

# MOSAIC-ACA Flight 2020 09 09

**POLAR 5**

## Crew:

Mission PI	Manfred Wendisch	
AWI	Hannes Probst	
AWI	Martin Gehrman	<b>Est. Take Off:</b> 10:00 LT
Eagle/Hawk	Marcus Klingebiel	
MiRAC	Mario Mech	<b>Est. Duration:</b> 5 Hours 33 min
PMS	Manuel Moser	

## Coordinates:

LYR	78° 14,7'	15° 28,9'
NY	78° 55,4'	11° 55,4'
W1	79° 37,8'	7° 00,0'
W2	82° 30,0'	7° 00,0'
W3	82° 30,0'	5° 42,0'
W4	81° 30,0'	7° 00,0'
W5	81° 30,0'	5° 48,0'

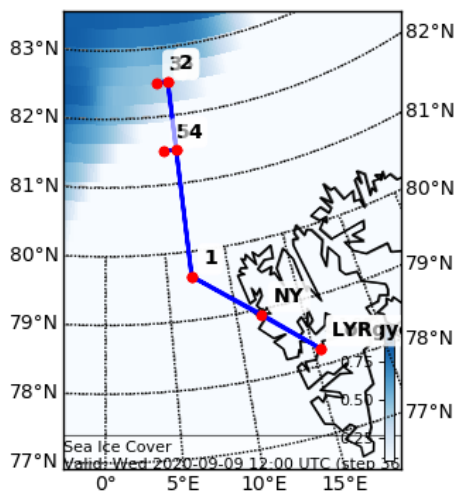
10 dropsondes between W1 ↔ W2

## Flight Plan:

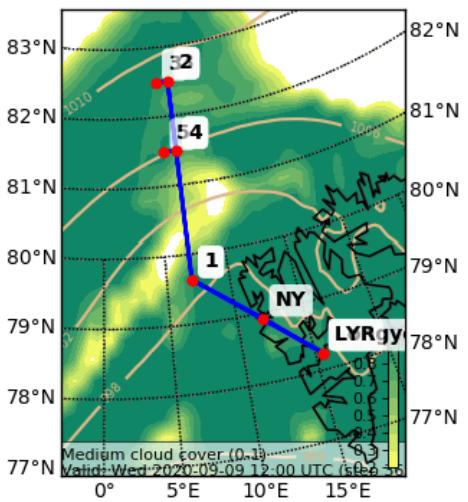
<b>LYR – NY – W1</b> ascend to FL100	<b>128 NM @ 160 kn</b>	<b>48 min</b>
<b>W1 – W2</b> stay at FL100	<b>172 NM @ 160 kn</b>	<b>65 min</b>
<b>W2 – W3</b> stay at FL100	<b>10 NM @ 160 kn</b>	<b>10 min</b>
<b>W3 – W2</b> descend to cloud top with 2,000 ft/min (inside cloud 500 ft/min)		<b>10 min</b>
<b>W2 ↔ W3</b> different levels from below	<b>10 NM @ 120 kn</b>	<b>40 min</b>
<b>W2 – W4</b> saw tooth through clouds	<b>60 NM @ 140 kn</b>	<b>30 min</b>
<b>W4 ↔ W5</b> different levels from below	<b>10 NM @ 120 kn</b>	<b>40 min</b>
<b>W4 – W1</b> at FL100	<b>112 NM @ 160 kn</b>	<b>42 min</b>
<b>W1 – NY – LYR</b> descending	<b>128 NM @ 160 kn</b>	<b>48 min</b>

**Total:** **ca 5 hours 33 min**

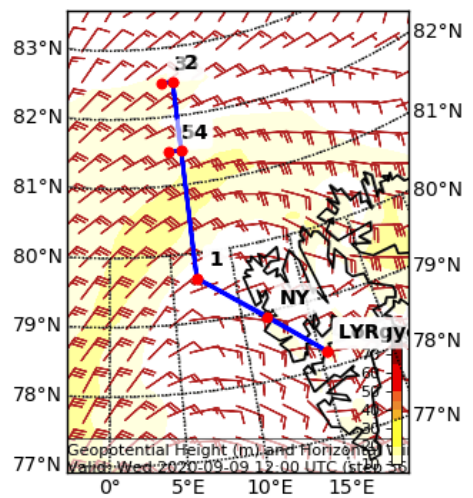
Sea Ice Cover Fraction (0-1) (pset)  
Valid: Wed 2020-09-09 12:00 UTC



Cloud Cover (0-1) (Medium Cloud)  
Valid: Wed 2020-09-09 12:00 UTC



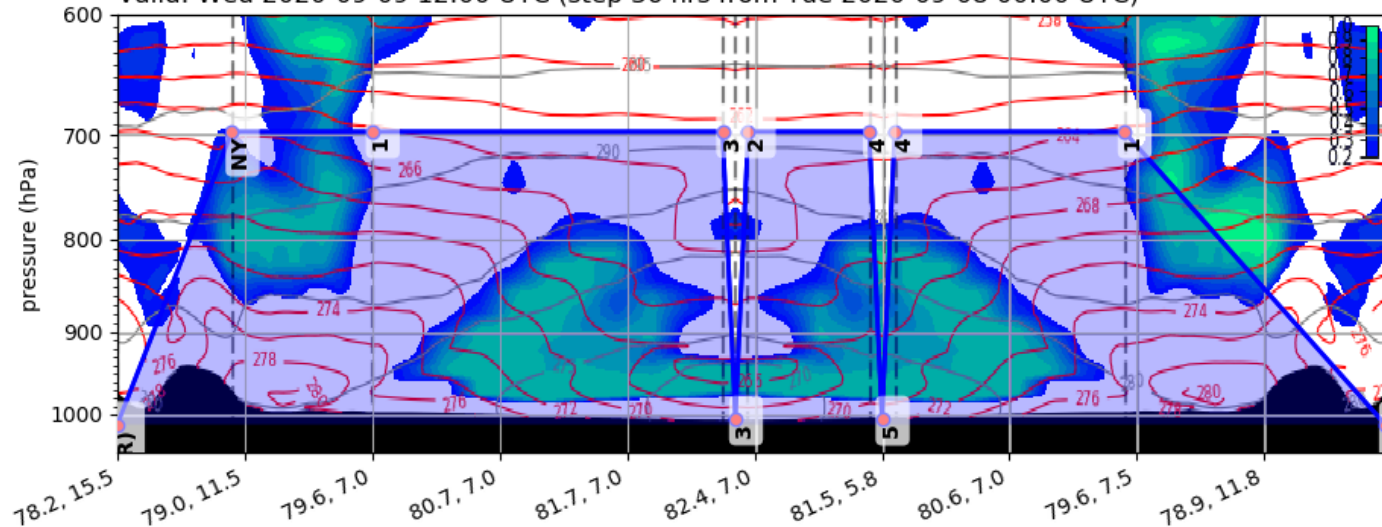
Geopotential Height (m) and Horizontal  
Valid: Wed 2020-09-09 12:00 UTC



## ECMWF

Cloud Cover (0-1) Vertical Section

Valid: Wed 2020-09-09 12:00 UTC (step 36 hrs from Tue 2020-09-08 00:00 UTC)



## ICON

Cloud Cover (0-1) Vertical Section

Valid: Wed 2020-09-09 12:00 UTC (step 36 hrs from Tue 2020-09-08 00:00 UTC)

