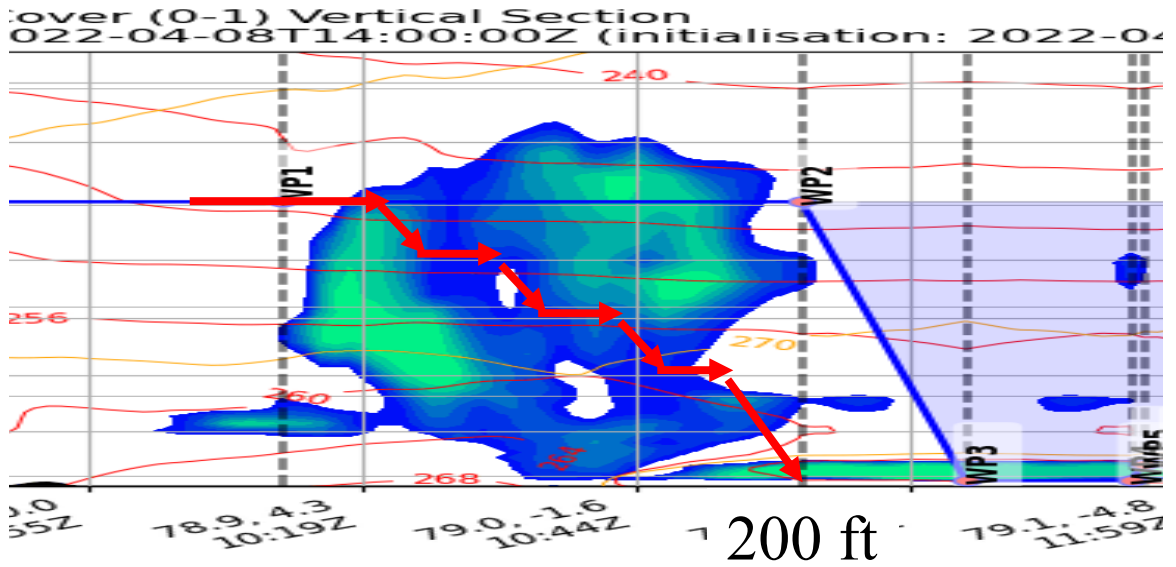
Total: 4:33

Detailed plan of racetrack pattern

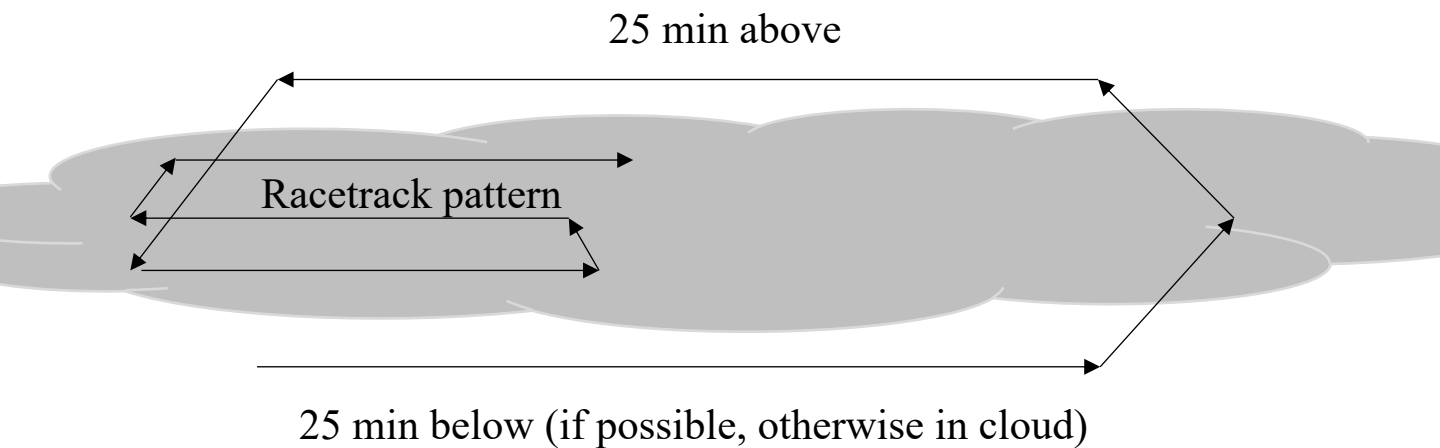




Cloud sampling on the way to the ice edge:



Sampling clouds over sea ice:

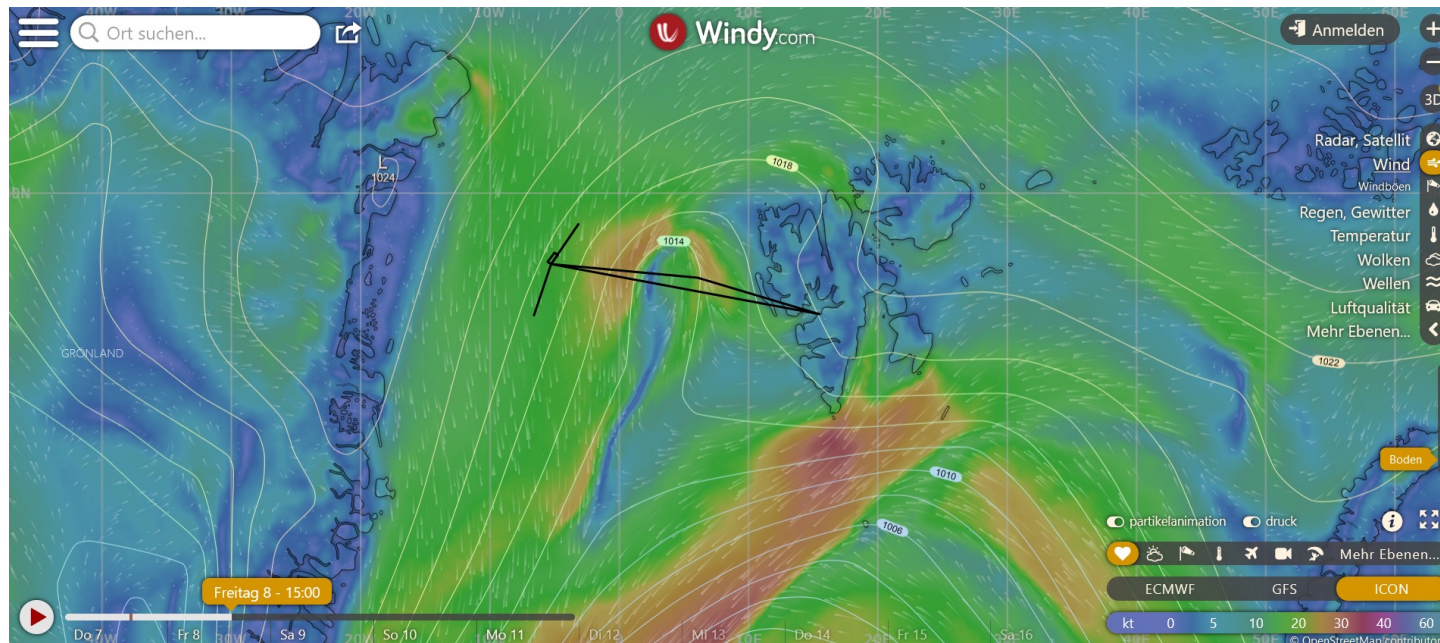
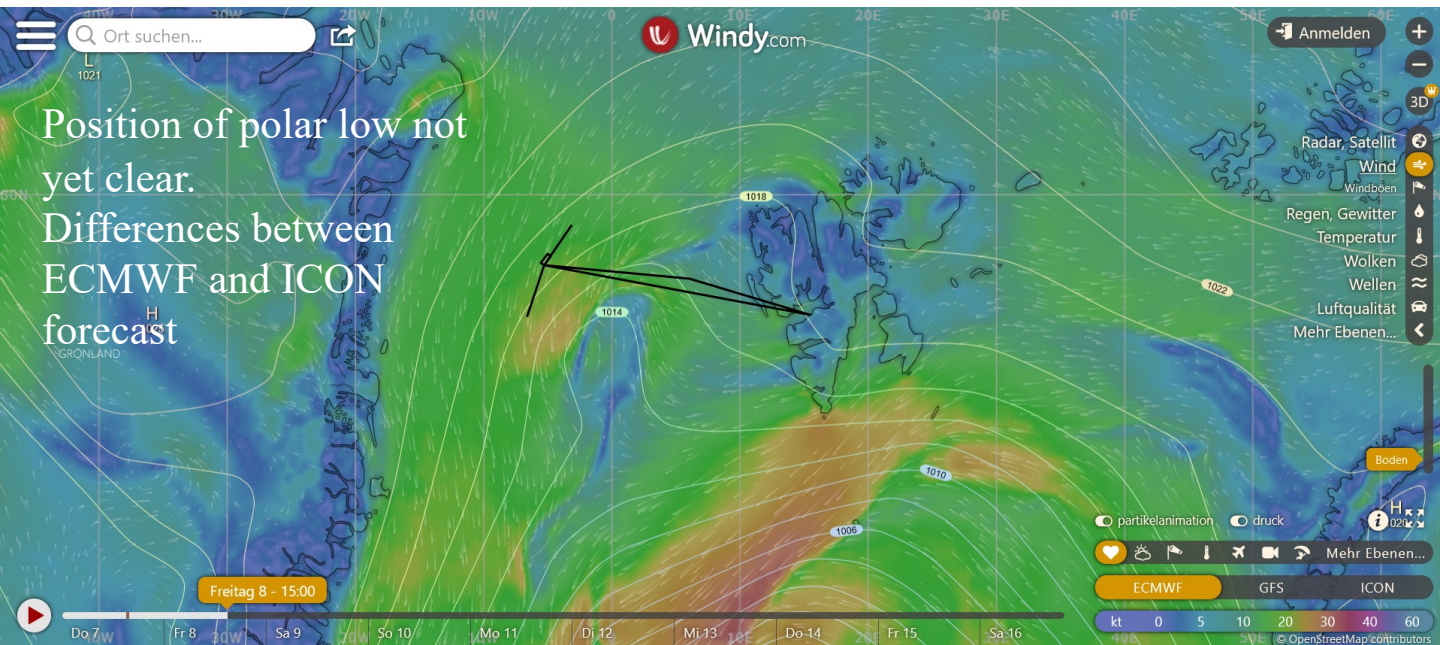




Objectives of the Flight:

Probing clouds in the vicinity of the polar low over Fram Strait. Higher probability for low level clouds over ice than in previous days. INP sampling below and above clouds over sea ice if possible. Operation in the vicinity of the HALO flight track(s), but not in exact collocation. Probing higher clouds in the way to the operation area and on the way back to LYR.

General Weather Situation:





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