NCAR Cloud Photo Inventory from S-Pol site - Barbuda [Knight]

RICO cloud photos, almost all from the Highlands, looking mostly NW, N, NE, and E.

Two 35mm cameras, Olympus (O) with motordrive, intervalometer, and time (local time) on the films, taken using a tripod; and Nikon (N), with times recorded on notes, hand-held. Fixed focal length lenses on the Olympus, usually 17 mm, occasionally 35 or 50 mm. This is not noted on the slides, but is obvious from examination of the foreground, on comparison with the usual, 17 mm shots. On the Nikon, a zoom lens, 28 to 80 mm, usually used at one extreme or the other, but sometimes in the middle, as noted (not precise). The noted focal lengths on the Nikon (N) slides are usually right, but are not to be trusted completely, since the adjustment can be inadvertently changed.

Times can be trusted within plus or minus 10 seconds.

A very approximate navigation is indicated for the O photos, on the accompanying two images, for which the end-to-end angle is, according to my calculations, 91.3 degrees (along the center line). These are taken with the 17 mm lens at the standard tripod location and the standard camera angle (from the horizontal), used for all except the last few days. Note that in the photo centered approximately NW, the very tips of branches of a tree show at the far left side, against the sky. The direction designations on these photos may be up to about 20 degrees off, but I doubt more than that. More accurate navigation may be done in the future, if needed. I don't think very accurate navigation is usually needed, and for my own use, I plan to navigate by matching visible clouds with radar echoes; maybe sometimes precipitation shafts too, but there is often precipitation on the radar that is invisible to the naked eye, or the photos. The Bragg echoes from vigorous new turrets probably make the best targets for this.

The location of the camera site in radar coordinates is approximately 3km E and 5.5 km N. Unfortunately, I did not find a way to fix that with any accuracy (in retrospect, I should have used a GPS), but again, I think that should be good enough for most purposes, almost certainly for all of my purposes. If it is needed, with some effort one could probably locate someone on Barbuda who has a GPS and would be willing to do this.

For further information on the photos, please contact:

Charles Knight Mesoscale and Microscale Meteorology Division-MMM National Center for Atmospheric Research (NCAR) phone: 303 497-8940 email: knightc at ucar.edu

Photo list add 4 hours for GMT

Local time	rolls	# of photos	
17 Dec 082234-105447	O-1,2	51	
0857-101720	N-1	19	
18 Dec 075300-112120	O-2-4	60	
0810-105140	N-1,2	56	
19 Dec 075010-101458	O-4,5	31	
080650-092845	N-2	9	
20 Dec 070000-100632	O-5,6	47	
071200-094630	N-2,3	35	
21 Dec 070800-094840	O-6,7a,7b	65	
071800-093516	N-3,4	19	
22 Dec 063900-090239	O-7b,8	62	
065242-093805	N-4,5	32	
23 Dec 063900-090239	O-8-10	50	
070010-084955	N-4	24	
24 Dec 082159-104410	O-10,11	44	
092145-103912	N-5,6	17	
25 Dec 075800-101400	O-11,12	45	

080115-085900	N-6,7	32	
26 Dec 071800-085029	O-12,13	27	
074115-084050	N-7	9	
27 Dec 064200-081906	O-13	23	
064440-065405	N-7	3	
28 Dec 064337-105107	O-13-15	92	
093210-111224	N-7	13	
29 Dec	(O-16 was blank)		
071015-071215	N-7,8	4	
30 Dec 064910-122815	O-17-20	155	
064510-115510	N-8,9	37	
31 Dec 080205-101018	O-21	30	
081450-082405	N-9	5	
1 Jan 065900-092400	O-21-23	47	
070200-092300	N-9,10	51	
2 Jan 065800-093111	O-23.24	34	
081430-081830	N-10	3	
3 Jan 075400-165501	O-24-27	118	
081400-185930	N-10,11	58	
4 Jan 062931-090030	O-27-29	73	
070100-085930	N-11-13	47	
5 Jan 063900-080429	O-29,30	34	
073040-073430	N-13	2	

6 Jan 062500-101122	O-30-32	111	
074330-100600	N-13,14	47	
7 Jan 063700-102236	O-32-34	74	(N-15 does not exist)
070545-093930	N-14,16	33	
8 Jan 063500-100418	O-34-36	108	
065130-090515	N-16,17	27	
10 Jan 065603-102429	O-37-40	108	
070430-102130	N-17,18	44	
11 Jan 063300-095702	O-40-42	84	
065705-093700	N-18,19	53	
12 Jan 064158-104600	O-42-45	102	
064300-095935	N-19-21	55	
14 Jan 063700-094702	O-45-47	100	
064020-093605	N-21-23	67	
15 Jan 064200-100500	O-47-50	90	
065025-100000	N-23,24	36	
16 Jan 063300-101206	O-50-52	85	
063950-100900	N-24,25	49	
17 Jan 063907-094200	O-52-55	94	(Best day)
065505-093400	N-25,26	58	
18 Jan 072700-120001	O-55,56	57	

081315-105300	N-27	5	
19 Jan 065214-085701	O-56-58	64	
065640-080700	N-27	30	
20 Jan 064900-083901	O-58	12	
21 Jan about 1315	N-28	4	Tail clouds, from road
22 Jan 064359-082202	O-58,59	28	
070215	N-28	1	
23 Jan 072300-095206	O-59,60	86	
073820-090240	N-28	29	



