

Wx-0127 (27 Jan 2020)

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1. Three day outlook

Synopsis –Ridge building into Ops area. Weak line of remnant clouds extending ESE to SW of Barbados, moving west through rapidly with a risk of isolated brisk shower else fair. Winds 5 to 10 kts will gradually increase to 10 to 15 kts.

Forecast – Scattered shallow clouds today, clearly by night. Risk of early morning showers over land. Seas moderate – northerly waves 2 to 2.5 metres, NNE swells every 14 to 15 sec from the north and northeast.

3-day outlook –Monday ridge extending from the Atlantic, mostly clear to scattered clouds and occasional cirrus streaks. Seas projected to be moderate to rough with 2 to 2.5 m into Wednesday with swell becoming more easterly.

Air mass origin — According to the IFS forecast, the air masses at upper-levels (300-700 hPa, red and orange pts.) are advected by westerlies during the next three days. At mid-levels (700-900 hPa, yellow and green pts.) the air masses are also advected from the west, but partially travel southwards before returning to the latitude of BB on 27.-28.1. The origin of the air masses in the surface layer (900-1000 hPa, blue pts.) changes from north of BB to south of BB within the next three days (see link vs. link).

2. Data for Flight Planning

Yesterday's conditions at various sites representative for local noontime:

Field	BCO	CE	NTAS	BT
Lat	13°09'46"	13°21'	14°49'	08°00'
Lon	59°25'44"	57°17'	51°01'	55°00'
LCL	740 m	800 m		710 m
CBH	750 m	800 m		
CTH	1.2 - 1.8 km			
Cirrus Top	12 km	12 km	12 km	12 km
AOD	n/a	n/a	n/a	n/a
PW	23.9 mm	21.6 mm*		36.4 mm**
Sfc Wind	2 m/s		5 m/s, 90°	
3km Wind	2.7 m/s, 192°	3.9 m/s, 189°		11.0 m/s, 200°
6km Wind	5.5 m/s, 255°	5.8 m/s, 225°		4.7 m/s, 334°
9km Wind	27.4 m/s, 305°	19.0 m/s, 315°		23.4 m/s, 320°
SST	-		26.5 °C	
Inversion height	1.5 km	1.4 km*		2.2 km**
EIS	4.5 K	4.4 K*		3.6 K**
LTS	14.9 K	14.5 K*		14.1 K**
Cloud Patterns	mixed	cloud free	sugar	n/a

CE: circle east, BT: Boulevard des Tourbillons

* from Meteor (14:45 UTC)

**from Atalante (14:45 UTC and 18:45 UTC)

3. Figures

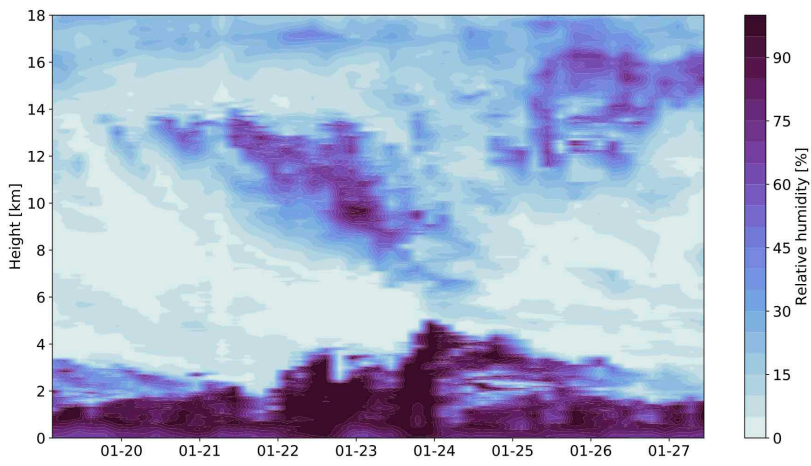


Figure 1: Soundings from BCO throughout EUREC4A.

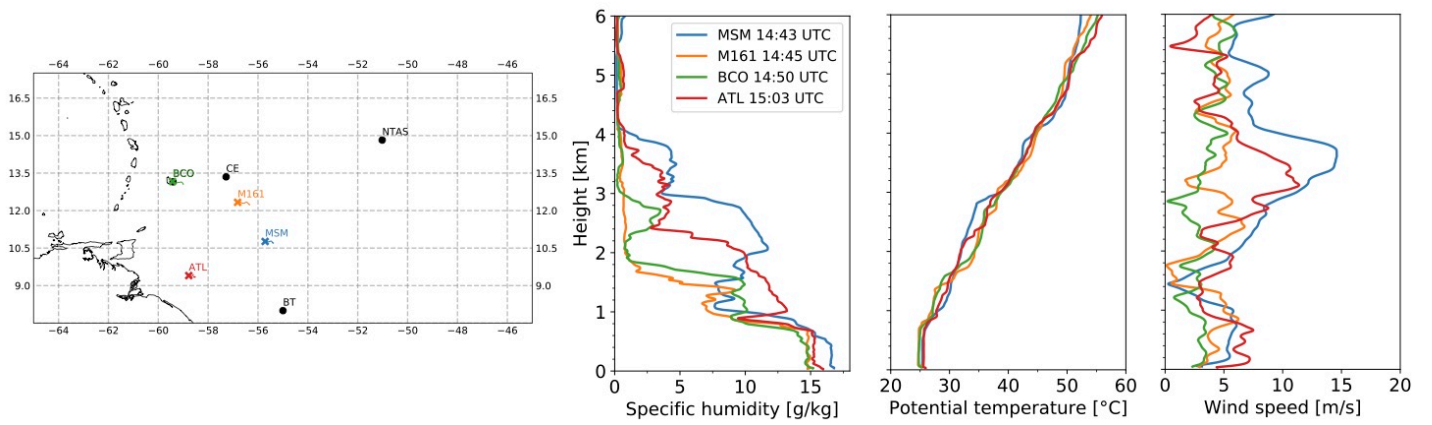


Figure 2: Soundings from four different stations.