

## **ACLOUD Flight #25 - Polar 6 - 20170626**

### **Mission PI P6: Mario Mech**

**Objectives:** The main goal of the flight was a study of the boundary layer structure and energy fluxes north from Svalbard during warm air advection. The focus was on the profiles of vertical fluxes of heat, humidity, momentum.

### **Crew:**

<b>Polar 6</b>	
<b>PI</b>	<b>Mario Mech</b>
<b>Basis Data Acq.</b>	<b>Martin Gehrman</b>
<b>ALABAMA</b>	<b>Franziska Köllner</b>
<b>A + TG</b>	<b>Oliver Eppers</b>
<b>CVI</b>	<b>Stephan Mertes</b>
<b>PMS</b>	<b>Dmitry Chechin</b>

### **Flight times:**

<b>Polar 6</b>	
<b>Take off</b>	<b>12:32 UTC</b>
<b>Touch down</b>	<b>14:48 UTC</b>

### **Important remarks:**

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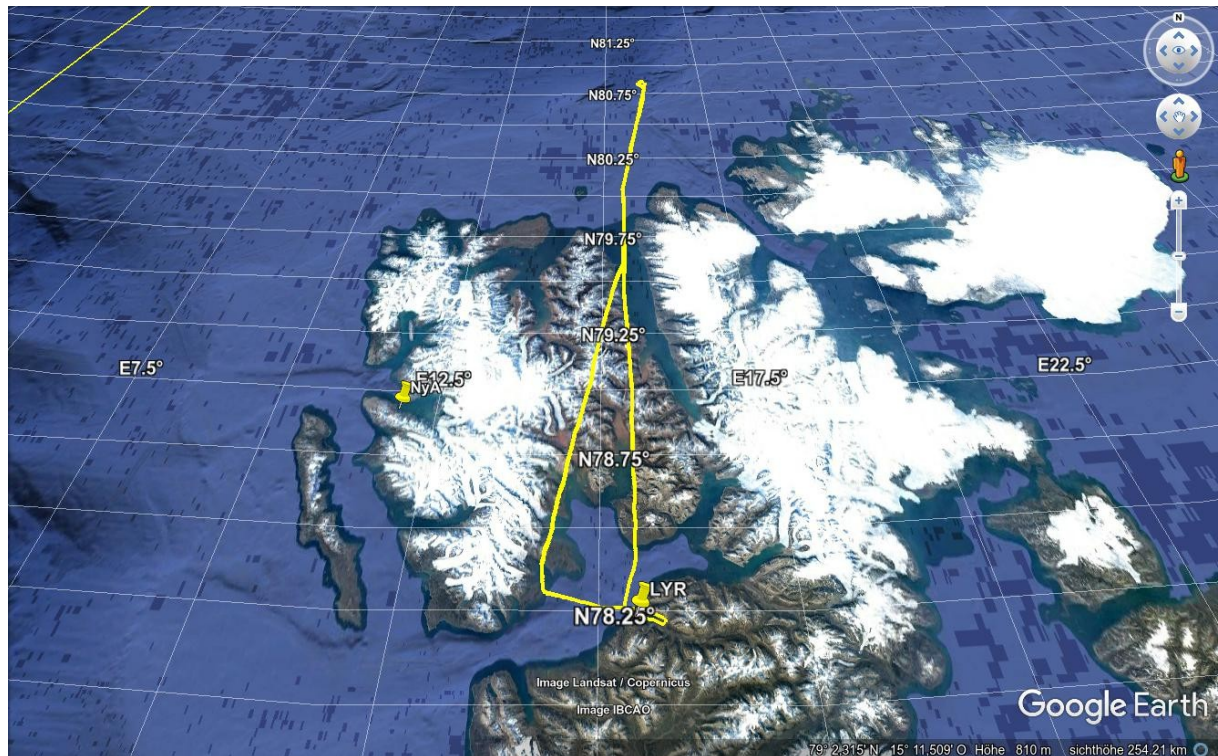
### **Weather situation as observed during the flight (compare to forecast):**

See report of Polar 5.

### **Overview:**

See report of Polar 5.

### **Flight track and pattern:**



Left: Pictures from cloud or ice

### Instrument Status:

Polar 6	
Basis data acquisition	
Nose Boom	
PHIPS	
SID-3	
CIP	
PIP	
ALABAMA	
CVI	
CVI UHSAS	
CVI ???	
AWI SP2	
AWI UHSAS	
CO/CO2/O3	

**Problem with CVI inlet:** CVI inlet heating is not working. When the inlet freezes it does not operate at its full functionality.

### Detailed Flight Logs (Name of author... more than one is possible):

#### Mario Mech (times UTC)

12:32 take off

12:35 scattered clouds  
 12:38 cloud top at 4800 ft  
 12:41 cloud at 7700 ft  
 12:42 at 10000 ft  
 12:58 change of heights for the pattern as proposed by Christof P6 200 and 300 ft  
 12:58 started descent with 700 ft/min  
 13:03 5800 ft clouds for the next 600 ft  
 13:07 no low level clouds present  
 13:09 1500 ft turbulence present  
 13:11 200 ft - BL at 600 ft  
 13:13 climb to 300 ft - quite some turbulence  
 13:24 clouds closed above  
 13:27 climb to 3000 ft  
 13:30 3000 ft  
 13:34 500 ft leg C2 to C1  
 13:58 heading home  
 14:08 above clouds at 6000 ft  
 14:48 touch down

## Quicklooks:

