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INDIA WEATHER REVIEW, 1935.

ANNUAL SUMMARY.

PART C.

STORMS AND DEPRESSIONS.

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DEPRESSIONS AND CYCLONIC STORMS.

During the year 4 storms and 8 depressions formed in the Bay of Bengal, 2 storms and 2 depressions in the Arabian Sea and one depression over Bihar. The dates on which the storms occurred and the greatest barometric depths observed are summarised in the Table below :—

Locality.	Month.	Date.	Greatest observed barometric depth.
Arabian Sea	January	28—29	0.30"
Arabian Sea	June	17—18	0.20"
Bay of Bengal	July	8	0.30"
Bay of Bengal	October	18	0.35"
Bay of Bengal	October	22	0.30"
Bay of Bengal	November	13—15	0.50"

The detailed descriptions of these storms and depressions are, as usual, followed by a list of western disturbances of the year, of the more important local storms, and of the localities in which winds of force 9 or more were experienced by ships in the Indian Seas.

1. *Arabian Sea Storm of 28th to 29th January 1935.*—Associated with the eastward passage of a western disturbance which was affecting Iraq on the 25th, pressures fell

considerably over the region extending from east Iran and Oman to Sind and Gujarat during the 26th. An elongated trough of low pressure extended from north Iran to Oman on the evening of the 26th and had moved further eastwards by the next morning, when it lay over east Iran, west Baluchistan and the north Arabian Sea adjoining the Mekran coast. A steep pressure gradient over the Persian Gulf caused strong winds and rough seas there, while gusty or squally weather with moderate to rough seas also prevailed on the Mekran coast. Fairly widespread rain had occurred in Mekran and clouding had extended to northwest India generally. The upper winds over the Persian Gulf and the Mekran-Sind coast had strengthened and a westerly to northwesterly wind blew with gale to storm force at Bahrein at all levels and at Muscat above 3 km. ; at Karachi a west-southwesterly wind blew with force 6 to 7 at 4 km. and force 11 at 6 km.

The evening chart of the 27th showed that the extended trough of low pressure was stationary but a fairly deep depression had developed at its southern end off the Mekran coast. Widespread rain had occurred from Jask to Pasni and rain was falling at 12 G. M. T. along the whole of the Mekran coast. Seas were moderate to rough and weather was squally over the Persian Gulf and Mekran, the surface wind at Gwador blowing with force 8 from the east at 12 G. M. T.

By the 28th morning, pressure had fallen considerably over northwest India as a whole, the greatest falls being over Sind and northeast Rajputana. The trough of low pressure had moved in an eastward to northeastward direction and the depression at its southern end, having deepened further, was centred off the Mekran-Sind coast near Lat. 23°N., Long. 66½°E. The pressure departure at the centre of the depression was of the order of 0.30". Widespread rain had occurred in Baluchistan, Pasni recording 3". Strong winds and rough seas had extended along the Mekran-Sind coast. The upper winds at Karachi, Ahmedabad,

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Jodhpur, Bombay, Malegaon and Poona had strengthened above 2 km. and blew from a southerly direction with force

ranging between 8 and 12. The following ships' observations are of interest in this connection :—

Name of ship.	Date.	Time.	POSITION.		WIND.		Cloud.	Sea.	Swell.	WEATHER REMARKS.
			Lat. N.	Long. E.	Dir.	For.				
S. S. Varsova . . .	28	8 hrs. (Ship's time).	24 54	61 29	NW	7	9	Rough	Heavy	Frequent rain-squalls.
S. S. Masimpur . . .	28	8-30 (I. S. T.).	23 18	67 30	NE	6	Nb. 10	Rough	Mod.	Rain at the time of observation; a succession of thunderstorms with clear intervals since 2-30 A. M.
S. S. Dogra . . .	28	8 hrs. (Ship's time).	24 00	67 05	NE	6	Steu. and Nb. 10.	Rough	Mod.	Sky overcast and dull.

By the evening of the 28th, the depression moved slightly northeastwards and had intensified into a storm of moderate intensity and of small extent over the Sind-Kathiawar

coast, as shown by the following observations received from *S. S. Masimpur* which was in the storm field :—

Time (I. S. T.) Hours.	POSITION.		Cloud.	WIND.		Sea.	Swell.	WEATHER REMARKS.
	Lat. N.	Long E.		Dir.	For.			
12-00	23 47	67 12	Cunb. 9	E	7	High	Heavy	Overcast; passing showers. Dhow No. 4301 flying distress signals; at 1344 hrs. the crew of Dhow (6 men) brought aboard by ship's life boat. 1352 set course and proceeded again towards Karachi.
14-30	23 54	67 12	Steu. 6	SW	7	Rough	Heavy South-westerly.	Squally weather, barometer falling quickly.
16-00	24 02	67 02	Steu. and Nb. 10.	SW	7	High	Heavy	Overcast sky. Squalls and rain.
17-30	24 12	66 54	Cunb. 10	NE	8	Very rough	Heavy	Showers with squalls; bar. falling. At 1630 hrs. the wind veered from southwest to northeast in a few moments. Weather apparently getting worse.
18-00.	24 17	66 52	Cunb., Alst. 10.	NE	9	High	Heavy	Overcast, squalls and showers 1730-1800 hours, wind full force 9. Courses and speed various varied according to Commander's orders.

