THE UNIVERSITY OF WISCONSIN VOLUME IMAGING LIDAR OPERATIONS DURING FALL -95 EXPERIMENT

Type of scan tells azimuth (a=) and elevation (e=) angles of VIL scanning patterns :
RHI = Range Height Indicator scan, i.e. elevational scan.
PPI = Plane Position Indicator scan, i.e. azimuthal scan.
VOL = Volume scan, several subsequent RHI's or PPI's forming a volume.
Comments tells visual observations or additional information about data cases.
All times are in UT.

Location of the VIL : Lake Koshkonong, WI: 42.926400, 89.040, 236.0 m

VIL Operations

Date	Start	End	Type of Scan	Comments
08/24/95	11:37	11:59	RHI a = 0, e = 35-145	Low clouds with rain
	12:40	14:46	RHI a = 0, e = 35-145	
08/25/95	14:49	14:58	RHI a = 270,360, e = 50-130	Cloud layers 4-6 km
	15:04	15:21	RHI a = 288.6,360, e = 5-175	
	15:23	16:04	RHI a = 0, e = 35-145	
08/29/95	00:26	00:53	RHI a = 288.6,360, e = 5-175	Cloud layers 4-5 km
09/01/95	19:56	20:04	PPI VOL a = 319.3-320, e = 2.3-3	Shooting on radiotower
09/05/95	18:15	19:29	RHI a = 288.6,360, e = 5-175	Cirrus 10-13 km
	19:44	20:08	RHI a = 0 , e = 35-145	
09/11/95	19:30	19:32	RHI a = 288.6,360, e = 5-175	Ice virgas 4-7 km,
	19:45	20:27	RHI a = 288.6,360, e = 5-175	Cirrus 8-12 km
	20:29	23:20	RHI a = 0, e = 35-145	
09/11/95	23:28	→	RHI a = 0, e = 35-145	
09/12/95	→	00:09		
	00:14	00:27	RHI a = 288.6,360, e = 5-175	
09/13/95	16:44	17:45	RHI a = 266.8,360, e = 5-175	Cirrus 7-10 km

VIL Operations Continues

Date	Start	End	Type of Scan	Comments
09/14/95	20:01	22:14	RHI a = 288.6,360, e = 5-175	Thin cirrus 8-11 km
	22:18	23:56	RHI a = 0, e = 35-145	
	23:58	→	RHI a = 90, e = 35-90	
09/15/95	→	00:13		
	00:16	00:57	RHI a = 288.6,360, e = 5-175	
	16:10	17:11	RHI VOL a = 95-170, e = 1.5-20	Volume scan over Lake Koshkonong
09/18/95	20:15	20:24	RHI a = 288.6,360, e = 5-175	Low clouds 2.5 km,
	20:48	20:59	RHI a = 0, e = 0.4-5	Cirrus 5-12 km
09/19/95	12:37	15:23	RHI a = 288.6,360, e = 5-175	Low clouds 2.0 km,
	15:31	16:00	RHI a = 225,315, e = 20-160	virgas and rain
09/26/95	14:43	15:04	RHI a = 288.6,360, e = 5-175	Cirrus 6.5-10.5 km,
	15:08	16:10	RHI a = 0, e = 35-145	aerosol layer with
	16:13	16:30	RHI a = 288.6,360, e = 5-175	strong waves
	19:47	20:08	RHI a = 0, e = 35-145	
	20:13	23:09	RHI a = 0, e = 35-145	
	23:33	→	RHI a = 288.6,360, e = 5-175	
	→	00:10		
09/27/95	00:18	01:14	RHI a = 60, e = 78-102	
09/29/95	18:28	18:35	RHI a = 288.6,360, e = 5-175	Cirrus 6-12 km
	18:37	19:09	RHI a = 15, e = 35-145	
	19:14	19:37	RHI a = 288.6,360, e = 5-175	
10/02/95	17:29	18:13	RHI a = 288.6,360, e = 5-175	Cloud layer 4.5 km,
	18:16	19:57	RHI a = 0, e = 35-145	Cirrus 9-11 km
10/10/95	13:49	13:55	RHI a = 288.6,360, e = 5-175	Cirrus 5-11 km
	13:57	14:10	RHI a = 0, e = 35-145	
	14:26	14:45	RHI a = 0, e = 35-145	
10/13/95	14:46	16:19	RHI a = 288.6,360, e = 5-175	Cirrus 9-11.5 km
	16:21	17:30	RHI a = 0, e = 35-145	
	17:31	18:35	RHI a = 288.6,360, e = 5-175	
	18:38	19:18	RHI a = 288.6, e=5-25	
10/22/95	22:07	22:14	RHI: a=288.6,360 e=5-175	Cirrus 6-8 km
	22:20	22:44	RHI: a=0, e=35-145	Cirrus 6-8 km
	22:57	23:14	RHI: a=0, e=0.5-5,	Cirrus > 200 km away
10/26/95	00:02	01:02	RHI: a=0, e=35-145	Cirrus
	01:10	01:16	RHI: a=288.6,360, e=5-175	Cirrus

VIL Operations Continues

Date	Start	End	Type of Scan	Comments
11/06/95	14:50	15:16	RHI: a=288.6,360 e=5-175	
	15:18	16:05	RHI: a=0, e=35-145	
	16:07	16:22	RHI: a=288.6,360 e=5-175	
	16:25	17:26	RHI: a=0, e=35-145	
	17:28	17:36	RHI: a=0, e=88-92	
	17:37	18:11	PPI VOL: a=322.5-323.2, e=1.6-2.1	Radiotower
11/07/95	18:38	20:00	RHI VOL: a=115-155, e=1.5-15	Virgas over lake
11/10/95	00:39	00:52	RHI: a=288.6,360 e=5-175	
	00:54	02:00	RHI: a=0, e=35-145	
11/16/95	23:09	23:12	RHI: a=288.6,360 e=5-175	
	23:16	→	RHI: a=0, e=35-145	
11/17/95	→	00:03		
	00:06	02:25	RHI: a=70, e=35-145	
11/21/95	20:03	20:20	RHI VOL: a=115-155, e=1.5-15	
11/22/95	14:12	14:34	RHI: a=288.6,360 e=5-175	
	14:36	16:05	RHI: a=40, e=35-145	
	16:22	19:24	RHI VOL: a=115-155, e=1.5-20	
11/30/95	22:38	22:49	RHI: a=288.6,360 e=5-175	Cirrus and virga 1-4 km, couple of times seeing cirrus up to 10 km
	22:50	23:21	RHI: a=0, e=35-145	
	23:28	→	RHI VOL: a=115-155, e=1.5-15	Convection over lake
	→	00:38		