

Meteor 0229 (2020)

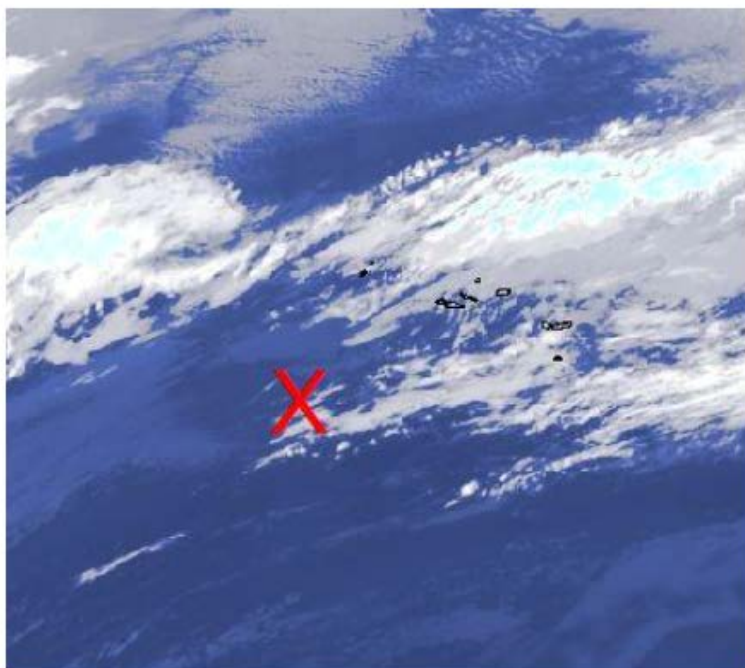
Stefan Kinne (1 Mar 10am)

1. Objective

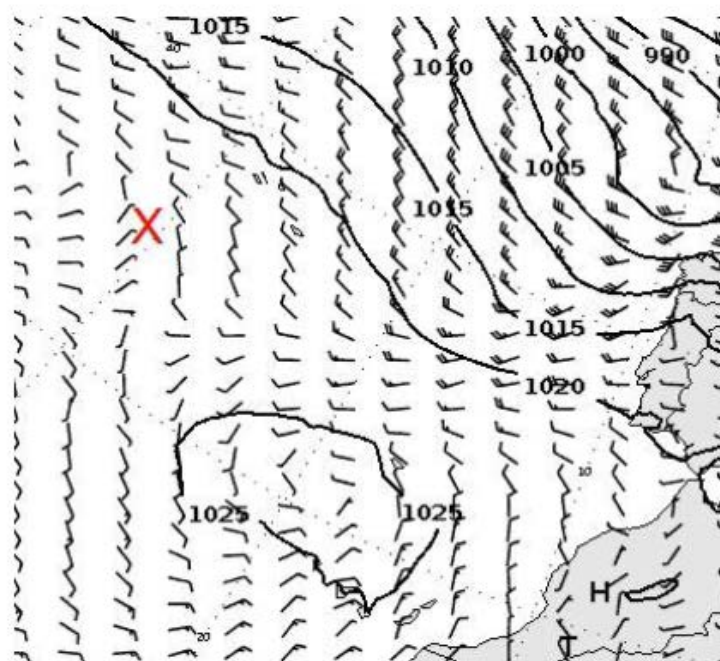
A few CTD (daily cycle investigation) casts and two radiosondes launches at 10.35 and 22.35UTC

Another sunny day without rain and cirrus. Low cloud elements more after sunrise and before sunset. By the end of the day we were finally back to (aerosol) clean maritime conditions (AOD,550nm near 0.06).

2. Synoptic Situation



Satellitenbild IR 29.02.2020 10:00 UTC



Vorhersage für Sonntag 00 UTC

Weather observations (every 3hr)

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20 02 29001 99342 70335 16/// /0302 10183 20141 40241 51013 7///// 8///// 22212 04198
2///// 3///// 4///// 5///// 6///// ICE /////
 20 02 29031 99345 70330 46/// /3403 10181 20135 40238 58003 7///// 8///// 22212 04198
2///// 3///// 4///// 5///// 6///// ICE /////
 20 02 29061 99347 70325 16/// /2804 10180 20132 40236 58002 7///// 8///// 22212 04201
2///// 3///// 4///// 5///// 6///// ICE /////
 20 02 29091 99349 70321 41498 62806 10180 20135 40243 53007 70311 82252 22212 04195
20100 33310 40902 50903 6///// ICE /////
 20 02 29121 99351 70315 11498 12706 10181 20135 40252 53009 70111 81240 22213 04191
20201 33210 40903 50902 6///// ICE /////
 20 02 29151 99353 70311 41499 12507 10182 20132 40242 58010 70200 81100 22212 04192
20201 3311// 40903 5///// 6///// ICE /////

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20 02 29181 99355 70307 11499 32706 10184 20135 40237 56005 70300 83105 22212 04191
20201 332// 40903 5///// 6///// ICE /////
20 02 29211 99356 70305 41498 52706 10182 20132 40252 53015 70311 85200 22211 04192
20201 331// 40903 5///// 6///// ICE /////

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more clouds in the morning and evening otherwise lots of blue skies, no rain, no cirrus

3. Cruise-day Elements

IWV (integrated water vapor): 19 kg /m2 +/- 1
LWP (liquid water path): -7 g /m2 +/- 5

Time	0-3UTC	4-6UTC	7-9UTC
Height_m	514.26	335.39	581.34
max_hydro_frac_low	0.00	0.00	0.17
Height_m	1207.39	1207.39	1207.39
max_hydro_frac_mid	0.00	0.00	0.00
Height_m	9343.27	12920.65	7281.02
max_hydro_frac_high	0.05	0.00	0.05

low=up to 1200m, mid=up to 6000m, high=up to 15000m

hourly means of ship data (1st line 0-1 UTC, 2nd line 1-2 UTC ... last line 23-24 UTC)

salinity PSU	Tdew °C	Tair °C	Twater °C	TrueDir deg	RH %	rel.Wind m/s	trueWind m/s	lw Rad W/m ²	sw Rad W/m ²	lat °N	lon °E
36.343	13.94	18.3	19.7	179.12	75.25	6.97	2.55	324.28	-1.05	34.26	-33.43
36.3074	13.96	18.21	19.69	345.27	75.77	6.68	3.08	324.58	-1	34.34	-33.25
36.3306	13.66	18.1	19.72	338.67	74.87	6.12	2.86	322.42	-1.78	34.42	-33.08
36.3162	13.4	18.02	19.7	326.4	73.92	5.32	2.03	321.03	-2	34.5	-32.91
36.4065	13.22	18.02	19.82	301.4	73	4.54	2.71	321.37	-1.53	34.58	-32.73
36.5764	13.17	18.05	20.17	280.12	72.63	3.34	3.6	320.53	-1.23	34.66	-32.55
36.5526	13.51	17.99	20.16	261.15	74.57	2.28	3.55	328.13	-1.13	34.74	-32.37
36.4356	13.64	18	19.83	249.33	75.25	3.8	4.33	338.35	-1	34.8	-32.24
36.4071	13.55	17.98	19.69	276.72	74.93	4.22	5.39	332.37	5.38	34.83	-32.17
36.4007	13.61	18	19.54	268.63	75	2.87	5.37	342.87	101.03	34.92	-31.98
36.3447	13.36	17.98	19.39	270.9	73.95	3.02	5.29	353.7	280.97	35.01	-31.78
36.3274	13.22	18.15	19.06	276.28	72.45	3.67	5.7	327.48	506.42	35.1	-31.59
36.334	13.59	18.2	19.17	259.23	73.95	4.28	5.3	328.12	655.1	35.14	-31.5
36.3166	13.43	18.32	19.17	270.15	72.73	2.79	5.51	327.72	725.9	35.2	-31.35
36.3511	13.41	18.32	19.19	258.47	72.53	3.15	6.09	327.08	741.42	35.29	-31.17
36.3613	13.68	18.27	19.23	259.53	74.15	5.71	6.64	331.93	718.37	35.32	-31.11
36.3286	13.91	18.24	19.42	272.47	75.45	3.57	6.61	332.37	614.53	35.38	-30.98
36.3613	13.46	18.32	19.27	273.13	72.87	3.68	6.52	332.68	410.98	35.45	-30.82
36.317	13.45	18.26	18.88	269.11	73.05	4.24	6.53	349.5	190.29	35.51	-30.66

36.3105	13.35	18.13	18.79	266.05	73.17	6.52	6.62	364.9	34.2	35.54	-30.61
36.3553	13.32	18.17	19.09	279.13	72.83	3.96	6.21	355.12	-0.67	35.57	-30.53
36.3601	13.24	18.17	19.11	274.55	72.47	3.76	6.24	342.3	-1	35.63	-30.4
36.359	13.53	18.05	19.06	261.3	74.38	1.84	4.61	338.2	-1.27	35.69	-30.26
36.3382	13.46	18.07	18.91	231.69	74.03	1.39	5.15	325.59	-1.29	35.76	-30.12

inter-calibration: none
CTD stations: 4
radiosondes: 2
overflights: none

station no.	date / time UTC	device	action	latitude [°N]	longitude [°W]
M161 261	29 feb 2020 / 07:25-08:06	CTD	1000m	34°48.300 N	32°13.776' W
M161 262	29 feb 2020 / 12:03-12:30	CTD	500m	35°07.898 N	31°30.843' W
M161 263	29 feb 2020 / 14:56-15:25	CTD	500m	34°18.497 N	32°06.799' W
M161 264	29 feb 2020 / 18:54-19:36	CTD	500m	35°32.273 N	30°36.845' W

4. Instrument Status

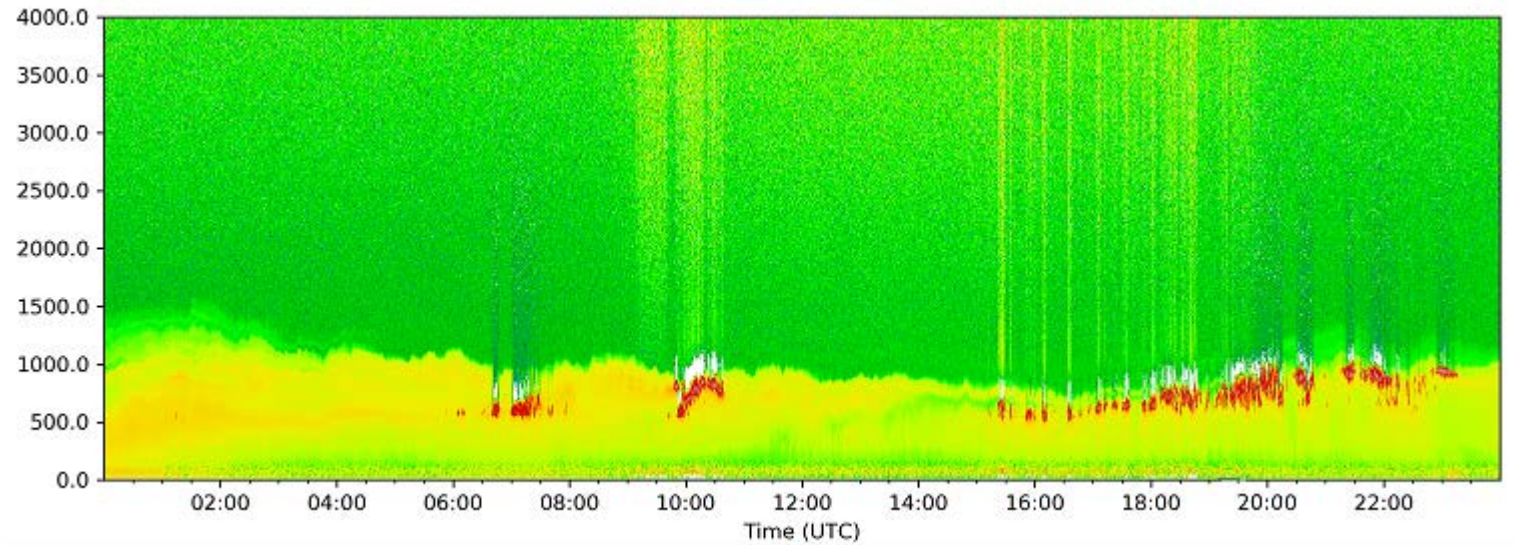
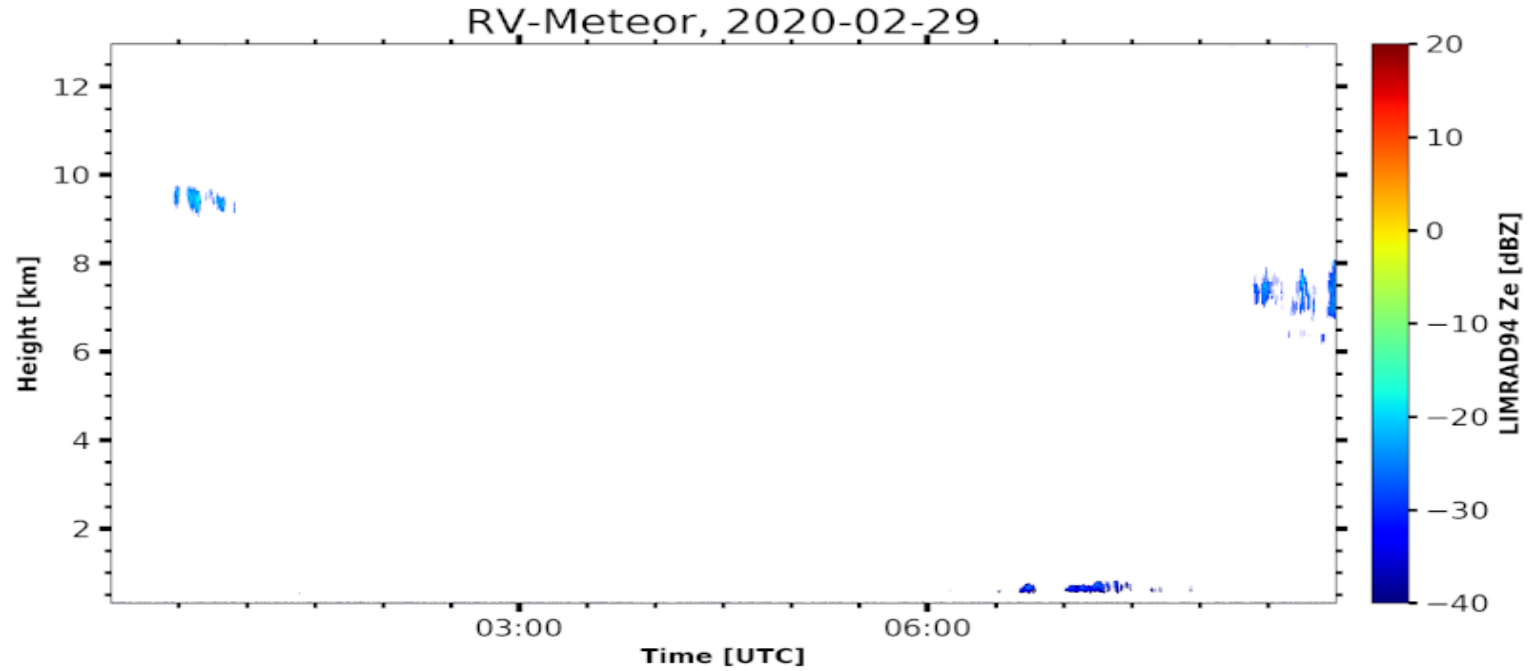
Instrument-Status (W-working, P-partially-working, F-failure, U-untested, R-ready, L-lost, S-stopped)

	status	operators
radiosondes	W	Katharina, Imke, Yanmichel, Almuth, Kevin, Sebastian, Geiske
cloud-radar	W	Heike, Johannes
micro-radiometer	W	Heike, Johannes
spect-radiometer	W	Heike, Johannes
Raman-lidar	W	Ludwig
spare cloud-kite	S	Oliver, Marcel, Marcel, Antonio, Robert, Sanola
Picarro	W	Sebastian
micro-biology	S	Wiebke, Jan, Abiel
ADPC ocean curr.	W	Callum, Beth
thermosalinograph	W	Callum, Beth
glider	S	Callum, Beth
UAV	W	Darek, Jakub, Michal, Wojciech
eddy-flux-data	W/S	Katharina, Imke, Heike
wind-lidar (DTU)	W	Geiske, Kevin
wind-lidar (Bre)	W	Geiske, Kevin
MAX-DOAS	W	Alma
ceilometer	W	Stefan
cloud camera	W	Stefan
sunphotometer	W	Stefan, Przemek, Andreas, John, Sanola

aero scat/abs			W	Przemek (Mr P)
WRAS (aero size)			W	Alma
CTD			W	Darek, Przemek, Beth, Callum, Alma, Sanola, Kevin, Robert, Wojtek, Almuth
Rodney			S	Darek, Jakub, Przemek

5. Outlook

Tomorrow packing preparations until to Ponta Delgada.



METEOR radar (top) and ceilometer (bottom) on Feb 29