At 1800 hrs. the storm was centred about 80 to 100 miles to the southsouthwest of Karachi. By 2300 hours it had moved further northeastwards and was approaching the coast between Dwarka and Karachi. Rough seas, strong winds and squally weather had extended to the Kathiawar coast. *S. S. Masimpur* situated at this hour about 50 miles to the south of Karachi reported very high sea and a northeasterly wind of force 7; Dwarka reported high sea with heavy swell and a southwesterly wind of force 7 with squally weather, while the sea at Veraval had also become rough. By 0200 hours of the 29th, the storm had passed inland between Karachi and Dwarka, and lay as a depression between Hyderabad (Sind) and Deesa. The weather had already moderated considerably along the Sind coast, *S. S. Masimpur* situated about 30 to 40 miles from Karachi now reporting

a northeasterly wind of force 4 to 5 and Karachi itself reporting a light westerly wind. Weather continued to be rough on the Kathiawar coast for some time more but had moderated there also by 0800 hours, as, by this time, pressures had risen considerably over Sind, Rajputana and Gujarat and caused the depression there to fill up.

The low pressure trough in which the storm had formed had also moved in a northeastward direction. While pressures were rising at its southern end as mentioned above, they fell considerably at its northern end, viz., over the Punjab. Consequently, on the 29th morning, simultaneously with the filling up of the depression over Sind, a deep depression appeared over the west Punjab. This latter depression weakened rapidly and passed away eastwards through Assam by the end of the month.

Under the influence of the storm and of the Punjab depression of the 29th, widespread rain fell between the northwest frontier and the central parts of the country between the 27th and 29th, the rain being locally heavy along and near the western Himalayas on the last two days of this period.

2. *Depression of 26th to 27th April 1935.*—Thunderous conditions, which prevailed over the Andaman Sea and the neighbourhood on the 21st, became more marked on the next day and, by the morning of the 23rd, extended to the south Bay of Bengal where weather became suspicious during the next two days. On the 25th morning, a temporary advance of the southwest monsoon occurred in the southeast Bay of Bengal where weather became markedly unsettled and by the afternoon of that day a cyclonic circulation in the upper air established itself over the central and south Bay up to a height of about 4 km.

Pressure was rapidly falling in the Bay Islands and over Pegu and on the early morning of the 26th the unsettled conditions in the southeast Bay were apparently concentrating into a depression with the central region in the neighbourhood of the Andamans. By 8 hours of the same day, a depression formed with centre within half a degree of latitude 13° N., longitude $93\frac{1}{2}^{\circ}$ E. The depression intensified while moving in a northwesterly direction and at 8 hours of the 27th lay within half a degree of Lat. 14° N., Long. 96° E. The pressure departure near its centre at this stage was of the order of $-0.20''$. Afterwards the depression began to show signs of weakening, as a consequence of the withdrawal of the southwest monsoon current from the Andaman Sea, and became unimportant by the 27th afternoon.

In association with this depression, there was widespread rain in the Bay Islands, the Tenasserim and the Irrawaddy and Pegu divisions between the 25th and 27th, with locally heavy falls in Tenasserim on the 26th.

3. *Arabian Sea Storm of 17th to 18th June 1935.*—The Arabian Sea monsoon strengthened on the 13th and 14th June, and locally heavy falls occurred in Kanara and the south Konkan on these days. By the 15th morning, a general fall of pressure had occurred over most of the country but a comparatively larger fall was noticed over the Konkan and the Deccan. The upper winds at Bombay, which had been southerly or westerly, had changed to an easterly to northeasterly direction above 4 km. During the next 24 hours, further heavy falls of rain occurred in Kanara and pressure continued to fall considerably along the Kanara-Konkan coast. A concentrated area of negative departures lay this morning off the Kanara-Konkan coast. Upper winds at Bombay had changed at all levels to an easterly

