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MONTHLY FREQUENCY TABLES

Horizontal Visibility, Height of Base of Low Cloud & Surface & Upper Winds at Pilot Balloon Stations in Pakistan

February 1954

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PAKISTAN METEOROLOGICAL DEPARTMENT

Karachi

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Monthly frequency tables of surface and upper winds, height of base of low clouds and horizontal visibility have been compiled from the data of Pilot Balloon Stations functioning during the month of February, 1954. The data have been given under the following four tables :—

Table 1 : Particulars of the stations *i.e.*, latitude, longitude and height above mean sea level are given in this table.

Table 2 : Wind frequencies for surface, 0.15 km. above surface, 0.9, 2.1, 3.0, 4.5, 6.0 and 7.5 kms. above mean sea level from observations made at 0300, 0900 and 2100 hours G.M.T. are given in this table.

Table 3 : This table furnishes the frequencies of heights of base of low cloud observed at or near the time of Pilot Balloon observations. The code figures have the following meanings :—

Code figure	0	1	2	3	4	5	6	7	8	9
Cloud height	Less than 50 m.	50 to 99 m.	100 to 199 m.	200 to 299 m.	300 to 599 m.	600 to 999 m.	1000 to 1499 m.	1500 to 1999 m.	2000 to 2500 m.	No low cloud.

Table 4 : The frequencies of horizontal visibility given in this table have been prepared from the observations made at or near the times of Pilot Balloon observations.

MUHAMMED SAMIULLAH

Director Meteorological Services.

KARACHI, Pakistan :

The 31st May 1968.

TABLE 1.—PARTICULARS OF STATIONS APPEARING IN TABLES.

Station	Latitude N	Longitude E	Height	Station	Latitude N	Longitude E	Height
Bogra ..	24° — 51′	89° — 23′	0.03 Km.	Jacobabad ..	28° — 18′	68° — 28′	0.06 Km.
Chaklala ..	33° — 37′	73° — 06′	0.50 Km.	Jhelum ..	32° — 56′	73° — 44′	0.24 Km.
Chhor .	25° — 31′	69° — 46′	0.01 Km.	Jiwani ..	25° — 04′	61° — 48′	0.06 Km.
Chittagong ..	22° — 21′	91° — 50′	0.02 Km.	Karachi .. (Drigh Road)	24° — 54′	67° — 08′	0.03 Km.
Cox's Bazar ..	21° — 26′	91° — 58′	0.01 Km.	Khanpur ..	28° — 39′	70° — 38′	0.09 Km.
Dacca ..	23° — 46′	90° — 23′	0.02 Km.	Lahore ..	31° — 33′	74° — 20′	0.22 Km.
Dalbandin ..	28° — 53′	64° — 24′	0.85 Km.	Multan ..	30° — 12′	71° — 26′	0.12 Km.
Drosh ..	35° — 34′	71° — 47′	1.51 Km.	Peshawar ..	34° — 01′	71° — 35′	0.37 Km.
Fortsandeman ..	31° — 21′	69° — 27′	1.43 Km.	Quetta ..	30° — 02′	67° — 02′	1.73 Km.
Gilgit ..	35° — 55′	74° — 20′	1.49 Km.	Sylhet ..	24° — 54′	91° — 53′	0.04 Km.

TABLE 2.– Observations of Wind by Pilot Balloons at 0300 G.M.T.—February, 1954

STATION	Speed in Knots	Number of observations at Surface: Total No. of observations	338-22	N	23-67	NE	68-112	E	113-157	SE	158-202	S	203-247	SW	248-292	W	293-337	NW	0-2 Knots
Bogra ..	3-14	28	2			1		1			1		1		1		1		20
	15-27														2				
	28-41																		
	> 41																		
Chaklala * ..	3-14	28			4						2					1	1		20
	15-27																		
	28-41																		
	> 41																		
Chhor ..	3-14	28	8		5		3		1				3		2		1		5
	15-27																		
	28-41																		
	> 41																		
Chittagong ..	3-14	28			1				2		1		1						23
	15-27																		
	28-41																		
	> 41																		
Cox's Bazar ..	3-14	28	7		5		3						5					2	6
	15-27																		
	28-41																		
	> 41																		
Dacca ..	3-14	28	2			1		1		1		3		3				3	15
	15-27																		
	28-41																		
	> 41																		
Dalbandin ..	3-14	28			9		1						1					1	16
	15-27																		
	28-41																		
	> 41																		
Drosh ..	3-14	28			1		1				1								25
	15-27																		
	28-41																		
	> 41																		
Fortsandaman ..	3-14	28			5								5		1		1		16
	15-27																		
	28-41																		
	> 41																		
Gilgit ..	3-14	28			1		2		1							7		1	16
	15-27																		
	28-41																		
	> 41																		
Jacobabad ..	3-14	28	5		1		7				1		1		1		1	4	8
	15-27																		
	28-41																		
	> 41																		
Jhelum ..	3-14	28			1				1									9	17
	15-27																		
	28-41																		
	> 41																		
Jiwani ..	3-14	28	4		2				4		1		1		2		5		8
	15-27												1						
	28-41																		
	> 41																		
Karachi (Drg Road) ..	3-14	28	2		3								1		1		1		18
	15-27				2														
	28-41																		
	> 41																		
Khanpur ..	3-14	28			12								3						13
	15-27																		
	28-41																		
	> 41																		
Lahore ..	3-14	28	2				2		2										22
	15-27																		
	28-41																		
	> 41																		
Multan ..	3-14	28	4		1				1		2							3	17
	15-27																		
	28-41																		
	> 41																		
Peshawar ..	3-14	28					1		4		3		5		3				12
	15-27																		
	28-41																		
	> 41																		
Quetta (Samungli) ..	3-14	28											1		3		1		22
	15-27																		
	28-41																		
	> 41																		
Sylhet ..	3-14	28			5		13		1		1								8
	15-27																		
	28-41																		
	> 41																		

STATION	Speed in Knots	Number of observations at 0.15 Km. above Surface: Total No. of observations	338-22	N	23-67	NE	68-112	E	113-157	SE	158-202	S	203-247	SW	248-292	W	293-337	NW	0-2 Knots
Bogra ..	3-14	28	2		1		2		1		4		3		3		7		2
	15-27														1		2		
	28-41																		
	> 41																		
Chaklala * ..	3-14	28	2		1		7		2				2		3		2		3
	15-27																		
	28-41																		
	> 41																		
Chhor ..	3-14	28	6	4		3		1		2				3		1			
	15-27		1	1		1						1		1		2			
	28-41																		
	> 41																		
Chittagong ..	3-14	28	5		4		2		4		4		3				1		4
	15-27																		
	28-41																		
	> 41																		
Cox's Bazar ..	3-14	28	10		3				4		3						2		3
	15-27		2																
	28-41																		
	> 41																		
Dacca ..	3-14	28	5		2		2		2		2		5		2		2		3
	15-27						1										1		
	28-41																		
	> 41																		
Dalbandin ..	3-14	28	1		4		10		1				1		2		3		1
	15-27				2		1				1								
	28-41																		
	> 41																		
Drosh ..	3-14	28	1		7		7				2								4
	15-27																		
	28-41																		
	> 41																		
Fortsandaman ..	3-14	28	2		5		1						11				2		3
	15-27												1						
	28-41																		
	> 41																		
Gilgit ..	3-14	28	1				5		1		1					7			8
	15-27															1			
	28-41																		
	> 41																		
Jacobabad ..	3-14	28	3		4		1		1		3		1		3		4		
	15-27		1		1		1		1								2		
	28-41						1												
	> 41																		
Jhelum ..	3-14	28	5		2		2		1						1		12		1
	15-27										1						1		
	28-41																		
	> 41																		
Jiwani ..	3-14	28	1		2		1		3		1		1		2		10		
	15-27		1						2				1				1		
	28-41				2														
	> 41																		
Karachi (Drg Road) ..	3-14	28	4		7		2								2		3		1
	15-27				6										2		1		
	28-41																		
	> 41																		
Khanpur ..	3-14	28	3		7				2		1		1				1		1
	15-27		3		7								1		1				
	28-41																		
	> 41																		
Lahore ..	3-14	28	8		2		7		1		1				2		4		
	15-27		1								1				1				
	28-41																		
	> 41																		
Multan ..	3-14	28	6		5		2		1		2		2						2
	15-27		4		1						1								
	28-41																		
	> 41																		
Peshawar ..	3-14	28	2				2		8		2		4				3		3
	15-27		1												1				
	28-41																		
	> 41																		
Quetta (Samungli) ..	3-14	28	1										3		9		2		5
	15-27																		
	28-41																		
	> 41																		
Sylhet ..	3-14	28					23		1		1		2						
	15-27						1												
	28-41																		
	> 41																		

STATION	Speed in Knots	Number of observations at 0.9 Km. above sea level: Total No. of observations	338-22	N	23-67	NE	68-112	E	113-157	SE	158-202	S	203-247	SW	248-292	W	293-337	NW	0-2 Knots
Bogra ..	3-14	27					2				3		1		3		9		4
	15-27														3		1		
	28-41																1		
	> 41																		
Chaklala * ..	3-14	22	4		4		4		4		1								4
	15-27																		
	28-41																		
	> 41																		
Chhor ..	3-14	27																	
	15-27		3		4		1				1		3		6		3		
	28-41		1										2		1		1		
	> 41																		
Chittagong ..	3-14	24																	
	15-27		9		1						1		2		1		6		2
	28-41		1								1								
	> 41																		
Cox's Bazar ..	3-14	27																	
	15-27		11		2								4		2		4		
	28-41		2										1				1		
	> 41																		
Dacca ..	3-14	26	3																
	15-27												3		8		7		1
	28-41												1		1		2		
	> 41																		
Dalbandin ..	3-14	27			6		8		1		1		1		1		2		6
	15-27						1												
	28-41																		
	> 41																		
Drosh ..	3-14																		
	15-27																		
	28-41																		
	> 41																		
Fortsandaman ..	3-14																		
	15-27																		
	28-41																		
	> 41																		
Gilgit ..	3-14																		
	15-27																		
	28-41																		
	> 41																		
Jacobabad ..	3-14	27	1		2		6		3		2		1		5		2		
	15-27				2		1										2		
	28-41																		
	> 41																		
Jhelum ..	3-14	26			2		2		2		1		4		1		3		4
	15-27		2				1		2		1								
	28-41		1						2		1								
	> 41																		
Jiwani ..	3-14	27																	
	15-27		3		1		1		1		2		3		4		5		
	28-41		1						1						2		1		
	> 41		1																
Karachi (Drg Road) ..	3-14	27	1		2		8		2		3		2		3		3		1
	15-27												1		1		4		
	28-41														1		4		
	> 41																		
Khanpur ..	3-14	28	2		5		2								3		3		1
	15-27				5		2		1								1		1
	28-41				1												1		
	> 41																		
Lahore ..	3-14	27	5		2		5		1		1				2		1		4	
	15-27								1		1								1
	28-41										1								
	> 41																		
Multan ..	3-14	26	3		4		3		1						3		1		2	
	15-27		2		2				1								1		
	28-41																		
	> 41																		
Peshawar ..	3-14	25					1		1		3		2		3		6		4
	15-27		3														1		
	28-41		1																
	> 41																		
Quetta (Samungli) ..	3-14																		
	15-27																		
	28-41																		
	> 41																		
Sylhet ..	3-14	26	1		2		2		4		3				7		1			5
	15-27										1								
	28-41																		
	> 41																		

STATION	Speed in Knots	Number of observations at 2.1 Km. above sea level: Total No. of observations	338-22	N	23-67	NE	68-112	E	113-157	SE	158-202	S	203-247	SW	248-292	W	293-337	NW	0-2 Knots
Bogra ..	3-14	25	1										2		3		2		
	15-27												1		5		3		
	28-41														3		1		
	> 41														1		3		
Chaklala * ..	3-14	21			1		1		6		4								
	15-27						1		3		1				1		1		1
	28-41																1		
	> 41																		
Chhor ..	3-14	26	3		1								3		3		2		
	15-27		1								2		3		4		1		
	28-41												1		1				
	> 41														1				
Chittagong ..	3-14	23											1		1		2		
	15-27		2		2								1		1		6		
	28-41		2														4		
	> 41																1		
Cox's Bazar ..	3-14	27																	
	15-27		3		1						1				3		4		1
	28-41		2										1		2		5		
	> 41		2														2		
Dacca ..	3-14	24											2				4		
	15-27														6		6		
	28-41														1		5		
	> 41																		
Dalbandin ..	3-14	26	4								1		2		1		5		
	15-27		2								1		5		1		1		
	28-41												3						
	> 41																		
Drosh ..	3-14	21	2		14								1						4
	15-27																		
	28-41																		
	> 41																		
Fortsandaman ..	3-14	22	2		3		1				3		3		4		1		1
	15-27												3		1				
	28-41																		
	> 41																		
Gilgit ..	3-14	24			1		8		1				1		6		1		6
	15-27																		
	28-41																		
	> 41																		
Jacobabad ..	3-14	26	3		1		1				4		4				3		1
	15-27										1		3		4		1		
	28-41																		
	> 41																		
Jhelum ..	3-14	23	1		1				5		2		1						
	15-27								3		1				4		3		
	28-41														2				
	> 41																		
Jiwani ..	3-14	22	3						2										
	15-27														4		1		
	28-41												2		7				
	> 41														1		1		
Karachi (Drg Road) ..	3-14	26	2								1		2		3		3		
	15-27												5		5		3		
	28-41														1		3		
	> 41														1				
Khanpur ..	3-14	25	1		1		2		1		3		1		2		2		1
	15-27		1		1								5						
	28-41		1		1														
	> 41		1																
Lahore ..	3-14	25	1		1				2		3		3		4		1		1
	15-27		1						1						3		2		
	28-41										2								
	> 41																		
Multan ..	3-14	26	2				2		1		1		2		4		1		1
	15-27		1		1								4		4		1		
	28-41												1						
	> 41																		
Peshawar ..	3-14	22	4		5		2		1						1		2		3
	15-27										1				1		2		
	28-41																		
	> 41																		
Quetta (Samungli) ..	3-14	20									3		2		8		5		2
	15-27																		
	28-41																		
	> 41																		
Sylhet ..	3-14	20			1				1		1				6		1		
	15-27														7		2		
	28-41														1				
	> 41																		

