



Flight Plan for: 30 April 2022

POLAR 6

Take Off: 09:10 UTC
Duration: 05.01 Hours

Pilots: James Steward
Artem Brusilovsky

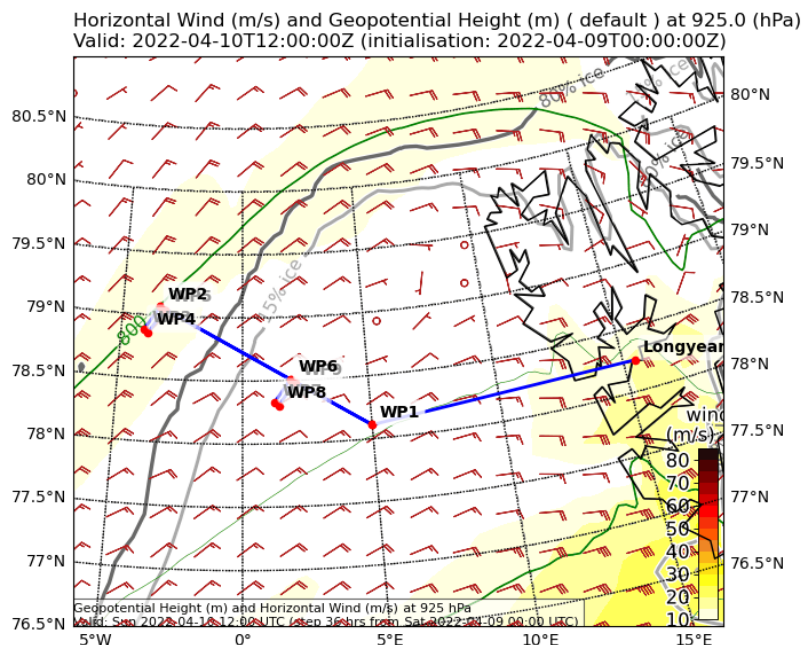
Crew:	Mission PI	Manuel Moser
	AWI	Dennis Ludwig
	CVI	Stephan Mertes
	ALABAMA /Trace gas	Philipp Joppe
	PMS	Johanna Mayer
	Aerosol/HERA	Jonas Schäfer

Ground PI: Nina Maherndl

Waypoints:

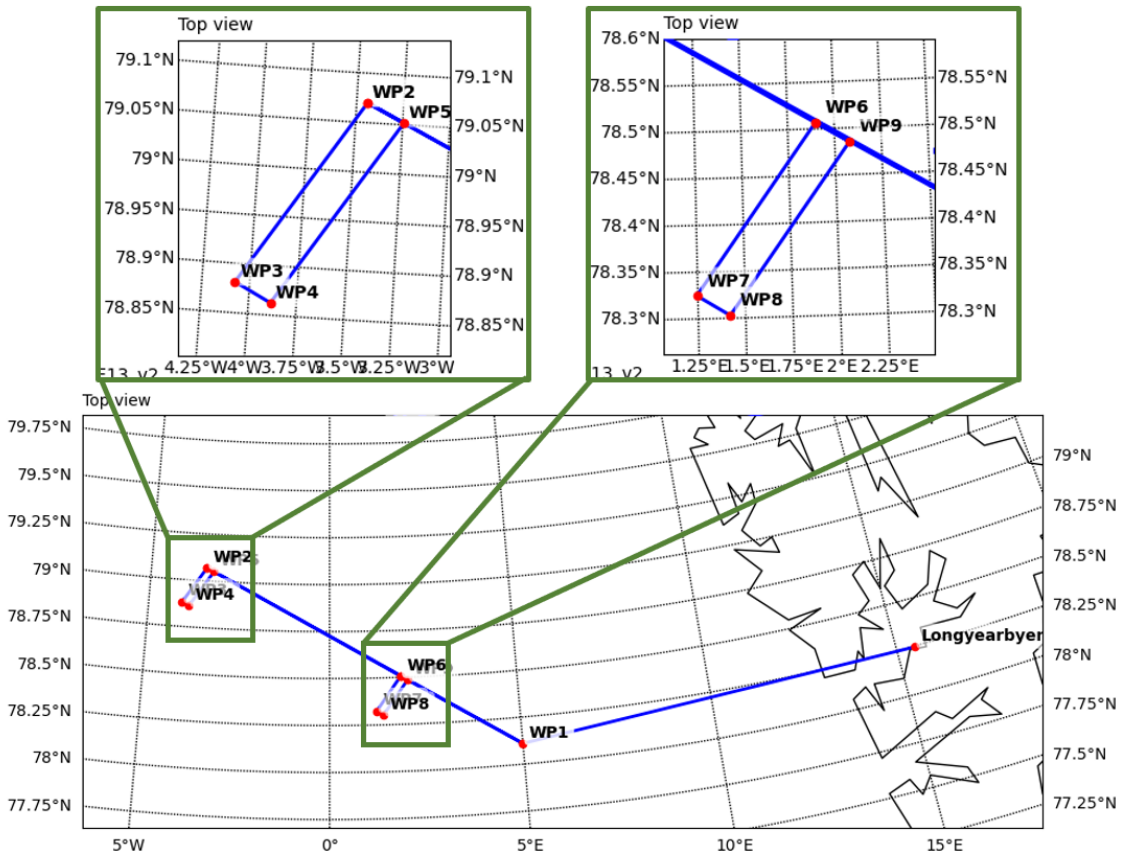
WP1	78.11 5.00	78° 6.600' N	005° 00.000' E
WP2	79.07 -3.44	79° 4.200' N	003° 26.520' W
WP3	78.88 -4.08	78° 52.860' N	004° 04.620' W
WP4	78.86 -3.88	78° 51.720' N	003° 53.100' W
WP5	79.05 -3.24	79° 3.120' N	003° 14.640' W
WP6	78.51 1.90	78° 30.420' N	001° 54.000' E
WP7	78.33 1.25	78° 19.500' N	001° 14.700' E
WP8	78.30 1.42	78° 18.180' N	001° 25.140' E
WP9	78.48 2.08	78° 29.100' N	002° 04.740' E

