



Flight Plan for: 04 April 2022, RF09

POLAR 6

Take Off: 10:00 UTC
Duration: 04:55 Hours

Pilots: Alan Gilbertson
Artem Brusilovskiy

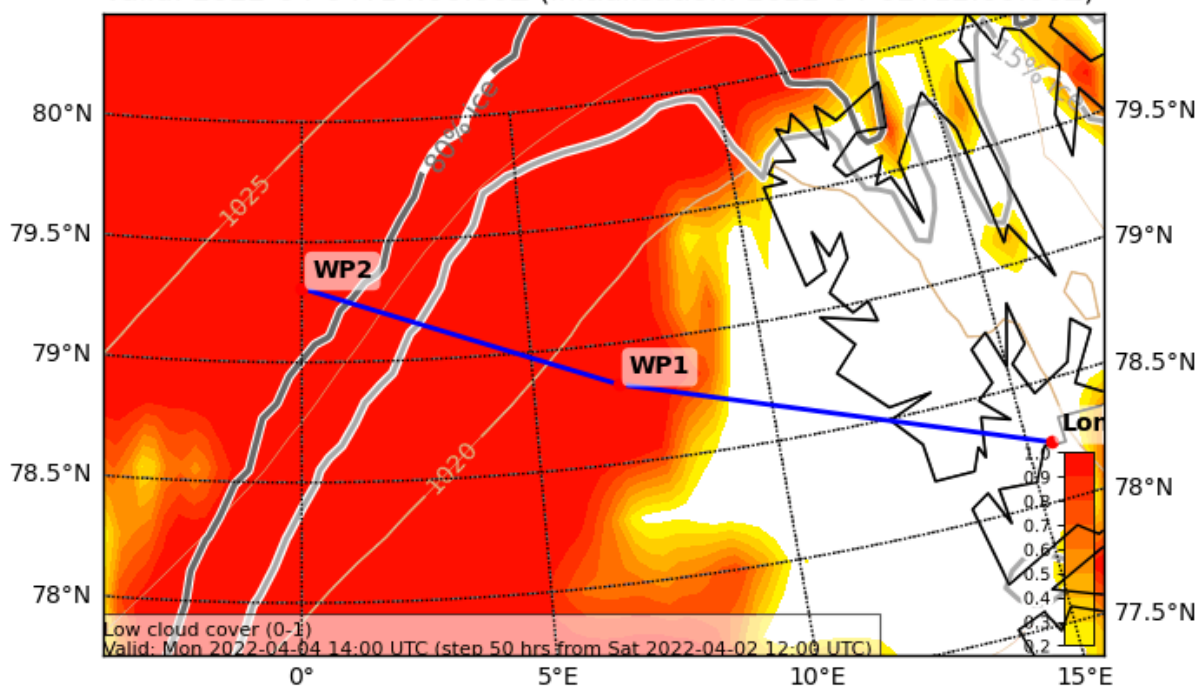
Crew:	Mission PI	Johannes Schneider
	AWI	Maximilian Stöhr (??)
	CVI	Jonas Schäfer
	ALABAMA/Trace gas	Philipp Joppe
	PMS	Elena delaTorreCastro
	Aerosol/HERA	Sarah Grawe

Waypoints:

WP1: 78.83N 6.83E	=	78° 50' N, 6° 50' E
WP2: 79.31N 0.00E	=	79° 19' N, 0° 00' E

Overview Map:

Cloud Cover (0-1) and Mean Sea Level Pressure (hPa) (LOW)
Valid: 2022-04-04T14:00:00Z (initialisation: 2022-04-02T12:00:00Z)



P6_RF09_v04



Flight Plan:

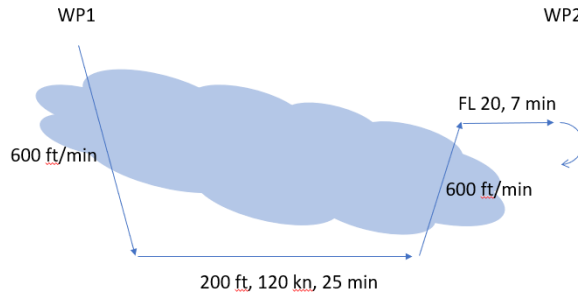
	<u>distance</u>	<u>speed</u>	<u>time</u>	<u>cum. time</u>
LJR – WP1: FL50	109 nm	160 knots	50 min	0:50
WP1-WP2: <u>descent 600 ft/min to 200 ft</u>	} 83 nm	120 knots	08 min	0:58
25 min at 200 ft (<u>below cloud</u>)			25 min	1:23
<u>Ascent 600 ft/min to above cloud</u>			05 min	1:28
7 min out of <u>cloud</u>			07 min	1:35
WP2: <u>procedure turn</u>			05 min	1:40
WP2 – WP1: <u>Stair case in cloud,</u> <u>heights depend on P5 information</u>	83 nm	120 knots	45 min	2:25
WP1: <u>procedure turn</u>			05 min	2:30
WP1 – WP2: <u>above cloud (approx. FL40)</u>	83 nm	120 knots	45 min	4:05
WP2: <u>procedure turn</u>			05 min	3:20
WP2 – WP1: <u>In cloud, close to cloud top</u>	83 nm	120 knots	45 min	3:15
WP1 – LJR: <u>ascent to FL 140 (trace gas), back to LJR</u>	109 nm	160 knots	50 min	4:55

Total: 4:55

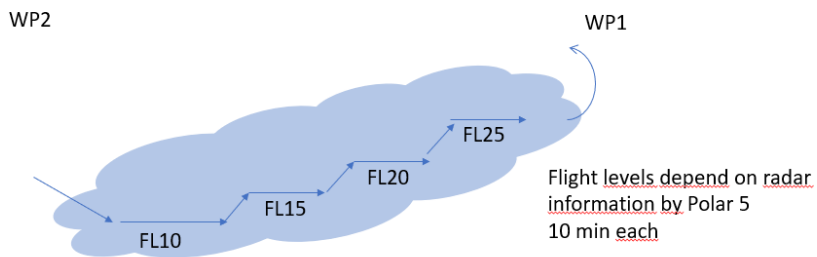


Detailed plan:

1) WP1 – WP2



2) WP2 – WP1

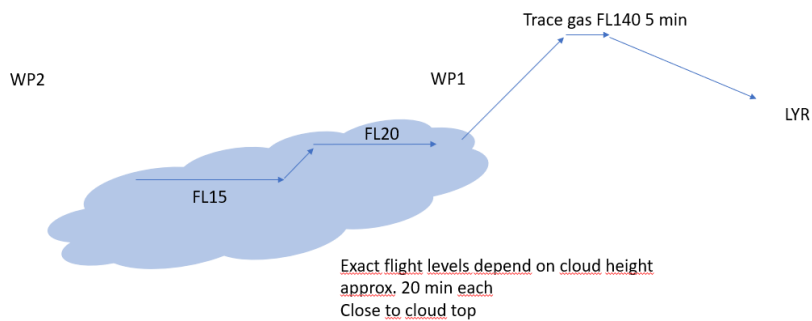


WP1

WP2



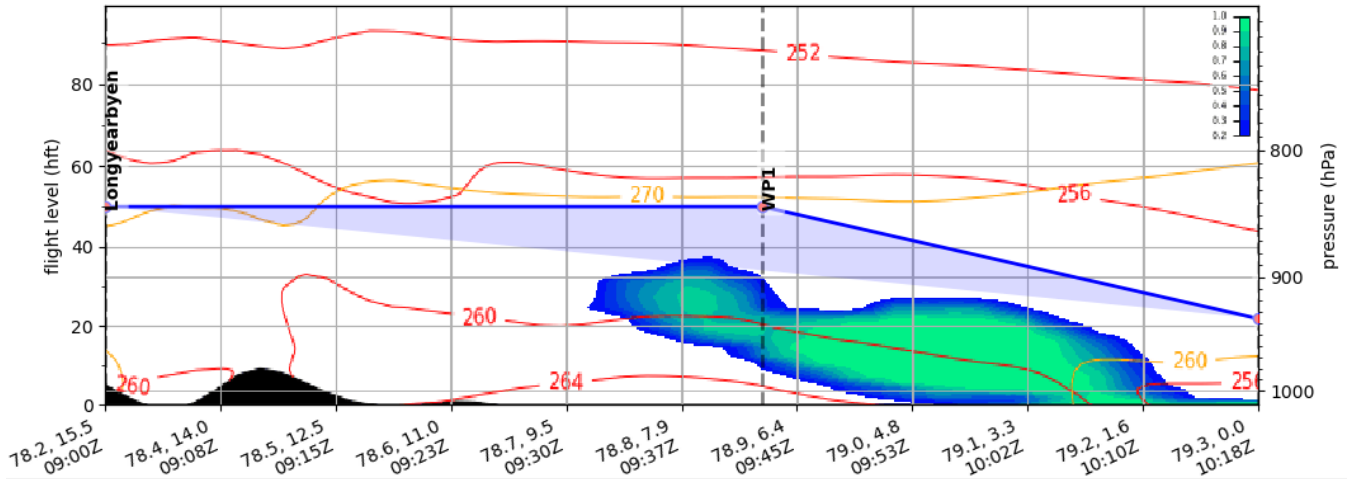
4) WP2 – LYR



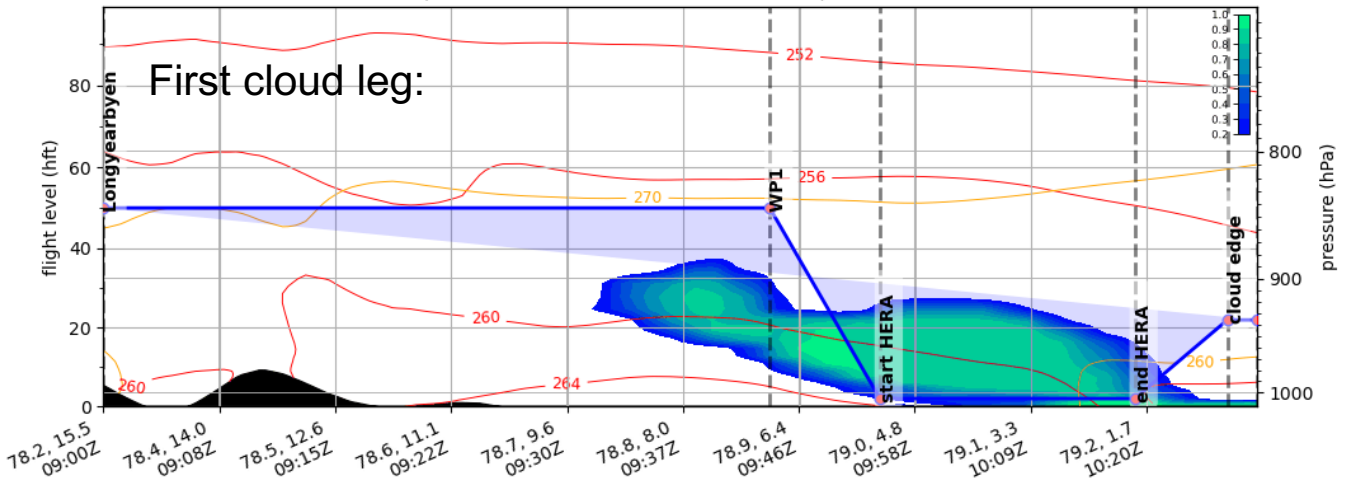


Additional Maps:

Cloud Cover (0-1) Vertical Section
Valid: 2022-04-04T12:00:00Z (initialisation: 2022-04-02T12:00:00Z)



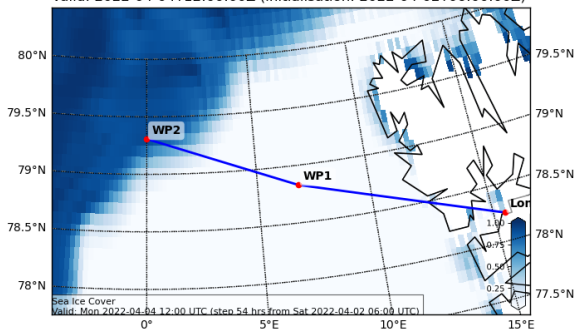
Cloud Cover (0-1) Vertical Section
Valid: 2022-04-04T12:00:00Z (initialisation: 2022-04-02T12:00:00Z)