* —On 2 days Observation not taken

TABLE 2.—Observations of Wind by Pilot Balloons at 0300 G.M.T.—February, 1954

Number of Observations at 3.0 Km. above sea level											Number of Observations at 4.5 Km. above sea level											Number of Observations at 6.0 Km above sea level											Number of Observations at 7.5 Km. above sea level											Speed in Knots	STATION
Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	W 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots		
15						}	2 2	3 2 4 1		4							1 2 1																								3-14 15-27 28-41 > 41	Bogra
19			1	1 2	4 2	1 2	2	2 1	1	14					1 2	1	1 5	3 1		9						1	1 2 2 1	1 1		4						1		1 1	1		3-14 15-27 28-41 > 41	Chaklala
23		1				1 8 1	1 5 2	4		9					1	1 1 3	1 1	1		3						1 1		1														3-14 15-27 28-41 > 41	Chhor
21	1					1	2 4 1	2 5 3 2		15						1	5 6 1	1 1		12						2	6 2	1 1		2						1	1				3-14 15-27 28-41 > 41	Chittagong
26	3				1		3 9	1 5 4		25	1				1	1 2	1 7 5	2 4 1		17					1 1	5 1 4	3 2														3-14 15-27 28-41 > 41	Cox's Bazar
17						2	2 1	5 6 1		3							1 1 1																								3-14 15-27 28-41 > 41	Dacca
22	1					2 1 2	3 4	7 1	1	10		1				1	2 3	2 1		5							2 1 2			2							1 1			3-14 15-27 28-41 > 41	Dalbandin
21	2 9 1	2	1		1	1	2	1	1	18	2 3			3 1	6 2		1			10						1 1	1 4 2			1									1	3-14 15-27 28-41 > 41	Drosh
20	1 1	1	1	1	1	1 2	6	1 1 2	1	14	1				1	1 3 1	1 3 1	1 1		7					1	1	2 1 1	1		1						1				3-14 15-27 28-41 > 41	Fortsandaman
21			3	3 1		2	2	3 1	6	15			2	5 2	5			1		6				1		1 3				2							1 1			3-14 15-27 28-41 > 41	Gilgit
23	1 1				1		4 1 2 1	2 3	1	17	1 1					3 1 1	1 2 3 1	1 1 1																							3-14 15-27 28-41 > 41	Jacobabad
22	2 1			1	2 3	3 3	2 1	1 1	2	17	1			1	1 2	2	1 6 2	1		9						2	1 3 1	1 1		1							1				3-14 15-27 28-41 > 41	Jhelum
14	1				1	1 1	4 2 1	3		8						1	4 1 1	1		3							2	1													3-14 15-27 28-41 > 41	Jiwani
23						1 2 1	1 4 7 1	1 5		11					1	1 1	1 3 1	1 2		2							2														3-14 15-27 28-41 > 41	Karachi (Drigh Road)
20	1		1	1	1	2 7	1 3 1	2		8					2	1	4	1																							3-14 15-27 28-41 > 41	Khanpur
22	1		1	3 1	2	2 1	2 5	2 2		15	1			1	2	3 5 2	1			9	1 1				1	1	3 1	1		1								1			3-14 15-27 28-41 > 41	Lahore
25		2			1	2 4 2	7 1	3 2 1		15	1					1 1	2 5	1 2 2		1						1															3-14 15-27 28-41 > 41	Multan
19	1	1	2	3 1	1	3	2 2	3		14			1	1	1	1 3	1 3 1	1 1		7						1	2 2 1	1													3-14 15-27 28-41 > 41	Peshawar
20		1				2 3	5 4	3 2		5						1	1 1	1 1																							3-14 15-27 28-41 > 41	Quetta (Samungli)
14							3 5 1 1	3 1		7						1	2 3 1																								3-14 15-27 28-41 > 41	Sylhet

TABLE 2—Observations of Wind by Pilot Balloons at 0900 G.M.T.—February 1954

STATIONS	Speed in Knots	Number of Observations at Surface: Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots
Bogra ..	3-14	28						2	2	3	21
	15-27										
	28-41										
	> 41										
Chakhale ..	3-14	28			3	1	2	1	9	2	9
	15-27							1			
	28-41										
	> 41										
Chhor ..	3-14	28	5						8	2	13
	15-27										
	28-41										
	> 41										
Chittagong ..	3-14	28				1	2	4	7		14
	15-27										
	28-41										
	> 41										
Cox's Bazar ..	3-14	28					6	2	6	12	1
	15-27									1	
	28-41										
	> 41										
Dacca ..	3-14	28	1				1	5	10	10	1
	15-27										
	28-41										
	> 41										
Dalhandin ..	3-14	28		7	3		1	1	3	2	11
	15-27										
	28-41										
	> 41										
Drosh ..	3-14	28		6				1			21
	15-27										
	28-41										
	> 41										
Fortsandaman ..	3-14	28	5	1		1	1	2	3	1	14
	15-27										
	28 41										
	> 41										
Gilgit ..	3-14	28			5	3		3	3		13
	15-27							1			
	28-41										
	> 41										
Jacobabad ..	3-14	28	1	2	3		1	1	3	4	12
	15-27		1								
	28-41										
	> 41										
Jhelum ..	3-14	28	1		1	3			1	7	15
	15-27										
	28-41										
	> 41										
Jiwani ..	3-14	28	4		1	6	3	4	3	5	2
	15-27										
	28-41										
	> 41										
Karachi (Drigh Road) ..	3-14	28		5	1	2		4	1	3	10
	15-27			1					1		
	28-41										
	> 41										
Khanpur ..	3-14	28	5	10				4		1	8
	15-27										
	28-41										
	> 41										
Lahore ..	3-14	28	2	3		3	1	2		6	11
	15-27										
	28-41										
	> 41										
Multan ..	3-14	28	8	5		1	1	2		2	9
	15-27										
	28-41										
	> 41										
Peshawar ..	3-14	28	3	5		4		1		2	13
	15-27										
	28-41										
	> 41										
Quetta (Samungli) ..	3-14	28		1			3	2	1	4	17
	15-27										
	28-41										
	> 41										
Sylhet ..	3-14	28		2	1	2	1	7	2		13
	15-27										
	28-41										
	> 41										

STATIONS	Speed in Knots	Number of Observations at 0-15 Km. above Surface: Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots
Bogra ..	3-14	28	3			1		3	10	6	4
	15-27							1			
	28-41										
	> 41										
Chakhale ..	3-14	23			2	5	2	3	6	2	2
	15-27								1		
	28-41										
	> 41										
Chhor ..	3-14	28	6	5		1	1		5	4	3
	15-27								3		
	28-41										
	> 41										
Chittagong ..	3-14	28	1			1	2	6	9	8	
	15-27							1			
	28-41										
	> 41										
Cox's Bazar ..	3-14	27	1					3	2	4	13
	15-27							1	1		2
	28-41										
	> 41										
Dacca ..	3-14	28	1					1	2	14	9
	15-27							1			
	28-41										
	> 41										
Dalhandin ..	3-14	27		3	9	1		1	6	1	3
	15-27				1			1	1		
	28-41										
	> 41										
Drosh ..	3-14	21	1	13	1		1	2			3
	15-27										
	28-41										
	> 41										
Fortsandaman ..	3-14	27	9	3		3	1	2	5		4
	15-27										
	28 41										
	> 41										
Gilgit ..	3-14	25			5	2		1	6		10
	15-27								1		
	28-41										
	> 41										
Jacobabad ..	3-14	27	1	4	4	2		3	3	5	5
	15-27										
	28-41										
	> 41										
Jhelum ..	3-14	28	4		4	1	1	1	1	10	4
	15-27				1					1	
	28-41										
	> 41										
Jiwani ..	3-14	28	1		2	4	4	2	3	3	1
	15-27		2				2	2	2		
	28-41										
	> 41										
Karachi (Drigh Road) ..	3-14	28			4	2		3	5	3	2
	15-27					1				2	2
	28-41				1						
	> 41										
Khanpur ..	3-14	28	7	7		1		1	4	2	2	1
	15-27		1						1		1	
	28-41										
	> 41										
Lahore ..	3-14	28	4	4	3	2	2	2		8	2
	15-27				1						
	28-41										
	> 41										
Multan ..	3-14	27	10	6	1	1	3	2	1	3	
	15-27										
	28-41										
	> 41										
Peshawar ..	3-14	25	4	4	5	5	1			3	3
	15-27										
	28-41										
	> 41										
Quetta (Samungli) ..	3-14	25	1			1	2	1	7	6	7
	15-27										
	28-41										
	> 41										
Sylhet ..	3-14	28	1		2	2	6	9	3		5
	15-27										
	28-41										
	> 41										

STATIONS	Speed in Knots	Number of Observations at 0.9 Km. above sea level: Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots
Bogra ..	3-14	28					1	4	12	5	3
	15-27								3		
	28-41										
	> 41										
Chakhale ..	3-14	23	1	1	3	7			5	1	1
	15-27					1			\		
	28-41										
	> 41										
Chhor ..	3-14	28	5	5	1			4	3	4	2
	15-27									4	
	28-41										
	> 41										
Chittagong ..	3-14	28	9	1			1	7	1	4	4
	15-27						1				
	28-41										
	> 41										
Cox's Bazar ..	3-14	27	7	4	1				3	4	3	1
	15-27		3								
	28-41										
	> 41										
Dacca ..	3-14	28	2					1	3	11	8	2
	15-27									1	
	28-41										
	> 41										
Dalhandin ..	3-14	27		3	10				2	6		5
	15-27									1	
	28-41										
	> 41										
Drosh ..	3-14										
	15-27										
	28-41										
	> 41										
Fortsandaman ..	3-14										
	15-27										
	28 41										
	> 41										
Gilgit ..	3-14										
	15-27										
	28-41										
	> 41										
Jacobabad ..	3-14	26	4	2	2	3	4	2	1	6	2
	15-27										
	28-41										
	> 41										
Jhelum ..	3-14	27	2	2	1	6			1	4	4	4
	15-27					3					
	28-41										
	> 41										
Jiwani ..	3-14	24	2					2	2	3	3	2
	15-27		2				1	1	3	3	
	28-41										
	> 41										
Karachi (Drigh Road) ..	3-14	27	3	1	2	1	1	1	1	6	1	2
	15-27			1	1					3	3	
	28-41									1		
	> 41										
Khanpur ..	3-14	28	2	5	4	1	3	3	3	3	
	15-27		1		1				1	1	
	28-41										
	> 41										
Lahore ..	3-14	26	1		3	3	5	1	1	9	
	15-27		1		1	1					
	28-41										
	> 41										
Multan ..	3-14	25	5	4	3	2	2	2	3	2	1
	15-27		1								
	28-41										
	> 41										
Peshawar ..	3-14	25	7	2		1	1			8	5
	15-27					1					
	28-41										
	> 41										
Quetta (Samungli) ..	3-14										
	15-27										
	28-41										
	> 41										
Sylhet ..	3-14	28				1	1	13	9	1	3
	15-27										
	28-41										
	> 41										

STATIONS	Speed in Knots	Number of Observations at 2.1 Km. above sea level: Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots
Bogra ..	3-14	26							2	3	
	15-27								9	4	
	28-41								5	1	
	> 41									2	
Chakhale ..	3-14	18	2			4	5				1
	15-27				1	2	1			2	
	28-41										
	> 41										
Chhor ..	3-14	28	1				5	1	5	1	
	15-27			1				5	6		
	28-41							1	1	1	
	> 41							1	1		
Chittagong ..	3-14	28	2				1	1	2	4	
	15-27		1						8	6	
	28-41									1	
	> 41									2	
Cox's Bazar ..	3-14	27	4			1			3	3	
	15-27		5						4	5	
	28-41		1								
	> 41		1								
Dacca ..	3-14	28						2	3	2	
	15-27								7	6	
	28-41							1	3	3	
	> 41									1	
Dalhandin ..	3-14	27	6				3	4	1	4	1
	15-27							5	2		
	28-41							1			
	> 41										
Drosh ..	3-14	21	1	12	1			2			3
	15-27		2								
	28-41										
	> 41										
Fortsandaman ..	3-14	26	4	3	2	2	2	6		2	2
	15-27						1	1	1		
	28 41										
	> 41										
Gilgit ..	3-14	25		1	5	1		1	4		13
	15-27										
	28-41										
	> 41										
Jacobabad ..	3-14	26	2	1		1	2	4	5	2	
	15-27							2	1	2	
	28-41								3		
	> 41								1		
Jhelum ..	3-14	25	2			4	7	1	1	2	2
	15-27				2	1	1	2			
	28-41										
	> 41										
Jiwani ..	3-14	16	3				2	1			3
	15-27		1						4		
	28-41								2		
	> 41										
Karachi (Drigh Road) ..	3-14	25			1			1	2	1	
	15-27		1					3	4	4	
	28-41					1		2	5		
	> 41										
Khanpur ..	3-14	23		1			1	5	3	3	
	15-27						1	2	2	1	
	28-41							1	2	1	
	> 41										
Lahore ..	3-14	23	2	1	1		5	2	2	5	
	15-27						1	3	1		
	28-41										
	> 41										
Multan ..	3-14	23			1	2		3	4	1	
	15-27		1				1	4	4		
	28-41								2		
	> 41										
Peshawar ..	3-14	22	2	1	3	2	2	4	4	2	1
	15-27									1	
	28-41										
	> 41										
Quetta (Samungli) ..	3-14	25	1	1		1	3	4	4	4	4
	15-27							1			
	28-41										
	> 41										
Sylhet ..	3-14	24	1			1		3	2	2	
	15-27							2	5	5	
	28-41								3	1	
	> 41										

TABLE 2.—Observations of Wind by Pilot Balloons at 0900 G.M.T.— February, 1954

Number of Observations at 3.0 Km. above sea level											Number of Observations at 4.5 Km. above sea level											Number of Observations at 6.0 Km. above sea level											Number of Observations at 7.5 Km. above sea level											Speed in Knots	STATION
Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots		
13						1	2 2 4 1	2 1		3						1	1 1																								3-14 15-27 28-41 > 41	Bogra
17		1		3 1	4 2	2 1	1	2		11				1	1 1 1	2 2	1 1	1		5				1		1 1	1	1													3-14 15-27 28-41 > 41	Chaklala
25					1	1 7 3	1 6 2	3 1		12						2 2	3 2	1 1 1		8				1	1	1 2	1 2			2	1										3-14 15-27 28-41 > 41	Chhor
26	1				1	2	1 10 1	1 5 4		19						2 1	4 7	1 3 1		10						1 6 2				2						1	1				3-14 15-27 28-41 > 41	Chittagong
26	2 1				1	1 1	3 5	3 6 3		24	1		1			3	1 10 1	1 5 1		14	2					1 2 4 1	1			3								1	2		3-14 15-27 28-41 > 41	Cox's Bazar
26						1	10 3 2	3 5 2		10							5 4	1		5						1 4				1							1				3-14 15-27 28-41 > 41	Dacca
13	1 1			1	1	1	3	3 2		9						2	1 2	1 2 1		8						2	1 1 1	1 2		6						1		1 1	3		3-14 15-27 28-41 > 41	Dalbandin
20	4 3 2 1	1			2	5			2	11	1 2			1 1	4	2				1	1																				3-14 15-27 28-41 > 41	Drosh
23	2 1			1	2	5 2	3 3	2 2		16	1	1		2		2 3	3 1 1	1 1		13	1		1			2 3 1	1	1		15	1		1 1		1 2	1 1 4	1			3-14 15-27 28-41 > 41	Fortsandaman
23	1		3	14				3	2	17		1		1 3	6 1	2 2	1			6				2		1 1	2			1						1					3-14 15-27 28-41 > 41	Gilgit
23	1 2					1 5	2 5 3 1	1 2		18						1 1 2	2 8	3 1		12						1 1	2 3	2 3		8							1 3	3 1			3-14 15-27 28-41 > 41	Jacobabad
21	1		1	4	3 1	5 2	1 1	1	1	18			1		1 2	1 6	1 2 1	2 1		8						2 1	1 1 1	2		5						1	1 1	1			3-14 15-27 28-41 > 41	Jhelum
13	1 1					2	1 3 1	1 3		9							1 2 1	4 1		5							1 2 1	1		4						1 2					3-14 15-27 28-41 > 41	Jiwani
25					1		1 6 5 1	1 3 2		21						2 2	2 7 5	1 1 1		19						2 2	4 7	1 1 2		18						1 3	1 10	1 2			3-14 15-27 28-41 > 41	Karachi (Drigh Road)
19	1					1 4 1	2 4 1	2 2 1		12							1 3 6	1 1		5							2 2	1		1									1		3-14 15-27 28-41 > 41	Khairpur
22		1	1		2 1	3 5	4 3	2		16			1		1	1 3 1	5	2 2		16	1				1	1 2	1 5 2	1 1 1		13						1 1 1 2	6	2			3-41 15-27 28-41 > 41	Lahore
20	1					2 4 2	3 3 2 1	1 1		13						1 1 2	2 5	2		7				1	1	1 1 2	1			3					1		1 1				3-14 15-27 28-41 > 41	Multan
20		1	1	3	1 1	4 1	4	1 1	2	15		1	1		1	2 2	4 2 1	1		10	1				3 1	2	1			8						1 1 3		1		3-14 15-27 28-41 > 41	Peshawar
20	2			1	3	1 2 2	2 4	2 1		12						1 1 1	1 1 3 1	1 2		7						1 1 2 2	1			5							2 1 1	1		3-14 15-27 28-41 > 41	Quetta (Samungli)
21						1	2 5 3 1	1 1 2		10							1 6 1	1		1						1														3-14 15-27 28-41 > 41	Sylhet

TABLE 2—Observations of Wind by Pilot Balloons at 2100 G. M. T. February, 1954

STATIONS	Speed in Knots	Number of Observations at Surface											Number of Observations at 0.15 Km. above Surface											Number of Observations at 0.9 Km. above sea level											Number of Observations at 2.1 Km. above sea level										
		Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots
Bogra ..	3-14 15-27 28-41 > 41	28			1	1		1	1	1	23	27	3	1	2	2 2		1	4	6 5	1	27	2	1				3 1	6 2	4 6 1	1	11							5 3	1 2	
Chittagong ..	3-14 15-27 28-41 > 41	28	1			2					25	27	3 4	4	1	2 1	7		1	1	3	24	8 4				3	2	2	5		18	2					1	2 2	4 4 3	
Cox's Bazar ..	3-14 15-27 28-41 > 41	28	3	8	6	2	1		1	3	4	28	7 2	1		1	7	1	2	5 2		28	10 3	1			1	5	5	2 1		26	1	2 1 1	1 1			2	2 2	6 7	
Dacca ..	3-14 15-27 28-41 > 41	28		1	2	1	3	5		1	15	27	3	2	2	1	5 2	1 2	5	3	1	24	2					7 2	4	5 4		17						1	1 3 1	2 5 3 1	
Dalbandin ..	3-14 15-27 28-41 > 41	28	1	15	1	2	1	2			6	24		3 3	10 2	1	1	1 1	1		1	24		5 1	12	1	1	1	1		2	24	2 1			1	1	6 5	1 2 1	2 1	1
Drosh ..	3-14 15-27 28-41 > 41	28		1	1		1				25	17		6	2			1			8											18	3	7 1	1		1	1			4
Fortsandaman ..	3-14 15-27 28-41 > 41	28		4			1	4	2		17	24	1	10	1		1	4	3 1		3											23	3	2	1		2	3 2	5 1	2	2
Jacobabad ..	3-14 15-27 28-41 > 41	28	6	1	2					3 1	15	28	5 3	6	4 1			1	2	4 1	1	28	1	1	9 1	2	2 1	4	1	3 2	1	25	1			1	2 3	4 1 1	3 4 1	3 1	
Jhelum ..	3-14 15-27 28-41 > 41	28				1		1	1	11	14	22	4	1		2		1	1	12	1	22	2	1	2	6	2		3	6		21		1		3	2 1	2	4 1	5	2
Jiwani ..	3-14 15-27 28-41 > 41	28			1	3 1	4	6	9		4	28				1 3	4	7	8 4	1		27	1			1	2 2	2 2	5 2 1	3 5	1	22	2 2	1	1		1	2	1 6 1	3 2	
Karachi (Drigh Road) ..	3-14 15-27 28-41 > 41	28	3	5	1			1	4	2	12	28	1	7 2	1	2		2	2 3	6 1	1	28	3	2	3 2	2 1	1	2	3 5	1 3		25	2			1	2 2 1	2 3 3	4 2	1	
Khanpur ..	3-14 15-27 28-41 > 41	28	2	12				1	1		12	27	2 3	6 7 1	1	1		1 1	1 1	2		27	3	5 1 1	6 2		1	3	1	1 1	2	22	2 1			3 1		3 2 1	4 1	2 2	
Lahore ..	3-14 15-27 28-41 > 41	28	3	5	1	2			1	3	13	28	5 2	1 1	3	4 1			3	6 2		28	2 1	3	3 1	2	2 1	3	2	6 1	1	23		2	2	1	5	3	5	4 1	
Multan ..	3-14 15-27 28-41 > 41	28	6		2	1				4	15	24	2 6	4	2 1	3 1	1	1	1	1	1	23	6 2 1	2	1	2	2 1	2	1	1	2	22	1 1	2		1	4	2 2 1	1 4	1 2	
Peshawar ..	3-14 15-27 28-41 > 41	28				2	1	3	5	2	15	23	1	3	4	4		1	5	2	3	23	3	2		1		2	3	6	6	22	2	2 1	5	2		1	1	2 3	3
Quetta (Samungli) ..	3-14 15-27 28-41 > 41	28				1			4	1	22																																
Sylhet ..	3-14 15-27 28-41 > 41	28		3	16	1		1			7	26	1	1	13 3	2	1	3			2	25			3	4	1	5 1	6	3	6	9						1	1 3 1	1	2

TABLE 2.—Observations of Wind by Pilot Balloons at 2100 G. M. T.—February, 1954

Number of Observations at 3.0 Km. above sea level											Number of Observations at 4.5 Km. above sea level											Number of Observations at 6.0 Km. above sea level											Number of Observations at 7.5 Km. above sea level											Speed in Knots	STATIONS
Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots		
3							2	1																																3-14 15-27 28-41 > 41	Bogra
11	1					2	2	3 3																																3-14 15-27 28-41 > 41	Chittagong
																																								3-14 15-27 28-41 > 41	Cox's Bazar
4							1 1 1	1																																3-14 15-27 28-41 > 41	Dacca
18						5	4 2 2	3 2		1							1																							3-14 15-27 28-41 > 41	Dalbandin
16	3 6	1				4			2	3				1	1		1																							3-14 15-27 28-41 > 41	Drosh
18	2 2	1	1		1	2 1	1 3 1	3		4		1				1	1 1																							3-14 15-27 28-41 > 41	Fortsandaman
21	1				1	6	2 4 2 2	1 2																																3-14 15-27 28-41 > 41	Jacobabad
18	2 1			1	2		4 2	3	2	1	1	1																												3-14 15-27 28-41 > 41	Jhelum
18	1				1	1	1 4 3	1 5 1		2						1	1																							3-14 15-27 28-41 > 41	Jiwani
20							2 4	4 2 1	1 4 2																															3-14 15-27 28-41 > 41	Karachi (Drigh Road)
13	2			1	1	1 1	1 6			1							1																							3-14 15-27 28-41 > 41	Khanpur
12	1	2			1	1 1	2 3	1		1						1																								3-14 15-27 28-41 > 41	Lahore
20	1				2	1 1 1	3 6 2	2	1																															3-14 15-27 28-41 > 41	Multan
18	1		2	3	3 1	2	2 1	3		3						1	1	1																						3-14 15-27 28-41 > 41	Peshawar
																																								3-14 15-27 28-41 > 41	Quetta (Samungli)
4							3	1																																3-14 15-27 28-41 > 41	Sylhet

TABLE 3—Frequency of Observations of Base of Low Cloud above Ground Level at 03, 09, and 21 G.M.T.—February, 1954

STATIONS	Cloud Amounts in Octas	No. of represented observations with cloud base represented by code figures at 03 G.M.T.										No. of observations with cloud base represented by code figures at 09 G.M.T.										No. of observations with cloud base represented by code figures at 21 G.M.T.									
		0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9
Bogra	Trace to 8					1	1		1		25							8	1		19					1	1	2			24
	6 to 8					1					1															1					1
	7 or 8																									1					1
Chaklala * ..	Trace to 8					3		3	1	3	18					1	1	2	4	4	16										
	6 to 8					2		2		2	17							1	1		21										
	7 or 8					2		1		1	17							1	1		20										
Chhor* ..	Trace to 8								1	1	26								2	1	25										
	6 to 8										8										8										
	7 or 8										4										3										
Chittagong ..	Trace to 8						6	2			20						4	7			17					1	4	1			22
	6 to 8						5				5															1	3				4
	7 or 8						4				4															1	3				4
Cox's Bazar ..	Trace to 8					1	2	1			24						3			1	24							2			26
	6 to 8										1										1										2
	7 or 8										1										1										2
Dacca (a) ..	Trace to 8			1		3	2				22						4	5	2		14				1	3	2				22
	6 to 8			1							2										4					3	1				6
	7 or 8			1							1										3					3	1				5
Dalbandin ..	Trace to 8					3	2	2	6		15					2	1	4	11	2	8					1	2	2	3		20
	6 to 8					1	1				13					1		1	1	1	15										
	7 or 8					1					10					1		1	1		13										
Fort Sandaman A	Trace to 8				1	2	2	3	3	1	15				1	1	2	1	3	2	17					1	1	3	2	9	12
	6 to 8					2	1	1			5				1	1	1	1			4					1		2		1	4
	7 or 8					2	1	1			4				1	1	1				3					1		2			3
Gilgit * ..	Trace to 8					4		3	4	3	14					2	2	3	7	2	12										
	6 to 8					4		3	2	1	21					2	1	3	1	2	22										
	7 or 8					4		3	2	1	21					2	1	3	1	2	21										
Jacobabad *A ..	Trace to 8								1	3	23				1		1	1		2	22										
	6 to 8								1	1	13				1		1				11										
	7 or 8								1		9				1		1				11										
Jhelum ..	Trace to 8					1	4	3	3	1	16					1	2		4	2	19						2	7	2	1	16
	6 to 8						3	1			19					1	1		1		22						1	1		1	16
	7 or 8						3	1			16					1	1				15							1			15
Jiwani ..	Trace to 8						5	10	1		12						12	1	2	1	12										
	6 to 8						1	4			14						5			1	15										
	7 or 8						1	3			12						1			1	9										
Karachi (Drigh Road) ..	Trace to 8					2	4	2	1		19						4		1		23						6	4	1		17
	6 to 8					1					9						1		1		3						2				7
	7 or 8					1					4						1		1		3						1				3
Khanpur ..	Trace to 8						1		7		20						3		7		18							2	8	1	17
	6 to 8						1		1		10						2		2		13							1			
	7 or 8						1		1		7										10							1			
Lahore ..	Trace to 8				1			4	4		19					1	1	4	5	2	15						1	3	5	1	18
	6 to 8				1			1			18					1	1				17							2	2		
	7 or 8				1			1			15					1	1				12							1	1		
Multan ..	Trace to 8						2	3	1		22						3	3	5	3	14						1		2		25
	6 to 8										13						2	1		1	12										7
	7 or 8										10						1	1		1	8										6
Peshawar ..	Trace to 8				1	2	1		8	3	13				1		1	8	14		4				1	1	3		8		15
	6 to 8										17				1		1	1	1		21						1		1		16
	7 or 8										15						1				18										15
Quetta (Samungli) ..	Trace to 8						4	8	1		15				1	1	5	7	1		13				2		2	7			17
	6 to 8						3	5	1		12				1	1	5	7	1		17				2		1	7			11
	7 or 8						3	5	1		12				1	1	4	3	1		14				2		1	7			11
Sylhet .	Trace to 8						3	5	7	1	12							6	12	4	6					1	3	5	6		13
	6 to 8						2	4	1		7							3	1		4					1	2	2	1		6
	7 or 8						1	1	1		3								1		4					1	2	1			4

A : On one day at 03 and 09 G.M.T.