Overview Map:





Detailed Map:



Flight Plan:

LYR – W1 at cruise altitude @160kn; 129NM 50 min
W1 – W2 Staircase pattern in cloud top @120kn; 116NM 58 min

Science Track over sea ice: (1 below clouds, 3 inside clouds, 2 above clouds)

W2>W3>W4>W5>W2>W3>W4>W5>W2>W3>W4>W5
 @120kn; 13NM each 54min

W5 – W6 sawtooth pattern @120kn; 71NM 36min

Science track over ocean:(1 below clouds, 3 inside clouds, 1 above clouds)

W6>W7>W8>W9>W6>W7>W8>W9>W6>W7
 @120kn; 13NM each 43min

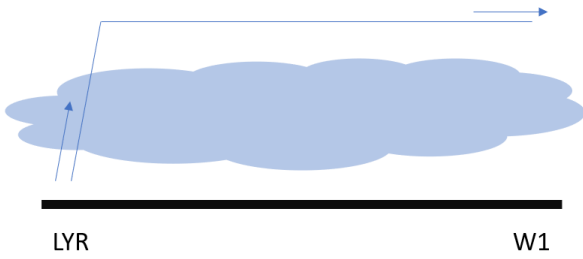
W7 – LYR FL140 (5min); FL120 (5min); FL10 (5min); cruise @160kn; 163NM 60min

Total: 5 hr 01 min

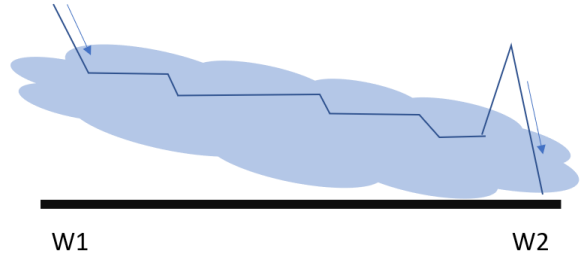


Additional Maps:

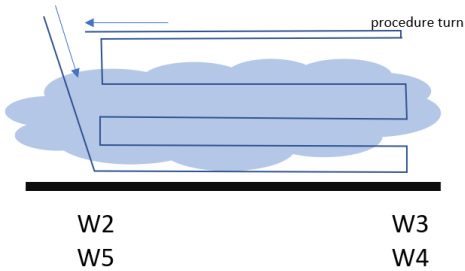
LYR → W1 (@160kn; 129NM; 50min)



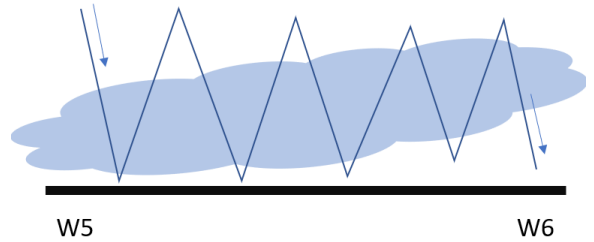
W1 → W2 (@120kn; 116NM; 58min)
Altitudes: inside cloud top



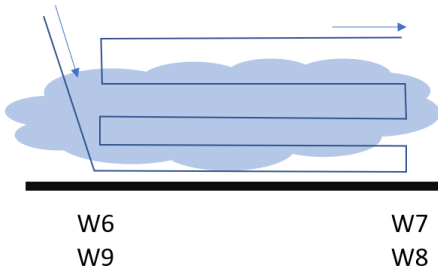
W2/W5 → W3/W4 (@120kn; 13NM/6:45min each leg; **54min**)
Altitudes: 200ft, 600ft, 1000ft, 1400ft, 2000ft (above cloud)



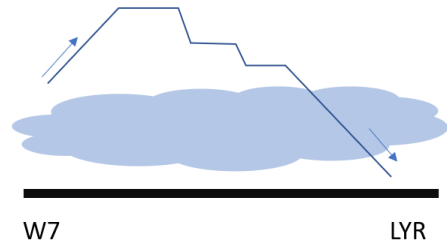
W5 → W6 (@120kn; 71NM; 36min)
Altitude: Sawtooth



W6/W9 → W7/W8 (@120kn; 13NM/6:45min each leg; **43min**)
Altitudes: 1300ft (below cloud), 2300ft, 3000ft, 3700ft, 5000ft (above cloud)



W7 → LYR (@160kn; 163NM; 60min)
Altitudes: 14000ft, 12000ft, 10000ft



Cloud Cover (0-1) Vertical Section
Valid: 2022-04-10T12:00:00Z (initialisation: 2022-04-09T00:00:00Z)

