

# MOSAIC-ACA Flight 2020 09 13

**POLAR 5**

## Crew:

Mission PI

Christof Lüpkes

AWI

Hannes Probst

AWI

**Est. Take Off:** 11:00 LT

Eagle/Hawk

Michael Schäfer

MiRAC

Friedhelm Jansen

**Est. Duration:** 5 Hours 19 min

PMS

Manuel Moser

## Coordinates:

LYR	78° 14,7'	15° 28,9'
NY	78° 55,4'	11° 55,4'
W1	80° 00,0'	-8° 00,0'
W2	80° 10,2'	-8° 00,0'
W3	79° 45,0'	0° 00,0'
W4	79° 55,2'	0° 00,0'

7 dropsondes between NY ← → W1

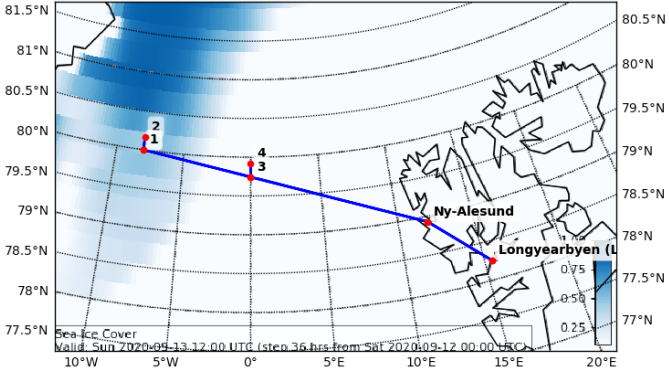
## Flight Plan:

<b>LYR – NY – W1</b> ascend to FL100	<b>286 NM @ 160 kn</b>	<b>107 min</b>
<b>W1 – W2</b> stay at FL100	<b>10 NM @ 160 kn</b>	<b>10 min</b>
<b>W2 – W1</b> descend to cloud top with 2,000 ft/min (inside cloud 500 ft/min)		<b>10 min</b>
<b>W1 ↔ W2</b> different levels from below	<b>10 NM @ 120 kn</b>	<b>40 min</b>
<b>W1 – W3</b> saw tooth through clouds	<b>86 NM @ 140 kn</b>	<b>37 min</b>
<b>W3 ↔ W4</b> different levels from below	<b>10 NM @ 120 kn</b>	<b>40 min</b>
<b>W3 – NY – LYR</b> descending	<b>200 NM @ 160 kn</b>	<b>75 min</b>

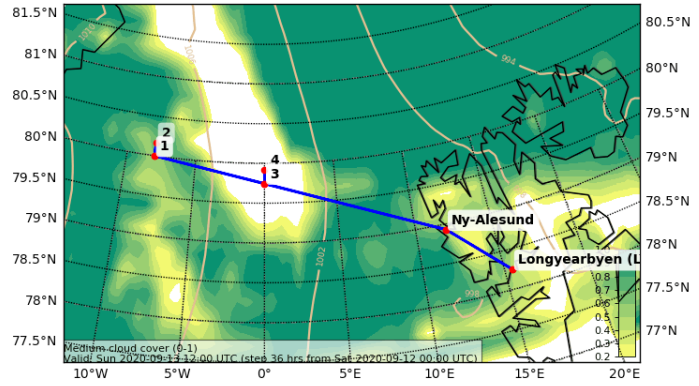
**Total:**

**ca. 5 hours 19 min**

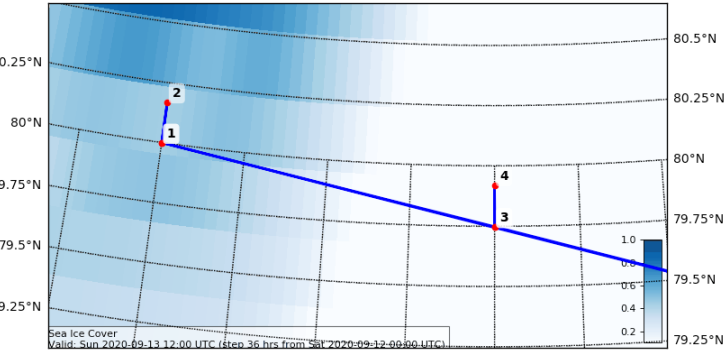
Sea Ice Cover Fraction (0-1) (pseudocolor plot)  
Valid: So 2020-09-13 12:00 UTC (step 36 hrs from Sa 2020-09-12 00:00 UTC)



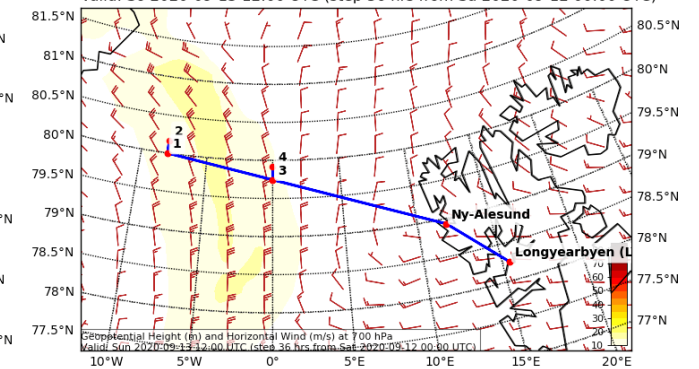
Cloud Cover (0-1) (Medium Cloud Cover)  
Valid: So 2020-09-13 12:00 UTC (step 36 hrs from Sa 2020-09-12 00:00 UTC)



Sea Ice Cover Fraction (0-1) (pseudocolor plot)  
Valid: So 2020-09-13 12:00 UTC (step 36 hrs from Sa 2020-09-12 00:00 UTC)



Geopotential Height (m) and Horizontal Wind (m/s) (Wind Speed 10-85 m/s) at 700 hPa  
Valid: So 2020-09-13 12:00 UTC (step 36 hrs from Sa 2020-09-12 00:00 UTC)



Cloud Cover (0-1) Vertical Section  
Valid: So 2020-09-13 12:00 UTC (step 36 hrs from Sa 2020-09-12 00:00 UTC)