(a) : On three days cloud observations not taken at 22 G.M.T.

TABLE 4.—Frequency of Observations of Horizontal Visibility at 03 and 09 G. M. T. and Number of days of fog (Visibility) < 100 m. February, 1954.

No. of observations between the following limits at 03 G.M.T.										No. of observations between the following limits at 09 G.M.T.										: No. of days of fog.	STATIONS
Less than 50 m.	50-200 m.	200-500 m.	500-1000 m.	1000-2000 m.	2000-4000 m.	4000-10000 m.	10000-20000 m.	20000-50000 m.	A 50000 m. (50 Kms.)	Less than 50 m.	50-200 m.	200-500 m.	500-1000 m.	1000-2000 m.	2000-4000 m.	4000-10000 m.	10000-20000 m.	20000-50000 m.	A 50000 m. (50 Kms.)		
					17	10	1								8	20					Bogra
				8	4	10	6								4	9	14	1			Chaklala
				1	5	21	1								1	27					Chhor
						23	5								1	22	5				Chittagong
					2	22	4								1	14	13				Cox's Bazar
					3	21	4										27	1			Dacca
				4	4	9	7	3	1				1	6	4	8	6	1	2		Dalbandin
		1		1	2	22	1	1							3	12	12	1			Fort Sandeman
						10	13	5								3	5	18	2		Gilgit
1						15	10		2							1	11	13	3		Jacobabad
				1	4	3	11	9								2	13	12	1		Jhelum
				1		27								2		26					Jiwani
					1	17	9		1						1	8	11	6	2		Karachi (Drigh Road)
			1	18	8	1								1	8	19					Khanpur
		1		1	7	19										27	1				Lahore
				3	6	19										28					Multan
					2	14	12								1	13	14				Peshawar
					10	17	1								5	15	8				Quetta (Samungli)
					7	21									2	25	1				Sylhet

Registered No. S-1453

MONTHLY FREQUENCY TABLES

Horizontal Visibility, Height of Base of Low Cloud & Surface & Upper Winds at Pilot Balloon Stations in Pakistan

March 1954

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PAKISTAN METEOROLOGICAL DEPARTMENT

Karachi

1969

Monthly frequency tables of surface and upper winds, height of base of low clouds and horizontal visibility have been compiled from the data of Pilot Balloon Stations functioning during the month of March, 1954. The data have been given under the following tables :—

Table 1 : Particulars of the stations *i.e.*, latitude, longitude and height above mean sea level are given in this table.

Table 2 : Wind frequencies for surface, 0.15 km. above surface, 0.9, 2.1, 3.0, 4.5, 6.0 and 7.5 kms. above mean sea level from observations made at 0300, 0900 and 2100 hours G.M.T. are given in this table.

Table 3: This table furnishes the frequencies of heights of base of low cloud observed at or near the times of Pilot Balloon observations. The code figures have the following meanings :—

Code figure	0	1	2	3	4	5	6	7	8	9
Cloud height	Less than 50 m.	50 to 99 m.	100 to 199 m.	200 to 299 m.	300 to 599 m.	600 to 999 m.	1000 to 1499 m.	1500 to 1999 m.	2000 to 2500 m.	No low cloud.

Table 4 : The frequencies of horizontal visibility given in this Table have been prepared from the observations made at or near the times of Pilot Balloon observations.

Table 5 to 7 : These furnish frequencies of wind, height of base of low cloud and horizontal visibility recorded at 0600 G.M.T. at Pilot Ballon Stations in East Pakistan during March to June, only.

KARACHI, Pakistan :

The 1st November 1968.

MUHAMMED SAMIULLAH,
Director Meteorological Services.

TABLE 1.—PARTICULARS OF STATIONS APPEARING IN TABLES.

Station	Latitude N	Longitude E	Height	Station	Latitude N	Longitude E	Height
Bogra ..	24° — 51′	89° — 23′	0.03 Km.	Jacobabad ..	28° — 18′	68° — 28′	0.06 Km.
Chaklala ..	33° — 37′	73° — 06′	0.50 Km.	Jhelum .	32° — 56′	73° — 44′	0.24 Km.
Chhor ..	25° — 31′	69° — 46′	0.01 Km.	Jiwani ..	25° — 04′	61° — 48′	0.06 Km.
Chittagong ..	22° — 21′	91° — 50′	0.02 Km.	Karachi .. (Drigh Road).	24° — 54′	67° — 08′	0.03 Km.
Cox's Bazar ..	21° — 26′	91° — 58′	0.003 Km.	Khanpur ..	28° — 39′	70° — 38′	0.09 Km.
Dacca ..	23° — 46′	90° — 23′	0.018 Km.	Lahore ..	31° — 33′	74° — 20′	0.22 Km.
Dalbandin ..	28° — 53′	64° — 24′	0.85 Km.	Multan ..	30° — 12′	71° — 26′	0.12 Km.
Drosh ..	35° — 34′	71° — 47′	1.51 Km.	Peshawar ..	34° — 01′	71° — 35′	0.37 Km.
Fortsandeman	31° — 21′	69° — 27′	1.43 Km.	Quetta .. (Samungli)	30° — 02′	67° — 02′	1.73 Km.
Gilgit ..	35° — 55′	74° — 20′	1.49 Km.	Sylhet ..	24° — 54′	91° — 53′	0.04 Km.

TABLE 2.—Observations of Wind by Pilot Balloons at 0300 G.M.T.—March, 1954

Number of Observations at Surface

STATIONS	Speed in Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots
Bogra ..	3-14 15-27 28-41 > 41	31		1	2	3			3		22
Chaklala ..	3-14 15-27 28-41 > 41	31		2	1			2	5		21
Chhor ..	3-14 15-27 28-41 > 41	31	1	5	2			4			19
Chittagong ..	3-14 15-27 28-41 > 41	31				2	5				24
Cox's Bazar ..	3-14 15-27 28-41 > 41	31	4		2		5	2	1	1	16
Dacca ..	3-14 15-27 28-41 > 41	31		1			6	9	3	2	10
Dalbandin ..	3-14 15-27 28-41 > 41	31	1	9	4	1		2	1	1	12
Drosh ..	3-14 15-27 28-41 > 41	31		6							25
Fort Sandaman ..	3-14 15-27 28-41 > 41	31			1		1	4	3	1	21
Gilgit ..	3-14 15-27 28-41 > 41	31						2 1	8	4	16
Jacobabad ..	3-14 15-27 28-41 > 41	31	1	1	5	7			1	4	12
Jhelum ..	3-14 15-27 28-41 > 41	31			1	1				11	18
Jiwani ..	3-14 15-27 28-41 > 41	31	3	3		3			4 1	7	10
Karachi (Drigh Road) ..	3-14 15-27 28-41 > 41	31	4					1	2	2	22
Khanpur ..	3-14 15-27 28-41 > 41	31	2	8		1	1		1		18
Lahore ..	3-14 15-27 28-41 > 41	31	1	3	1	1				3	22
Multan ..	3-14 15-27 28-41 > 41	31	5	1		1	1			6	17
Peshawar ..	3-14 15-27 28-41 > 41	31				5	3	5	1	1	16
Quetta (Samungli) ..	3-14 15-27 28-41 > 41	31			1			2		3	25
Sylhet ..	3-14 15-27 28-41 > 41	31		2	16	1					12

Number of Observations at 0.15 Km. above Surface

STATIONS	Speed in Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots
Bogra ..	3-14 15-27 28-41 > 41	31	2	2	5	4	2	3	3 2	5	3
Chaklala ..	3-14 15-27 28-41 > 41	30		8	3 1			3	3	8	4
Chhor ..	3-14 15-27 28-41 > 41	31	3 1	4 3	5 4	1	1	2 3	1 1	2	
Chittagong ..	3-14 15-27 28-41 > 41	31	2	3	7	2	8 1	3	1	1	3
Cox's Bazar ..	3-14 15-27 28-41 > 41	31	6	1	1	1	8 1	1	1	6	5
Dacca ..	3-14 15-27 28-41 > 41	31	3		1		6 1	5 2	5 2	1	5
Dalbandin ..	3-14 15-27 28-41 > 41	30	1	5	13	1		2	3 1	1 1	2
Drosh ..	3-14 15-27 28-41 > 41	27		10	6	1		2			8
Fort Sandaman ..	3-14 15-27 28-41 > 41	31		4		1	5	12	5	1	3
Gilgit ..	3-14 15-27 28-41 > 41	29			1	1			13 5		9
Jacobabad ..	3-14 15-27 28-41 > 41	31	2 1	1	7 3 1	5 4	1		1	1 2	2
Jhelum ..	3-14 15-27 28-41 > 41	31	2	1		2 1			1 1	15 8	
Jiwani ..	3-14 15-27 28-41 > 41	31	1 2 1	1 2	3 1	2	1	2	6 4 2	3	
Karachi (Drigh Road) ..	3-14 15-27 28-41 > 41	31	5 1	4 5			1		2 3	7 3	
Khanpur ..	3-14 15-27 28-41 > 41	31	2 1	7 7	3	1 1	1 1	3 1	1 1	1	
Lahore ..	3-14 15-27 28-41 > 41	31	7	2 2	2	1	2		1	9 5	
Multan ..	3-14 15-27 28-41 > 41	31	7 3	6	1	3	3 1	1		3	3
Peshawar ..	3-14 15-27 28-41 > 41	31	2	1	5	2	3	4	2	6	6
Quetta (Samungli) ..	3-14 15-27 28-41 > 41	30	2	3	1			1	8	9	6
Sylhet ..	3-14 15-27 28-41 > 41	31			29 2	8			1		

Number of Observations at 0.9 Km. above sea level

STATIONS	Speed in Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots
Bogra ..	3-14 15-27 28-41 > 41	31		3	1	2	3	5 1	7 1 1	3 2	2
Chaklala ..	3-14 15-27 28-41 > 41	30	5	1	4	1 2	1			10	6
Chhor ..	3-14 15-27 28-41 > 41	30	3 2	5 2	2	1	1	1 2	5 1	3 1	1
Chittagong ..	3-14 15-27 28-41 > 41	28	7			1	2	4 1	3 1	7	2
Cox's Bazar ..	3-14 15-27 28-41 > 41	31	11 1	2 1		1	4 1	3	4	3	
Dacca ..	3-14 15-27 28-41 > 41	29	3	1		1	1	6 4	5 3	5	
Dalbandin ..	3-14 15-27 28-41 > 41	30	1	5	10	1		2	3	2	6
Drosh ..	3-14 15-27 28-41 > 41										
Fort Sandaman ..	3-14 15-27 28-41 > 41										
Gilgit ..	3-14 15-27 28-41 > 41										
Jacobabad ..	3-14 15-27 28-41 > 41	31	4	2	1 2	5 1	3	6	2	1 3 1	
Jhelum ..	3-14 15-27 28-41 > 41	31	4 1	1		2 2 1	2	1		15 2	
Jiwani ..	3-14 15-27 28-41 > 41	31	4	1 2	2	1	3 2	3 1	4 2	3 3	
Karachi (Drigh Road) ..	3-14 15-27 28-41 > 41	31	2 1	2 2	4 1			2	3 4 1	4 3	2
Khanpur ..	3-14 15-27 28-41 > 41	31	1 2	5 4	3 2 1	3		4 1	1 2	1	1
Lahore ..	3-14 15-27 28-41 > 41	31	5	1	1	2	2	2	1	8 8	1
Multan ..	3-14 15-27 28-41 > 41	30	5 2	2 1	2	1	3	5 1	2	2	4
Peshawar ..	3-14 15-27 28-41 > 41	31	7	2				3	4	7 1	7
Quetta (Samungli) ..	3-14 15-27 28-41 > 41										
Sylhet ..	3-14 15-27 28-41 > 41	30		1	1	6	7	6 1	4	2	2

