

ACLOUD Flight 2017 05 31, Wednesday

POLAR 6
In Situ

Crew:	Mission PI	Johannes Schneider	
	AWI	Daniel Damaske	Est. Take Off: 17:00 LT
	PMS	Dmitry Chechin	
	Aerosol 1	Hans Clemen	Est. Duration: 5 h 00 min
	Aerosol 2	Stephan Mertes	
	Trace Gases	Heiko Bozem	

Waypoints: **LYR:** 78° 14.816' N, 15° 27.545' E
 C1: 78° 52.000' N, 12° 35.000' E
 C2: 79° 10.000' N, 10° 30.000' E
 C3: 80° 05.000' N, 07° 00.000' E

Flight Plan **PS:** Polarstern: 80° 45.000' N, 10° 40.000' E

LYR – C1 climb to comfortable altitude: **55 NM @ 140kn** **30 min**
 → descent to 1500 ft at C1

C1 – C2 pass NyA/center of fjord at 1500 ft: **30 NM @ 140kn** **15 min**

C2 – C3 5 min legs in diff. Altitude 200 ft/ 500 ft: **65 NM @ 140kn** **30 min**

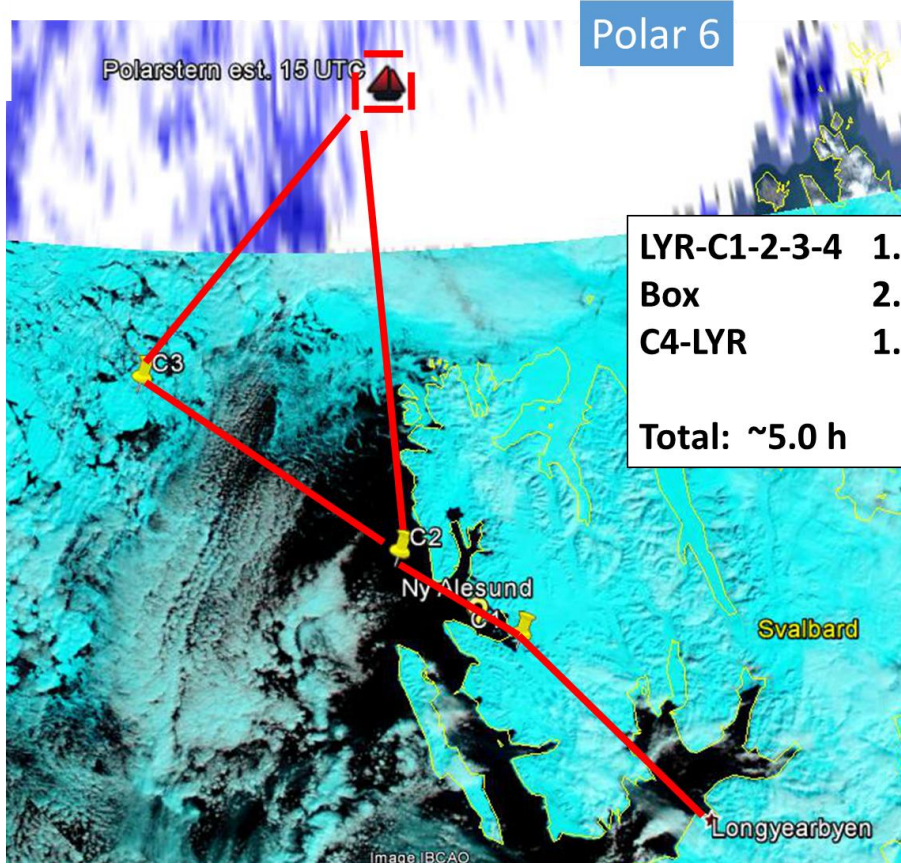
C3 – C4 Calibration pattern nose boom: **75 NM @ 120kn** **35 min**
 → **diff. flight speeds 1min (160-140-140-120-100-120-140-160kn)**

Box around PS: C4-C5-C6-C7 **6x4x10 NM @ 140kn** **6x 20 min**
 in different altitudes 6x:
 200 ft, 1000 ft, 3000 ft, 5000 ft, 7000 ft, 10 000 ft
 - use C3-C4 to climb

C4 – LYR at 10,000 ft, descend to 5,000ft half way **180 NM @ 140kn** **75 min**

Total: 585 NM 5 h 00 min

Take-off:
15:00



LYR-C1-2-3-4	1.50 h
Box	2.00 h
C4-LYR	1.50 h
Total: ~5.0 h	

Boxes in
200 ft
1000 ft
3000 ft
6000 ft
10000 ft

120 kn

