

## POLAR 5

Crew: Mission PI      Christof Lüpkes  
AWI                      Lukas Kandora  
SMART                 Johannes Stapf  
Eagle/Hawk          Elena Ruiz  
MiRAC                 Tobias Doktorowski  
AMALi                 Tobias Donth

**Est. Take Off: 10:30 LT**

**Est. Duration: 6 hr 6 min**

## POLAR 6

Crew: Mission PI      Heiko Bozem  
AWI                      Cristina Sans Coll  
CVI                      Udo Kästner  
Aerosol I                Hans Clemen  
Aerosol II                Oliver Appel  
PMS                      Delphine Leroy  
Aerosol II                Franziska Köllner

**Est. Take Off: 10:30 LT**

**Est. Duration: 5 hr 30 min**

# Alternative B

# POLAR 5

## ACLOUD Flight 2017 06 10 Saturday

### Flight Plan (Alternative B, if only low clouds, estimates of duration only for P5)

LYR → W0                      10,000 ft:                      1 Nm , 160 kn                      47 min

W0 → W1 P5 arrives at W1 in 200 ft,                      71 Nm , 160 kn                      27 min  
 descend 1000 ft/min  
 P6 arrives at W1 in cloud layer

W1 → PS                      200 ft                      60 Nm, 120 kn                      30 min  
 at PS, 5 staggered legs (8 min length)                      120 kn                      50 min  
 in different heights,  
 e.g. 200 ft, 400 ft, 600 ft, 1000 ft, 1500 ft, P6 staggered legs in clouds

PS → W2                      200 ft                      40 Nm, 120 kn                      20 min

at W2, fly 5 staggered legs (8 min)                      120 kn                      50 min  
 in different heights

W2 → LY, climb to 8.000 ft, at 8000 ft                      70 min+35 min  
 fly 4 squares of 1 min edge length  
 with 100 kn, 120 kn, 140 kn, 100 kn

→ Home to Longyear 10.000 ft, free speed                      38 min



### Waypoints:

LYR:	78° 14.816' N	15° 27.545, E
W0:	80° 0.242' N	13° 27.144' E
W1:	81° 1.056' N	11° 53.172' E
PS:	81° 54.000N	9° 54.000' E
W2:	81° 52.451'N	5° 44.294' E
W3:	81° 00.000'N	7° 26.198'E
W4:	79° 14.892' N	9°59.793' E

Dropsondes at W0 W1 W2 W3 W4  
 PS

# Alternative B

# POLAR 6

## Flight Plan (Alternative B, if only low clouds, estimates of duration only for P5)

LYR → W0      10,000 ft:      1 Nm , 160 kn      47 min

W0 → W1    P5 arrives at W1 in 200 ft,    71 Nm , 160 kn      27 min  
                  descend at 1000 ft/min  
                  P6 arrives at W1 in cloud layer

at W1, 5 legs (8 min length), lowest in 200 ft      50 min

W1 → W3    free height

at W3, 5 legs (8 min length), lowest in 200 ft      50 min

W3 → W4 → LY

If time available fly 4 squares with 1 min edge length, 100, 120, 145 kn, 100 kn

→ Home to Longyear 10.000 ft, free speed



### Waypoints:

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Dropsondes at W0 W1 W2 W3 W4  
 PS

# ACLOUD Flight 2017 06 10 Saturday

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**Est. Duration: 6 hr 6 min**

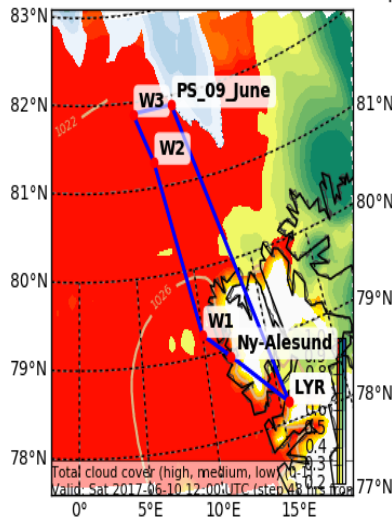
## Flight Plan (Alternative A, if middle clouds are present)

LJR → W0	10,000 ft:	<b>1 Nm , 160 kn</b>	<b>47 min</b>
W0 → W1	P5 arrives at W1 in 200 ft, descent at 1000 ft/min P6 arrives at W1 in cloud layer	<b>71 Nm , 160 kn</b>	<b>27 min</b>
W1 → PS	P5:                      200 ft P6:                      in cloud layer	<b>60 Nm, 120 kn</b>	<b>30 min</b>
At PS: 5 staggered legs (8 min length) in different heights, e.g. 200 ft, 400 ft, 600 ft, 1000 ft, 1500 ft, P6 staggered legs in clouds Lowest P6 leg in 2500 ft		<b>120 kn</b>	<b>50 min</b>
PS → W2	200 ft Collocated with P6, which flies in 500 ft or as close as possible	<b>40 Nm, 120 kn</b>	<b>20 min</b>
At W2: 5 staggered legs (8 min) in different heights P6, staggered legs in clouds		<b>120 kn</b>	<b>50 min</b>
W2 – W4	climb to 8.000 ft, at 8000 ft 4 squares of 1 min edge length with 100 kn, 120 kn, 140 kn, 100 kn	<b>70 min+35 min</b>	
→ Home to Longyear	10.000 ft, free speed		<b>38 min</b>

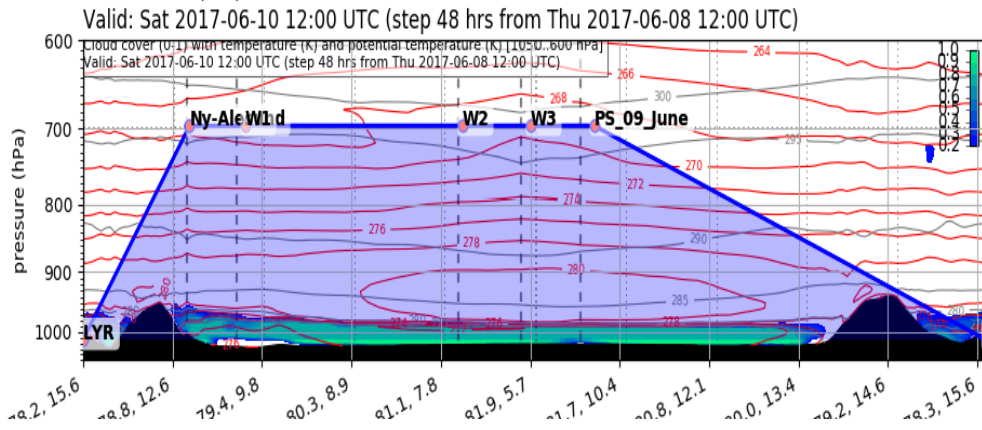
# Forecast Saturday 12 UTC

Cloud Cover (0-1) (Total Cloud Cover)

Valid: Sat 2017-06-10 12:00 UTC (step 48 hrs from Thu 2017-06-08 12:00 UTC)



EPSG:77790000



P5 Plan