Number of Observations at 2.1 Km. above sea level

STATIONS	Speed in Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots
Bogra ..	3-14 15-27 28-41 > 41	29			1		1	3	8 8 1	1 4 1	1
Chaklala ..	3-14 15-27 28-41 > 41	29	6	1	2	4	2 1	1	1	7	4
Chhor ..	3-14 15-27 28-41 > 41	30	3 2	4 2		2	2 2	3 1 1	3 1 1	2 1	
Chittagong ..	3-14 15-27 28-41 > 41	23	3	1	2				3 2	8 4	
Cox's Bazar ..	3-14 15-27 28-41 > 41	27	4 2	1 1	1	1 1	1		1 2	5 5 1	1
Dacca ..	3-14 15-27 28-41 > 41	25				1	3	1	6 6 2	3 3	
Dalbandin ..	3-14 15-27 28-41 > 41	30	6 2	1	2	1	1	4 2 1	2 3	2 2	1
Drosh ..	3-14 15-27 28-41 > 41	27	2 3	11 1	1		1	2			6
Fort Sandaman ..	3-14 15-27 28-41 > 41	31	1				5	3 1	9 2	4	1
Gilgit ..	3-14 15-27 28-41 > 41	29			6	2		1	16		4
Jacobabad ..	3-14 15-27 28-41 > 41	29	2		1	1 1	4 2	4 4	6 1	2 1	
Jhelum ..	3-14 15-27 28-41 > 41	30	2		1	1	3 1 1	2	6 2	9 1	1
Jiwani ..	3-14 15-27 28-41 > 41	29	2 1	1	1	1	1 1	3 2 1	4 6 1	1 2	1
Karachi (Drigh Road) ..	3-14 15-27 28-41 > 41	28	6 1	2	2		1 1	2 2	2 1 1	4 2	1
Khanpur ..	3-14 15-27 28-41 > 41	29	2	4 2	1	1	1	2 1	5 4 1	2 2	1
Lahore ..	3-14 15-27 28-41 > 41	30	5 1	1	1		3 1	1	3 1	5 7 1	
Multan ..	3-14 15-27 28-41 > 41	30	3 1				1 1	3 2 1	7	9	2
Peshawar ..	3-14 15-27 28-41 > 41	29	7	2		1		3	1	9 5	1
Quetta (Samungli) ..	3-14 15-27 28-41 > 41	30	2			1	2	5	9 1	7	3
Sylhet ..	3-14 15-27 28-41 > 41	27		1			2	5 1 1	7 7	2	1

TABLE 2.—Observations of Wind by Pilot Balloons at 0300 G.M.T.—March 1954

| Number of Observations at 3.0 Km. above sea level | | |

TABLE 2.—Observations of Wind by Pilot Balloons at 0900 G.M.T.—March, 1954

STATIONS	Speed in Knots	Number of Observations at Surface.										Number of Observations at 0.15 Km. above Surface.										Number of Observations at 0.9 Km. above sea level.										Number of Observations at 2.1 Km. above sea level.									
		Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots
Bogra ..	3-14 15-27 28-41 > 41	31						3	11	5	12	31		1	1	1	1	7 1	11 1	2 3	2	31		1			2	3 1	17 2	1 1	3	30		2			1	2 1	6 13 1	1 3	
Chaklala ..	3-14 15-27 28-41 > 41	31			4	1	1		3	11 6	5	31		2	4	1	1		12 3	2 3	3	31	1	1	2 1	2 1	1 1	1	7	6 3	4	29	1 1	1	3	4 1	4	2 1	4	3 1	3
Chhor ..	3-14 15-27 28-41 > 41	31	5	5				4	5	2	10	31	9	7				4	8 1	2		31	6 1	5 1 1	2		1	6 2	1 2	1 1	1	30	2	3 3	1	2	3	2 2	2 5	2 1	2
Chittagong ..	3-14 15-27 28-41 > 41	31					2	16	10		3	31	1				1 2	7 1	17 1	1		28	7	1		2	1	2 1	5	8	1	26	5		2	1	1	1	2 2	4 8	
Cox's Bazar ..	3-14 15-27 28-41 > 41	31					3	9	15	3 1		31					3	7 1	11 2	6 1		31	6	4			2	1 1	5 1	9 2		30	6 2	3		1 2	1	1 1	1 1	3 8	
Dacca ..	3-14 15-27 28-41 > 41	31					7	8	10	5	1	31					5 2	9 1	9	4 1		31					2	6 4	11 1	4 2	1	29					1	1	8 11	4 2 2	
Dalbandin ..	3-14 15-27 28-41 > 41	31	1	6	2	3	3 1	5	3		7	30	1	4 1	8 1	3	2	3	3 3		1	30		5 1	7	3	1 1	3	5 1		3	28	5	2		1	3 1	5 2	6 1 1	1	
Drosh ..	3-14 15-27 28-41 > 41	31	3	7	1			2			18	28	6	5 4	1			3	1	1	7											28	3	9 4				7	1		4
Fort Sandaman ..	3-14 15-27 28-41 > 41	31	3				1	7	2	4	14	31	3	1			2	6	6	6	7											31	2	1			1	6 1	11 3	4 1	1
Gilgit ..	3-14 15-27 28-41 > 41	31		1	3	1		6	3		17	27			4	3	1	2	5		12											27			6	2	1	1	5	1	11
Jacobabad ..	3-14 15-27 28-41 > 41	31	2		2	5	4		5	2	11	31	2		3	4	5	2	5	2 1	7	31	3		2	3 1	2	7	4	5 1	3	29	1				3 1	6	8 1	6 2	1
Jhelum ..	3-14 15-27 28-41 > 41	31	1	2		2			1	13	12	31	4	1 1		2 1			6	15	1	31	3 1		1	3 2			5	14 1	1	28		2		1 1	3	3	7	9 2	
Jiwani ..	3-41 15-27 28-41 > 41	31	1	2	4	4		2	9	3	6	31	1 1	2	4	5		3	10 1	2 1	1	30	3 1	5 1	1	1 1	3	1 2	4 3 1	1	2	28	4	1	1		2 1	6 2	3 1	4 3	
Karachi (Drigh Road). ..	3-14 15-27 28-41 > 41	31			1	3		8	5 1	2	11	31	2	3	4	2	1	7	5 3		4	31	2 1	4	5	1		1 1	8 3	2	3	30	2 1	3 1	2		1	3	6 3 1	4 3	1
Khanpur ..	3-14 15-27 28-41 > 41	31	1 1	8 1			1	3 1	1		14	31	4 1	7 1	1	1	2	4 2	3		5	31	1	6 2	2	1	5	2	6 1 1	1	3	29	1	1		1 1	1 1	3 1	2 8 1	6 2	
Lahore ..	3-14 15-27 28-41 > 41	31	1	1		1 1	1 1		4	10	11	31	1	1		1	1 2		7	10 3	5	31	1				1 2	1	5	14 3	4	31	1			1	1 2 1	1	6 4	9 5	
Multan ..	3-14 15-27 28-41 > 41	31	6	4	1		1	9		4	6	31	11	1			5	5	2	3	4	31	8	3	1	1	4	10	2	1	1	31	3	1			2 2	3 1	8 5	5 1	
Peshawar ..	3-14 15-27 28-41 > 41	31	2	5	1	5		1	2	5	10	31	5 1	7	5	5		1	1	1 3	2	31	8	3	3	1			2 1	4 3	6	26	3		2			4	4 1	9 3	
Quetta (Samungli). ..	3-14 15-27 28-41 > 41	31	1	1		1	1	1	11 1	5	9	30	1			1		4	11	10 3												30		1		1		4 1	9 1	10 2	1
Sylhet ..	3-14 15-27 28-41 > 41	31		1			1	2	2		25	31			1	3	7	6	6		8	30				1	2	19	6		2	27	2			1		2 1	7 9 2	1	2

TABLE 2—Observations of Wind by Pilot Balloons at 0900 G.M.T.—March, 1954

| Number of Observations at 3.0 Km. above sea level | | |

TABLE 2.—Observations of Wind by Pilot Balloons at 2100 G. M. T.—March, 1954

STATIONS	Speed in Knots	Number of observations at Surface											Number of observations at 0.15 Km. above Surface											Number of observations at 0.9 Km. above sea level											Number of observations at 2.1 Km. above sea level										
		Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots
Bogra ..	3-14	31	1	1	3	2		4	4	16	20	31	5	1		3	2	2	4	2	1	31	1	1	2			3	6	8		15					1	3			1
	15-27														1	2	1	2	2	3				1			1	2	2	2								7	1			
	28-41																																					2				
	> 41																																									
Chittagong ..	3-14	31				2	1				28	30	1	3		5	9	5	1	1	3	27	2		1	1	2	5	4	6		17	2		1	1			2	3	1
	15-27															1	1						1			1		2	1	1			2		1	1		1	1	2	
	28-41																																									
	> 41																																									
Cox's Bazar ..	3-14	31	1	6	7	3	3	1		1	9	30	5			2	8	3	2	10		30	5	3	1		2	3	5	6	2	28	2	1	1				3	5	3
	15-27																						2							1						1				5	6	
	28-41																																							1		
	> 41																																									
Dacca ..	3-14	31			1		8	8			14	31	3		1		1	7	5	1		31					4	1	10	5	1	18		1	1	1			5	2	
	15-27												1				3	7	1	1								4	3	2									4	3	
	28-41																																							1		
	> 41																																									
Dalbandin ..	3-14	31	3	8	3		4	1	2	2	8	31		7	5	4	3	2		3	2	31		9	6	2	3	3		3	3	31	2	1	3	1	1	9	2	3	1
	15-27													2	1			1	1						1				1				1					2	1	2	
	28-41																																						1	1		
	> 41																																									
Drosh ..	3-14	31		1	2	5	1	3			19	24		5	3	2	1	5			7											24	4	8				6			5
	15-27																	1																				1			
	28-41																																									
	> 41																																									
Fort Sandaman ..	3-14	31		4	2			1	1	2	21	29	2	11	2	2		7	2	1	2											29	2	1			3	8	8	5	1
	15-27																																					1				
	28-41																																									
	> 41																																									
Jacobabad ..	2-14	31	4	1	3	1	1	1	1	1	17	31	4	2	3	2	4	2	4	3		31	2	2	2	1	3	7	3	1	3	29	2		3		4	6	7	1	1
	15-27		1				1						2		1		1						1		1		1	1	1								1	3	1		
	28-41												1		1			1												2												
	> 41																																									
Jhelum ..	3-14	31	3							13	15	31	10	2			1	1		8	1	31	9	1		1	1	1	11			30	2	1	2	1	1	3	4	5	4
	15-27													1						7			1			1	1		4				1				1	1		2	
	28-41																																									
	> 41																																									
Jiwani ..	3-14	31			1	5	1	9	8	1	4	31		1		1	2	4	5	1		31	1	1	1	2	1	5	1	3	1	28	4	2		1		4	2	5	
	15-27								2						1	3	1	4	3								1	3	4	2				1	2			1	2	2		
	28-41																		3									4	2	1									2		
	> 41																		1									3	1										1		
Karachi (Drigh Road) ..	3-14	31	5	1				1	1	7	16	31	8	1					6	8		31		2	4	1		1	5	4	3	30	3	4	3	1		4	1	3	1
	15-27													1					2	5					1			2	5	2			1				1	1	6		
	28-41																			1									1										1		
	> 41																																									
Khanpur ..	3-14	31	2	2	1			1	3		22	30		5	2	1		5	3		1	30		6	4	1		7	3			26		1	2	1	1	9	2	2	2
	15-27												1	6	1			1	4					1	1			2	3					1				2	1	2	
	28 41																							1						1												
	> 41																																									
Lahore ..	3-14	31	2	3	1			1	1	4	19	31	4	1		2		1	5	7		31	2			2	1	1	3	10		29		1	2		1	3	4	9	
	15-27												4		1					6			4					1	1	6			1					2	2	4	
	28-41																																									
	> 41																																									
Multan ..	3-14	31	3	2	1	3	3			2	18	30	3	8	1	3	1	1	1	2	2	30	7	1	2	1	1	2	2	5	2	29	3				2	4	4	5	
	15-27												3	1	1	2		1					1	1		1	1	2	1				1					4	4	2	
	28-41																																									
	> 41																																									
Peshawar ..	3-14	31	1				1	11	1	1	15	29	8		4	1	1	3	1	6	5	29	5	5		1		2	3	9	2	28	6	2				1	2	9	2
	15-27									1																				2			1							1	4	
	28-41																																									
	> 41																																									
Quetta (Samungli) ..	3-14	31				1		3	2	2	23	16				1	4	7	3	1												16					2	8	2	4	
	15-27																																									
	28-41																																									
	> 41																																									
Sylhet ..	3-14	31		7	15	1					8	31	1		12	5	3	5	1			28	1	1	1	1	3	7	8	1	1	16	1				2		1	2	1
	15-27														4													2	2										8			
	28-41																																						1			
	> 41																																									