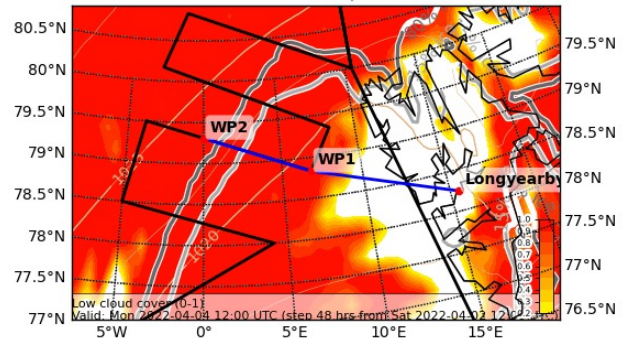
Sea ice forecast
04042022 12:00 UTC

Black: HALO Flight plan

Sea Ice Cover Forecast (0-1) (default)
Valid: 2022-04-04T12:00:00Z (initialisation: 2022-04-02T06:00:00Z)



Cloud Cover (0-1) and Mean Sea Level Pressure (hPa) (LOW)
Valid: 2022-04-04T12:00:00Z (initialisation: 2022-04-02T12:00:00Z)

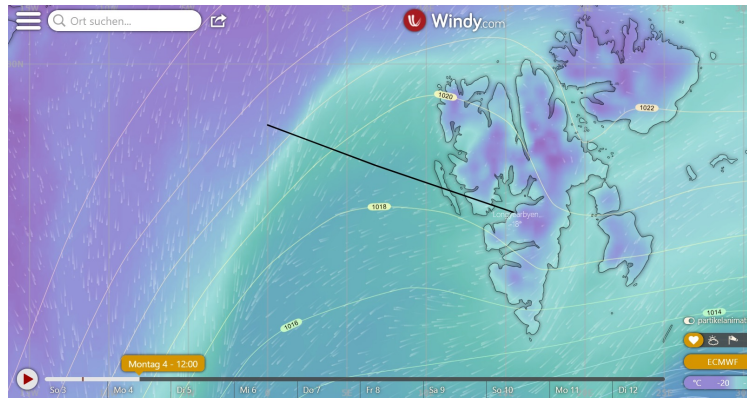
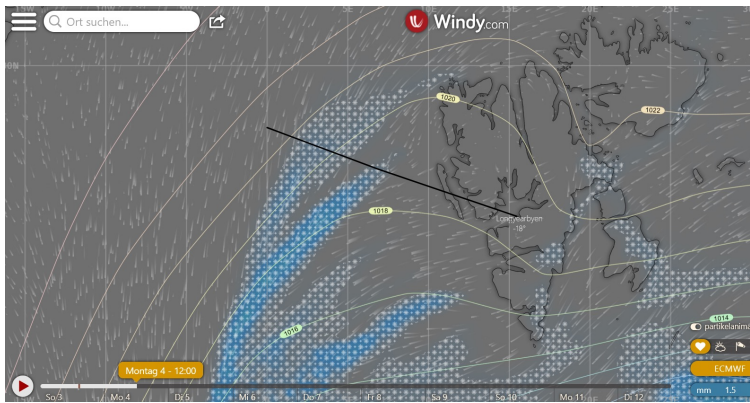




Objectives of the Flight:

Collocated flight with Polar 5 and partly with HALO. HALO will pass this leg once. Probing cloud and aerosol over cold air outbreak and over sea ice. Aerosol below and above cloud. For HALO comparison last leg close to cloud top but in cloud. For Polar 5 comparison second and forth leg, levels for second leg will be given by P5 radar from first overpass.

General Weather Situation:



Marine Cold Air Outbreak Index and Surface Winds
Valid: 2022-04-04T12:00:00Z (initialisation: 2022-04-01T00:00:00Z)