TABLE 2.—Observations of Wind by Pilot Balloons at 2100 G. M. T.—March, 1954

Number of observations at 3.0 Km. above sea level											Number of observations at 4.5 Km. above sea level											Number of observations at 6.0 Km. above sea level											Number of observations at 7.5 Km. above sea level												
Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Speed in Knots	STATIONS
5							5																																		3-14 15-27 28-41 > 41	Bogra
6				1			3	1	1																																3-14 15-27 28-41 > 41	Chittagong
21	1 1	1 1		1		1	0 2	3 2 1	1																																3-14 15-27 28-41 > 41	Cox's Bazar
6							3	2	1																																3-14 15-27 28-41 > 41	Dacca
23	1					6 1	6 2 1	2 2 1	1	3	1					1	1																								3-14 15-27 28-41 > 41	Dalbandin
24	3 3	3		1	6 1				7	6	1	1	1	1	2																										3-14 15-27 28-41 > 41	Drosh
28						1 1	3 2 1	7 5	5 3	6					1	1 2		1 1																							3-14 15-27 28-41 > 41	Fort Sandaman
26	1		1		1 1	4 2	8 3 1	1 2	1																																3-14 15-27 28-41 > 41	Jacobabad
24	1 1			1	2	2	7 1	6 2	1																																3-14 15-27 28-41 > 41	Jhelum
19	3 1	2	2			1	4 3 1	2																																	3-14 15-27 28-41 > 41	Jiwani
28	3 2	3			2	2 1	5 2 3	1 1	3	2							1	1	1	1							1														3-14 15-27 28-41 > 41	Karachi (Drigh Road)
18		1				5 3	6 1	2		1					1																										3-14 15-27 28-41 > 41	Khanpur
26	2	1	1	1	1	3 1	6 3	4 2 1																																	3-14 15-27 28-41 > 41	Lahore
26	1				1	3 2	4 6	6 3																																	3-14 15-27 28-41 > 41	Multan
24	2 1	1	2	1	1	4 1	3 1	2 3	2	4						1 1	1	1																							3-14 15-27 28-41 > 41	Peshawar
16						1	11 1	2	1																																3-14 15-27 28-41 > 41	Quetta (Samungli)
4							1 2	1																																	3-14 15-27 28-41 > 41	Sylhet

TABLE 3.—Frequency of Observations of Base of low cloud above ground level at 03, 09, and 21 G.M.T. March, 1954

STATIONS	Cloud Amount in Octas	No. of observations with cloud base represented by code figures at 03 G.M.T.										No. of observations with cloud base represented by code figures at 09 G.M.T.										No. of observations with cloud base represented by code figures at 21 G.M.T.									
		0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9
Bogra ..	Trace to 8					1	1	2			27						1	6	2		22						1	1			29
	6 to 8						1				1																1				1
	7 or 8						1				1																1				1
Chaklala* ..	Trace to 8					1		1	4		25					1	3		4	9	14										
	6 to 8								1		12								1		14										
	7 or 8										12										12										
Chhor* ..	Trace to 8								1		30								1	1	29										
	6 to 8										2										4										
	7 or 8																				1										
Chittagong ..	Trace to 8						10	3			18						2	5			24						8	3		1	19
	6 to 8						5				5							3			3						4			1	5
	7 or 8						2				2																3				3
Cox's Bazar ..	Trace to 8						1	4			26							2		1	28						1	2			28
	6 to 8						1	2			3							1			1										
	7 or 8						1	1			2							1			1										
Dacca ..	Trace to 8					3	2				26						5	5	1		20					1	2	1			27
	6 to 8					2					3						3	1			5					1					1
	7 or 8					2					2						1				1					1					1
Dalbandin ..	Trace to 8								8		23							1	15		15								8		23
	6 to 8										7								1		8										7
	7 or 8										6										2										5
Fort Sandaman ..	Trace to 8								6	3	22							1	5	16	9					1	2			3	25
	6 to 8								1		11										15					1	1				7
	7 or 8								1		8										12					1	1				5
Gilgit ..	Trace to 8					2		1	3	9	15					3		1	12	6	9										
	6 to 8					2		1		3	13					3		1	2	1	22										
	7 or 8					2		1		3	13					3			1		15										
Jacobabad ..	Trace to 8								1		28							1			29										
	6 to 8										9										6										
	7 or 8										5										5										
Jhelum ..	Trace to 8							1	1	5	24							2	4	3	22								4	1	26
	6 to 8									1	9								1		15								1		6
	7 or 8									1	8										9								1		3
Jiwani ..	Trace to 8					1				3	27						1				30							1	1		29
	6 to 8										7										6										3
	7 or 8										4										4										2
Karachi (Drigh Road) ..	Trace to 8					1	2				28						2	1	1		27					1	2	1			27
	6 to 8										7										4										1
	7 or 8										3										3										1
Khanpur ..	Trace to 8								3	1	27								6		24								2		29
	6 to 8										2										5								1		3
	7 or 8										1										3								1		2
Lahore ..	Trace to 8							2	2		27							1	1	2	27								2		29
	6 to 8										9										10										6
	7 or 8										5										7										5
Multan ..	Trace to 8						1		1		29							3	2		26							1	1	1	28
	6 to 8										5							1			7										2
	7 or 8										3							1			3										1
Peshawar ..	Trace to 8					1		2	6	2	20							7	15		9							5	4		22
	6 to 8										17							3	1		12							2			9
	7 or 8										13							2			12										8
Quetta (Samungli) ..	Trace to 8						1	5			25						8	5			18						3	1			27
	6 to 8						1	2			10						1	3			16						2				8
	7 or 8										8										11										5
Sylhet ..	Trace to 8					1	2	4	4		20							5	10	1	15					1	2	2	3		23
	6 to 8					1	1	1			3							2			2					1	2	1			4
	7 or 8					1		1			2																2	1			3

* 21 G.M.T. observations not commenced.

TABLE 4. Frequency of Observations of Horizontal Visibility at 03, and 09 G.M.T. and Number of days of fog (Visibility) < 100 m. March, 1954

No. of observations between the following limits at 03 G.M.T.										No. of observations between the following limits at 09 G.M.T.										No. of observations between the following limits at 21 G.M.T.										No. of days of fog.	STATIONS
Less than 50 m.	50-200 m.	200-500 m.	500-1000 m.	1000-2000 m.	2000-4000 m.	4000-10000 m.	10000-20000 m.	20000-50000 m.	A 50000 m. (50 Kms.)	Less than 50 m.	50-200 m.	200-500 m.	500-1000 m.	1000-2000 m.	2000-4000 m.	4000-10000 m.	10000-20000 m.	20000-50000 m.	A 50000 m. (50 Kms.)	Less than 50 m.	50-200 m.	200-500 m.	500-1000 m.	1000-2000 m.	2000-4000 m.	4000-10000 m.	10000-20000 m.	20000-50000 m.	A 50000 m. (50 Kms.)		
					11	20									8	22	1														Begra*
				2	1	18	9	1						1	1	6	15	8													Chaklala*
					1	30									3	27	1														Chhor
				1	1	29										29	2														Chittagong
					2	29									1	11	19														Cox's Bazar
					3	22	6								1	4	22	4													Dacca
				2	13	12	4					1	4	4	8	9	4	1													Dalbandin
					5	23	3								4	12	13	2													Fort Sandaman
						4	13	14								4	1	17	9												Gilgit
						9	21	1								3	21	7													Jacobabad
					1	3	14	13						1	1	1	8	18	2												Jhelum
			1	2	5	22	3							1	2	18	10														Jiwani
					1	22	7	1								18	13														Karachi (Drigh Road)
			1	16	13	1							2	2	24	3															Khanpur
					3	27	1									27	4														Lahore
					5	26									1	30															Multan
					1	11	19									10	19	2													Peshawar
					4	19	8								1	5	23	2													Quetta (Samungli)
				4	15	12									16	15															Sylhet

TABLE 5.—Special Observations of Wind by Pilot Balloons at 06 Hours G.M.T.—March, 1954

STATIONS	Speed in Knots	Number of observations at Surface											Number of observations at 0.15 Km. above Surface											Number of observations at 0.9 Km. above sea level											Number of observations at 2.1 Km. above sea level										
		Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots
Bogra ..	3-14	16				1			2		13	16	1		2	2	3	2	1	2	3	16		2	1	1	1	2	7		1	5					1	1	1		
	15-27																											1											2			
	28-41																																									
	> 41																																									
Chittagong ..	3-14	16					2	5	3	1	5	16					3	5	4		2	15	1	2		1	2	2	1	4	1	8	2	1	1	1			1	2	
	15-27																	2										1													
	28-41																																									
	> 41																																									
Cox's Bazar ..	3-14	16			1		5		5	1	4	16			1		4	4	2	3		16	7			2	1	2		1	3	15	3	1		2		1	1	3	
	15-27																2																1			2			1			
	28-41																																									
	> 41																																									
Dacca ..	3-14	16	1				1	6	3	1	4	16			1		2	4	1	2	4	16					4	5	3	2	1	10			1		1	1	3	2	
	15-27																1		1										1										1			
	28-41																																									
	> 41																																									
Sylhet ..	3-14	16		1	4	2		2			7	16		1	4	5	2	1	2		1	15				2	3	5	3		2	8					2	3		2
	15-27																																						1			
	28-41																																									
	> 41																																									

Table 6—Frequency of Observations of Base of Low Cloud above Ground Level at 06 Hours G.M.T.

STATION	Cloud Amount in Octas	Number of observations of Base of Low Cloud above ground level at 06 Hours G.M.T. represented by code figures.									
		0	1	2	3	4	5	6	7	8	9
Bogra ..	Trace to 8							3			13
	6 to 8							1			1
	7 or 8										
Chittagong ..	Trace to 8						8	3			5
	6 to 8						1				1
	7 or 8						1				1
Cox's Bazar ..	Trace to 8							4		1	11
	6 to 8										
	7 or 8										
Dacca ..	Trace to 8						4		1		11
	6 to 8						1				1
	7 or 8						1				1
Sylhet ..	Trace to 8						1	2	3		
	6 to 8						1		2		10
	7 or 8										3

Number of observations at 3.0 Km. above sea level											Number of observations at 4.5 Km. above sea level											Number of observations at 6.0 Km. above sea level											Number of observations at 7.5 Km. above sea level												
Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Speed in Knots	STATION
																																								3-14 15-27 28-41 > 41	Bogra
1	1																																							3-14 15-27 28-41 > 41	Chittagong
10	1 1			2 1				4	1																															3-14 15-27 28-41 > 41	Cox's Bazar
3							1 2																																	3-14 15-27 28-41 > 41	Dacca
4						1 1	1		1																															3-14 15-27 28-41 > 41	Sylhet

TABLE 7—Frequency of Observations of Horizontal Visibility at 06 G.M.T.

Number of observations between the following limits at 06 hours G.M.T.

Less than 50 m.	50—200 m.	200—500 m.	500—1,000 m.	1,000—2,000 m.	2,000—4,000 m.	4,000—10,000 m.	10,000—20,000 m.	20,000—50,000 m.	More than ≥ (50 Kms)	No. of days of Fog.	STATIONS
						4	12				Bogra
						14	2				Chittagong
					1	4	11				Cox's Bazar
											Dacca*
					9	7					Sylhet

* Observations not recorded.

Registered No. S-1453

MONTHLY FREQUENCY TABLES

Horizontal Visibility, Height of Base of Low Cloud & Surface & Upper Winds at Pilot Balloon Stations in Pakistan

April 1954

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PAKISTAN METEOROLOGICAL DEPARTMENT

Karachi

1969

Monthly frequency tables of surface and upper winds, height of base of low clouds and horizontal visibility have been compiled from the data of Pilot Balloon Stations functioning during the month of April, 1954. The data have been given under the following tables :—

Table 1 : Particulars of the stations *i.e.*, latitude, longitude and height above mean sea level are given in this table.

Table 2 : Wind frequencies for surface, 0.15 km. above surface, 0.9, 2.1, 3.0, 4.5, 6.0 and 7.5 kms. above mean sea level from observations made at 0300, 0900 and 2100 hours G.M.T. are given in this table.

Table 3: This table furnishes the frequencies of heights of base of low cloud observed at or near the times of Pilot Balloon observations. The code figures have the following meanings:—

Code figure	0	1	2	3	4	5	6	7	8	9
Cloud height	Less than 50 m.	50 to 99 m.	100 to 199 m.	200 to 299 m.	300 to 599 m.	600 to 999 m.	1000 to. 1499 m.	1500 to 1999 m.	2000 to 2500 m.	No low cloud.

Table 4 : The frequencies of horizontal visibility given in this Table have been prepared from the observations made at or near the times of Pilot Balloon observations.

Table 5 to 7 : These furnish frequencies of wind, height of base of low cloud and horizontal visibility recorded at 0600 G.M.T. at Pilot Ballon Stations in East Pakistan during March to June.

KARACHI, Pakistan :

The 1st November 1968.

MUHAMMED SAMIULLAH,
Director Meteorological Services.

TABLE 1.—PARTICULARS OF STATIONS APPEARING IN TABLES.

Station	Latitude N	Longitude E	Height	Station	Latitude N	Longitude E	Height
Bogra ..	24° — 51′	89° — 23′	0.03 Km.	Jacobabad ..	28° — 18′	68° — 28′	0.06 Km.
Chaklala ..	33° — 37′	73° — 06′	0.50 Km.	Jhelum ..	32° — 56′	73° — 44′	0.24 Km.
Chhor ..	25° — 31′	69° — 46′	0.01 Km.	Jiwani ..	25° — 04′	61° — 48′	0.06 Km.
Chittagong ..	22° — 21′	91° — 50′	0.02 Km.	Karachi .. (Drigh Road).	24° — 54′	67° — 08′	0.03 Km.
Cox's Bazar ..	21° — 26′	91° — 58′	0.01 Km.	Khanpur ..	28° — 39′	70° — 38′	0.09 Km.
Dacca ..	23° — 46′	90° — 23′	0.02 Km.	Lahore ..	31° — 33′	74° — 20′	0.22 Km.
Dalbandin ..	28° — 53′	64° — 24′	0.85 Km.	Multan ..	30° — 12′	71° — 26′	0.12 Km.
Drosh ..	35° — 34′	71° — 47′	1.51 Km.	Peshawar ..	34° — 01′	71° — 35′	0.37 Km.
Fortsandeman	31° — 21′	69° — 27′	1.43 Km.	Quetta .. (Samungli)	30° — 02′	67° — 02′	1.73 Km.
Gilgit ..	35° — 55′	74° — 20′	1.49 Km.	Sylhet ..	24° — 54′	91° — 53′	0.04 Km.

TABLE 2.—Observations of Wind by Pilot Balloons at 0300 G.M.T.—April, 1954

STATIONS	Speed in Knots	Number of observations at Surface										Number of observations at 0.15 Km. above Surface										Number of observations at 0.9 Km. above sea level										Number of observations at 2.1 Km. above sea level									
		Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots
Bogra ..	3-14	30				13	4	1			12	30			2	15	9	2				23					3	6	2	4		9						1	3		
	15-27															2												2	6									1	3		
	28-41																																							1		
	> 41																																									
Chaklala ..	3-14	30	2	1	3			1	1	3	18	30	3	9	6	1			2	3	3	30	8	5	3	2				5	3	29	5	3	2	2	2	1	2	10	
	15-27									1				1	1					1			1	1	1						1						1				1	
	28-41																																									
	> 41																																									
Chhor ..	3-14	30	1	4			1	16	2	1	5	30		2				10	6	1	1	30	1	2	1			3	4	5	1	28	2	1	1		4		4	5	1
	15-27													1	2			7					2		1			4	2	3								1	4	2	
	28-41																													1									1			
	> 41																																									
Chittagong ..	3-14	30				6	15	2			7	30				4	16	2				23					7	5				10					1	5		
	15-27																8										9	1	1								3	1			
	28-41																																									
	> 41																																									
Cox's Bazar ..	3-14	30				1	22	3	1		2	30				1	11	4	1		1	29				2	8	6	1		2	19	1				2	8	2	
	15-27						1										12									1	8	1									1	5		
	28-41																																									
	> 41																																									
Dacca ..	3-14	30			1	3	19	7				29				5	16	1			1	11					2	1	2	1		6					2	3		
	15-27																6										1	4										1		
	28-41																																									
	> 41																																									
Dalbandin ..	3-14	30		7	1			3	1	2	16	30	2	5	5	1	2	4	5	1	4	30		5	4		1	3	4	1	12	30	5	1			1	5	3	3	
	15-27																	1															3					6	3			
	28-41																																									
	> 41																																									
Drosh ..	3-14	30		2	3	1	1				23	27	1	13	3	2	2	1			5											27	1	16	1	1	1	1			3
	15-27																																1	2								
	28-41																																									
	> 41																																									
Fort Sandeman ..	3-14	30							1		29	30		5	2	1	3	11	2	1	5											30	4	4	2		3	6	6	4	1
	15-27																																									
	28-41																																									
	> 41																																									
Gilgit ..	3-14	30				1		1	7	2	19	29		1	1	2		1	20	3	9											29			3	3		1	13		9
	15-27																		1	1																					
	28-41																																									
	> 41																																									
Jacobabad ..	3-14	30			8	4	1		2	2	13	30	2	3	4	7	2	2	2	1	1	30	2	2	1	1	5	2	6	4	1	29	1				4	5	7	2	1
	15-27												1		4								1				1	2	1				1				1	1	4	2	
	28-41																																									
	> 41																																									
Jhelum ..	3-14	30	2	1					1	9	17	30	6	2						14	1	30	9		1		2	1	2	10	1	30	4	1	2	3		3	3	5	2
	15-27												2							5			1		1					2						1	1			5	
	28-41																																									
	> 41																																									
Jiwani ..	3-14	30	3		2	1		2	9		12	29	1		1	1	2	3	4	4		28	2	2			1	1		3	1	27	1	1	1	1	1		1	3	
	15-27		1												1	1			10									2	4	4				1					4	2	
	28-41																		1										5	2									1	5	
	> 41																													1									2	2	
Karachi (Drigh Road) ..	3-14	30						3	9	2	16	30		2				2	13	3		29			3		1	1	3	3		24	3		1	2		1	6	2	
	15-27												1					1	8				1		1				6	6			1						4	1	
	28-41																													2	2									2	1	
	> 41																																									
Khanpur ..	3-14	30	2	5					1		21	29	5	2	1	2	1	3	3	1		28		2	1	2	2	2	6		2	27	2	2	2		2	3	5	5	1
	15-27			1									2	5	1			2	1					3	1			1		1	3							1	1	2		
	28-41																							1	1																	
	> 41																																									
Lahore ..	3-14	30	7	1						4	18	30	5	3	2				1	9		30	6	1		1		1	2	6	2	30	2	2	1	1	1	2	3	7	1
	15-27												7	2						1			4						3	4			1				1	1	1	5	
	28-41																																							1		
	> 41																																									
Multan ..	3-14	30	5	3	1	2					19	29	9	5	2	4	3			1	1	29	3	6	1	5	1	5		2		28	6	1			5	2	7	3	
	15-27												2				1	1					2		1		2			1			1					1	1	1	
	28-41																																									
	> 41																																									
Peshawar ..	3-14	30	1		1	6	4	6		1	11	30		3	2	5	3	2	4	6	4	30	5					1	4	16	1	30	3	2		1		3	3	11	2
	15-27													1																3			1							4	
	28-41																																									
	> 41																																									
Quetta (Samungli) ..	3-14	30		2				2			26	30			2	2	2	2	4	5	11											30	1	1	1	1	1	5	7	8	4
	15-27																1																					1			
	28-41																																									
	> 41																																									
Sylhet ..	3-14	30		5	11	1	1	1			11	30		2	17	2	4	2				19	1				6	4			1	4					1	3		
	15-27														3												3	2													
	28-41																																									
	> 41																																									

TABLE 2. Observations of Wind by Pilot Balloons at 0300 G. M. T.—April, 1954

| Number of observations at 3.0 Km. above sea level | | |

TABLE 2.—Observations of Wind by Pilot Balloons at 0900 G. M. T.—April, 1954

STATIONS	Speed in Knots	Number of observations at Surface.										Number of observations at 0.15 Km. above Surface.										Number of observations at 0.9 Km. above sea level.										Number of observations at 2.1 Km. above sea level.									
		Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots
Bogra	3-14	30			3		2	4	7	2	12	30	1		2	1	5	5	6		4	30				1	4	8	5	4		25					3	3	3		
	15-27														1	1			4							1		1	5	1							3	13	2		
	28-41																																									
	> 41																																									
Chakhala	3-14	30	1		2				15	1	8	30		2	3			1	14	2	2	30	1	2	1	2	1		13	5	3	30	2	2	4	4		2	6	7	1
	15-27		1						1	1			1						4	1			1							1						2						
	28-41																																									
	> 41																																									
Chhor	3-14	30	1	1				11	7	1	9	30	2	2	1		1	9	8	3	1	30	1	1	2	2	1	6	6	3	2	30	2	1	2		2	5	2	1	
	15-27																	1	2				1			1		2	3								1	3	6	3	
	28-41																																						2			
	> 41																																									
Chittagong	3-14	30					5	22	2		1	30					6	12	4	1		28				1	10	5	1		1	19					1	7	2		
	15-27																2	4									2	5	1									8	1		
	28-41																	1									1	1													
	> 41																																									
Cox's Bazar	3-14	30					6	12	6			30					7	11	6			27	1				4	8	7	1	2	24	3			1	1	3	8		
	15-27						2	3	1								2	4									3	1									1	4	1		
	28-41																																									
	> 41																																									
Dacca	3-14	30				2	24	3				29				2	23					29			1		5	13				22					1	4	1		
	15-27						1										4										5	5										12	2		
	28-41																																									
	> 41																																									
Dalhousie	3-14	30		2	1	1	1	8	1	2	12	28			3	2		4	4	1	5	28			3	1	1	3	5	1	10	26	3		3		3	3	2	2	2
	15-27						1	1							1		1	2	2	1								3		1				1			2	2	1		
	28-41																																									
	> 41																																									
Drosh	3-14	30	2	14							14	24	7	12							3	24	2	14			2				2	24	2	14			2				2
	15-27													2										4										4							
	28-41																																									
	> 41																																									
Fort Sandeman	3-14	30		1		1	1	3	7	2	15	30		1			2	4	12	2	9											30		2			4	9	7	2	4
	15-27																																					1	1			
	28-41																																									
	> 41																																									
Gilgit	3-14	30		1	4	2		7	2		14	30			5	4		2	8	1	10											30			7	5	1	3	4		10
	15-27																																									
	28-41																																									
	> 41																																									
Jacobabad	3-14	30	1			7	5	1	2	1	10	30	1			8	5	3	1	2	7	30	2	1	1	5	11	1	2	2	3	30	3	1		2	2	8	2	4	2
	15-27				1		1		1							1	1		1									1		1							1	2	2	1		
	28-41																																									
	> 41																																									
Jhelum	3-14	30		1	1			1	3	6	17	30	3	1	1	1	4	3	4	8	3	30	3	1			1	2	5	14	3	30	1	1	1	2	2	2	5	11	1
	15-27									1										2										1						1		1		2		
	28-41																																									
	> 41																																									
Jiwani	3-14	30			1	5	5	7	7	1	1	29			3	2	4	8	6	1	2	29	3	1	1		1	4	2	1		28	1	3	1	1	2		1	3	1
	15-27					1			1	1					1				2							1		2	3	3			1					1	6	1		
	28-41																													1								2		1		
	> 41																																									
Kasachi (Drigh Road)	3-14	30	1	1			2	15	2	1	2	30	1	1		1	1	3	3	1		30	2		2		1	1	2	4	2	30	4	2		1		6	6	
	15-27								1	3								4	15						1				7	8					1		1	1	5	2	
	28-41																																									
	> 41																																									
Khanpur	3-14	30		4	1	1	1	6	4	1	12	30	3	2	1	2	1	6	7	3	3	30	3	3	1	2	1	7	4		4	26	1	1	1		1	5	8	2	2
	15-27													2										1			1	2										5			
	28-41																							1																		
	> 41																																									
Lahore	3-14	30	3	1					4	12	10	30	6	1	2			1	6	12		29	3	2				1	8	9	1	29	3	1			2	3	7	6	1
	15-27																			2			1							4								1		5	
	28-41																																									
	> 41																																									
Multan	3-14	30	3	2	1	2	2	2	3	6	9	30	7	2	2	3	1	3	4	3	3	30	3	3	4	2	7	2	3	2	2	29	2	1	1	1	3	11	3	3	
	15-27												1	1										2									1					1	2		
	28-41																																									
	> 41																																									
Peshawar	3-14	30	2	12	1	5				4	6	30	8	10	3	3				1	3	30	10	5	1					9	4	30	3		1	3	3	6	4	5	1
	15-27												2																	1										4	
	28-41																																									
	> 41																																									
Quetta (Samungli)	3-14	30	1			1	1	9	8	9	1	30					3	6	7	6												30					1	7	3	8	
	15-27																	2	3	3																	2	2	3	3	
	28-41																																					1				
	> 41																																									
Sylhet	3-14	30		1	4	1	1	1			22	30	1	4	6	3	3	6			7	28				1	7	14	1		1	11						2	2		
	15-27																										1	3										2	5		
	28-41																																						1			
	> 41																																									

TABLE 2.—Observations of Wind by Pilot Balloons at 0900 G. M. T.—April, 1954

| Number of observations at 3.0 Km. above sea level | | |

TABLE 2.—Observations of Wind by Pilot Balloons at 2100 G. M. T.—April, 1954

STATIONS	Speed in Knots	Number of observations at Surface											Number of observations at 0.15 Km. above Surface											Number of observations at 0.9 Km. above sea level											Number of observations at 2.1 Km. above sea level										
		Total No. of observations	338-22	N	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	338-22	N	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	338-22	N	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	338-22	N	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots
Bogra ..	3-14	30			1	4	11	5	5			4	30				1	9	11	5			4	27						1	2	4	3	2		14							1	3	2	
	15-27																															8	4	1											5	
	28-41																															1													3	
	> 41																																													
Chittagong ..	3-14	30					10	5	1			14	29					3	9	4				26							1	6				13						1		4	2	
	15-27																		10	2											13	3												3	3		
	28-41																	1													3																
	> 41																																													
Cox's Bazar ..	3-14	30				4	5	13	3			5	29			1			12	5	1	1	1	27			1			4	10	2	1	4	11			1		1		1	3	2	1
	15-27																		6	2											3	3												1	1		
	28-41																																													
	> 41																																													
Dacca ..	3-14	30	1		1	4	15	6	1		2	28							4	4				18						1	3	2			6								2	2	
	15-27																		14	6											9	2												1	1	
	28-41																														1															
	> 41																																													
Dalhousie ..	3-14	30	2	7	1		1	8	1	1	9	30	5	5	3	1	2	4	1			1	30	5	6	3	1	2	5	4			1	30	3				1	6	3	2		
	15-27													1	1			3	3							1				2						4					6	3				
	28-41																																								1					
	> 41																																													
Drosh ..	3-14	30		3	1	2	1				23	21	1	11	1	1	1					6													21	4	6	2		1					6
	15-27																																					2								
	28-41																																													
	> 41																																													
Fort Sandeman ..	3-14	30		2	3		2	1			22	30		4	2	2	3	6	6	2	5														30	2			1	6	8	3	10		
	15-27																																													
	28-41																																													
	> 41																																													
Jacobabad ..	3-14	30	1		1	3	7	3	2	2	11	30	1	1	1	3	4	3	4	1	2		30				1	4	9	5	4			30	2			2	4	9	3	4	1	
	15-27												2				3	2		1								4	1		2										4	1				
	28-41																2																													
	> 41																																													
Jhelum ..	3-14	30	1							8	21	30	6	2				1	1	15			30	2		1			2	3	12	2	28	2	2	1	3	2	2	2	10	1	
	15-27												1							4											7										1	2			
	28-41																															1														
	> 41																																													
Jiwani ..	3-14	30	1			1	5	13	5	2	3	30	1	1			2	2	1	1			30				2	1	1	3	3		30		1	1	2		1	2	2	2	
	15-27																1	7	7	7	1							1	1	9						2	1			1	9	9	2	
	28-41																	1	6											6						2	1				2	2	2	
	> 41																													4																
Karachi (Drigh Road) ..	3-14	30						4	9	3	14	30	1					1	14	4			30	1		1	1	2	1		1		26	3	1	1	2	1	4	4	2	1	
	15-27																		8	2				1							9	3									2	4	1		
	28-41																														10															
	> 41																																													
Khanpur ..	3-14	30	1	3	1	1		1	2		20	29	2	6	3	2	2	2	2			1	29	1	3	4		2	6	2	2	1	25	1	2	1	3		8	4	1		
	15-27			1									1	2				3	3					2					3	3								1	3	1				
	28-41																																													
	> 41																																													
Lahore ..	3-14	30	4	1						3	22	30	4	5	1				1	3	6		30	6	2		1			2	11	5	30	2	1	2		1	4	6	7		
	15-27												6				1				3									1	2	2								1	3	3		
	28-41																																													
	> 41																																													
Multan ..	3-14	30	5	1	2			1		1	19	28	2	2	5		4	1		2			27	3	4	2	2	6	2	1		1	25	1					6	4	2	1	
	15-27		1										2	1	2	3		1	1						1		1		1	1										6	4	1		
	28-41												1					1																											
	> 41																																													
Peshawar ..	3-14	30		2		2		16		3	7	30	7	1	3	1	1	1	7	6	2		30	7	2	2				4	8	4	30	6	2	3	1	1	3	3	7	1	
	15-27																			1				2							1								1			2		
	28-41																																													
	> 41																																													
Quetta (Samungli) ..	3-14	30						1	2	6	21	29	1				3	5	7	12	1													29	1					7	11	10		
	15-27																																													
	28-41																																													
	> 41																																													
Sylhet ..		30		2	9	2		2			15	29		2	5	5	9	3	1			19		1		2	3	6	1		1												
															3	1												1	4															

TABLE 2.—Observations of Wind by Pilot Balloons at 2100 G.M.T.—April, 1954

Number of Observations at 3.0 Km. above sea level											Number of Observations at 4.5 Km. above sea level										Number of Observations at 6.0 Km. above sea level.										Number of Observations at 7.5 Km. above sea level.										Speed in Knots	STATIONS
Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots		
1							1																																3-14 15-27 28-41 > 41	Bogra
4							1	2 1																															3-14 15-27 28-41 > 41	Chittagong
7			1				2	1 2	1																														3-14 15-27 28-41 > 41	Cox's Bazar
1								1																															3-14 15-27 28-41 > 41	Dacca
22	1 3					5 4	1 3	3 2		1							1																						3-14 15-27 28-41 > 41	Dalhandin
18	9 3	3				1			2	4	1			1		1			1																				3-14 15-27 28-41 > 41	Drosh
30	3 1				1	2 4	9 2	4 1	3	7	1					2	2	1 1																					3-14 15-27 28-41 > 41	Fort Sandaman
25	3			1		5 1	4 3	5 2	1	1						1																							3-14 15-27 28-41 > 41	Jacobabad
25	4 1	1	1		2 2	2	5 2	3 1 1																															3-14 15-27 28-41 > 41	Jhelum
23		3 1	1	1		2 2 1	2 3 3 1	1 1 1		2			1			1																							3-14 15-27 28-41 > 41	Jiwani
22	1 2 1	2 1	2		1	2 1	3	2 3	1	4	1					1	1 1			2	1						1													3-14 15-27 28-41 > 41	Karachi (Drigh Road)
19	1			1	1	7 2	2	3 1	1																														3-14 15-27 28-41 > 41	Khanpur
28	4	1	1	1	1	2 3	4 3	6 1 1		2		1				1																							3-14 15-27 28-41 > 41	Lahore
19			1			2 3	5 5	1 2		1						1																							3-14 15-27 28-41 > 41	Multan
28	3 1	1		1	5 1	5 2 1	2	3 3		2							2																						3-14 15-27 28 41 > 41	Peshawar
28	1 1					5 4	6 3	5 1																															3-14 15-27 28-41 > 41	Quetta (Samungli)
																																							3-14 15-27 28-41 > 41	Sylhet

TABLE 3.—Frequency of Observations of Base of low cloud above ground level at 03, 09, and 21 G. M. T.

April, 1954

STATIONS	Cloud Amounts in Octas	No. of observations with cloud base represented by code figures at 03 G.M.T.										No. of observations with cloud base represented by code figures at 09 G.M.T.										No. of observations with cloud base represented by code figures at 21 G.M.T.									
		0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9
Bogra	Trace to 8					8	12	1			9					1	5	6	4		14					3	4	1	2		20
	6 to 8					4	3	1			8					1					1					1					
	7 or 8					3	1				6																				
Chaklala * ..	Trace to 8							1	6	1	22								6	11	13										
	6 to 8										11										10										
	7 or 8										10										9										
Chhor * ..	Trace to 8								3	1	26										30										
	6 to 8								1		1																				
	7 or 8																														
Chittagong ..	Trace to 8						17	12			1						11	10			9						8	7			15
	6 to 8						7	3			10						3				3						1	1			2
	7 or 8						1	1			2						1				1						1	1			2
Cox's Bazar ..	Trace to 8						14	13	2		1						11	8	2	1	8					1	6	8	1	1	13
	6 to 8						2	6			8						5	3		1	9					1	3	1			5
	7 or 8						1	3			4						2	1			3					1	1				2
Dacca ..	Trace to 8				1	19	8				2					2	18	1			9				1	11	5	1			12
	6 to 8				1	8	6				16					1					5				1	5	1				7
	7 or 8				1	6	3				10					1					2				1	3					4
Dalbandin ..	Trace to 8							1			29								7		23								4	1	25
	6 to 8										2										3										1
	7 or 8										2										3										1
Drosh ..	Trace to 8																														
	6 to 8																														
	7 or 8																														
Fort Sandaman ..	Trace to 8								1	2	27								8	11	11								8		22
	6 to 8								1	1	6								1		9								2		6
	7 or 8								1		5										6								2		4
Gilgit * ..	Trace to 8					1	1		1	3	24								9	11	10										
	6 to 8					1	1			1	14									4	17										
	7 or 8					1	1			1	14									2	15										
Jacobabad * ..	Trace to 8										30										30										
	6 to 8										5										1										
	7 or 8										1										1										
Jhelum ..	Trace to 8									4	26							1	3		26							1	1	1	27
	6 to 8									1	7										8										5
	7 or 8										6										6										2
Jiwani ..	Trace to 8					1	1		1		27						1	1			28								2		28
	6 to 8								1		3							1			2										2
	7 or 8								1		2																				1
Karachi (Drigh Road) ..	Trace to 8					7	4				19						1				29					1	1				28
	6 to 8						1				1										1						1				2
	7 or 8																										1				2
Khanpur ..	Trace to 8							1			29								1	1	28								1		29
	6 to 8										1																				3
	7 or 8																														
Lahore ..	Trace to 8									1	29										30								1		29
	6 to 8										6										7										1
	7 or 8										3										4										
Multan ..	Trace to 8							1	2		27								2		28							1	1	1	26
	6 to 8								1		4																				2
	7 or 8								1		3																				2
Peshawar ..	Trace to 8								9		21							5	18		7							4	7		19
	6 to 8										10							1			12										12
	7 or 8										7										6										10
Quetta (Samungli) ..	Trace to 8							4	1		25								1	1	28						5	4	1		20
	6 to 8							2	1		5								1		6										7
	7 or 8							1			3								1		4										6
Sylhet ..	Trace to 8						10	13	7								3	18	9							2	10	16	1		1
	6 to 8						9	6	2		17							8	1		9					2	8	12	1		23
	7 or 8						3	2			5							8			4					2	5	7			14

*2100 G.M.T. observations not recorded.

TABLE 4.—Frequency of Observations of Horizontal Visibility at 03 and 09 G. M. T. & Number of days of fog (Visibility) < 100 m. April, 1954

No. of observations between the following limits at 03 G.M.T.										No. of observations between the following limits at 09 G.M.T.										No. of days of fog.	STATIONS
Less than 50 m.	50-200 m.	200-500 m.	500-1000 m.	1000-2000 m.	2000-4000 m.	4000-10000 m.	10000-20000 m.	20000-50000 m.	Λ 50000 m. (50 Kms.)	Less than 50 m.	50-200 m.	200-500 m.	500-1000 m.	1000-2000 m.	2000-4000 m.	4000-10000 m.	10000-20000 m.	20000-50000 m.	Λ 50000 m. (50 Kms.)		
					11	19									12	16	2				Bogra
					5	10	15								2	4	22	2			Chaklala
					7	21	2								12	15	2	1			Chhor
						30										29	1				Chittagong
					2	22	6								2	16	12				Cox's Bazar
					1	18	11									7	22	1			Dacca
				2	13	12	3				1	1	1	7	7	7	6				Dalbandin
					13	12	3	2							12	6	7	5			Fort Sandaman
						2	11	16	1								4	14	12		Gilgit
					1	15	12	2							2	8	19	1			Jacobabad
						15	12	3								5	22	2	1		Jhelum
					3	25	2				1					18	11				Jiwani
					1	29									3	17	9	1			Karachi (Drigh Road)
		1	2	24	2	1							3	5	17	5					Khanpur
					2	27		1							3	27					Lahore
					7	23								1	2	27					Multan
						6	22	2							5	23	2				Peshawar
					3	23	4								1	16	12		1		Quetta (Samungli)
				1	6	23									3	27					Sylhet

TABLE 5.—Special Observations of Wind by Pilot Balloons at 06 Hours G.M.T.—April, 1954

STATIONS	Speed in Knots.	Number of observations at Surface											Number of observations at 0.15 Km. above Surface											Number of observations at 0.9 Km. above sea level											Number of observations at 2.1 Km above sea leve										
		Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots
Bogra ..	3-14	30			2	3	1	1			23	30			4	8	12	3		1	2	28				1	7	10	5	1	1	15						1	4		
	15-27																											2	1										8		
	28-41																																						1	1	
	> 41																																								
Chittagong ..	3-14	30					7	21			2	29					1	12	1			23					4	9	1		2	13					1		3	3
	15-27																7	8									6	1											6	
	28-41																																								
	> 41																																								
Cox's Bazar ..	3-14	30					15	11	1			30					11	11				29			1	1	11	7	2	1	5	14		1			1	5	3	
	15-27						2	1									7	1										1									2	1	1		
	28-41																																								
	> 41																																								
Dacca ..	3-14	30				1	23	4			2	30			1	2	18	2				25					5	8	2	1		10					2	2		1
	15-27																7										5	3	1									4		
	28-41																																						1		
	> 41																																								
Sylhet ..	3-14	30		4	6	2	3	2			13	30		2	14	2	4	4			4	16				2	3	8				2					1		1	
	15-27																											3													
	28-41																																								
	> 41																																								

Table 6 – Frequency of Observations of Base of Low Cloud above Ground Level at 06 Hours G.M.T.

STATION	Cloud Amount in Octas	Number of observations of Base of Low Cloud above ground level at 06 Hours G.M.T. represented by code figures.									
		0	1	2	3	4	5	6	7	8	9
Bogra ..	Trace to 8					2	7	3			18
	6 to 8					1	1	1			3
	7 or 8					1					1
Chittagong ..	Trace to 8						11	11			8
	6 to 8						1				2
	7 or 8						1				1
Cox's Bazar ..	Trace to 8						10	12	1		7
	6 to 8						2	2			4
	7 or 8						1				1
Dacca ..	Trace to 8						1	24	1		4
	6 to 8							8			11
	7 or 8							3			6
Sylhet ..	Trace to 8					2	13	11	3	1	19
	6 to 8					3	10	6	1		6
	7 or 8					2	3	1			

Number of observations at 3.0 Km. above sea level											Number of observations at 4.5 Km. above sea level											Number of observations at 6.0 Km. above sea level											Number of observations at 7.5 Km. above sea level												
Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Total No. of observations	N 338-22	NE 23-67	E 68-112	SE 113-157	S 158-202	SW 203-247	W 248-292	NW 293-337	0-2 Knots	Speed in Knots	STATIONS
1							1																																		3-14 15-27 28-41 > 41	Bogra
5							4	1																																	3-14 15-27 28-41 > 41	Chittagong
1	1																																								3-14 15-27 28-41 > 41	Cox's Bazar
1							1																																		3-14 15-27 28-41 > 41	Dacca
2							2																																		3-14 15-27 28-41 > 41	Sylhet

TABLE 7 - Frequency of Observations of Horizontal Visibility at 06 G.M.T.

Number of observations between the following limits at 06 hours G.M.T.

Less than 50 m.	50—200 m.	200—500 m.	500—1,000 m.	1,000—2,000 m.	2,000—4,000 m.	4,000—10,000 m.	10,000—20,000 m.	20,000—50,000 m.	More than 50,000 m. > (50 Km.)	No of days of Fog.	STATION
					6	24					Bogra
						30					Chittagong
											Cox's Bazar *
						13	16	1			Dacca
					3	27					Sylhet

* Observations not recorded.