or northeasterly direction, while those at Malegaon had changed similarly above 1.5 km. By the 16th evening, the area of negative departures had extended further northwards and the upper winds at Poona veered to an easterly to southeasterly direction. By the early morning of the 17th, a depression had formed off the Konkan coast. *S. S. Jalamohan* situated at 7 hours of that day at Lat. $16^{\circ} 30'$ N., Long. $71^{\circ} 30'$ E. reported a westsouthwesterly wind of force 6, overcast sky, squally weather, rough sea and a heavy southwesterly swell, rain being the principal feature of the past weather. *S. S. Schonfels* situated at 8 A.M. at Lat. $18^{\circ} 35'$ N., Long. $70^{\circ} 22'$ E. was experiencing a westnorthwesterly wind of force 5, overcast sky and rough sea. Reports from observatories along the Kanara-Konkan coast and from ships off that coast showed that strong winds, rough seas and squally weather, in many cases accompanied with rain, prevailed along and off that coast. Marmagao reported, at 8 hours of the day, a southwesterly wind of force 8 and by this time the depression was probably a storm of small extent centred about 150 miles to the northwest of Ratnagiri, the pressure departure at the centre being of the order of $-0.20''$. The weather diary for the day maintained at that observatory reads :

“Moderate continuous rain with squally wind from midnight till 6 hours, heavy rain-shower with strong wind between 7.50 and 10 hours. Owing to rain, visibility was moderate, sky was mainly overcast, showers of short duration and of moderate nature with squally wind between 14.30 and 19 hours during the afternoon.”

The storm remained practically stationary off the Konkan coast till the evening of the 17th and strong winds and squally weather continued to be experienced in its monsoon sector. *S. S. Heron* situated at 20 hours of the 17th near Lat. $15^{\circ} 15'$ N., Long. $73^{\circ} 45'$ E. reported a westerly wind of force 8, overcast sky, squally weather, very rough sea and moderate swell. By the morning of the 18th, pressures had risen generally and the storm had weakened into a depression, which lay at 8 hours of that day over the Gulf of Cambay. *S. S. Baringa*, situated near its central region this morning reported a westerly wind of force 7, squally weather, very rough sea and heavy westerly swell; a thunderstorm had occurred and rain was still falling at the time of observation. By the evening of the 18th, the depression had weakened further and passed inland across the Kathiawar coast and weather had moderated along the coasts, the force of wind even in the monsoon sector going down to 3 or 4. It filled up over Kathiawar by the next morning.

The following observations were recorded by *S. S. Heron*, which was in the monsoon sector of the depression :—

Date.	Time.	POSITION.		WIND.		Sea.	Swell.	Cloud.	WEATHER REMARKS.
		Lat. N.	Long. E.	Dir.	For.				
16	8 P. M.	12 20	74 55	Variable	7	Rough	..	Overcast	Overcast. Squally.
17	8 A. M.	13 52	74 14	SW	6	Mod.	Mod.	Do.	Rain and squalls.
17	8 P. M.	15 15	73 45	W	8	Very rough	Mod.	Do.	Squalls.
18	8 A. M.	16 30	73 12	Variable	6	Rough	Mod.	Do.	Squalls.
18	8 P. M.	17 45	73 05	Do.	7	Very rough	Mod.	Do.	Rainsqualls.

This disturbance was responsible for a strengthening of the monsoon in Kanara and the Konkan and its extension into the Bombay Deccan. Widespread thunderstorm rain also occurred in Gujarat under its influence on the 18th.

4. *Shallow Depression of 25th to 26th June 1935.*—A slight pressure fall was noticed in the central Bay of Bengal on the 23rd morning. During the course of the next 24 hours, pressure fell rapidly over the region extending from the Arakan coast to the northwest angle of the Bay and on the morning of the 24th conditions became markedly unsettled off the Orissa-Ganjam coast, where a cyclonic circulation had definitely established itself as was shown by observations from coastal observatories and ships.

Pressure fell further during the course of the day and a shallow depression formed with central region at 8 hours of the 25th about 100 miles to the southeast of Puri. During the course of the next 24 hours, the depression moved without intensifying in a northwesterly direction and passed inland across the Orissa-Ganjam coast. It lay as a low pressure area over the central parts of the country on the 26th and filled up by the next morning.

This disturbance was responsible for widespread rain along the Ganjam coast and in Bengal between the 23rd and 25th and an extension of the monsoon into Bihar and Orissa, the central parts of the country, Gujarat and Rajputana between the 23rd and 27th. The notable amounts were 7" at Calingapatam and 5" at Narasannapeta (Ganjam) on the 25th.

5. *Storm of 8th July 1935 in the Bay of Bengal.*—On the morning of the 7th July, a well marked area of negative pressure departures appeared over the head of the Bay of Bengal, while the upper winds at Calcutta, Dacca and Chittagong showed a cyclonic circulation extending at least up to 2 km. During the course of the day, pressure fell appreciably in the northwest angle of the Bay and by the evening, a depression had formed there; the 17 hours surface chart showed a closed circulation, all stations round the head of the Bay reporting rain or drizzle. *S. S. Khosrou*, situated at 1530 hours at Lat. $19^{\circ} 5' N.$, Long. $89^{\circ} 5' E.$, reported a southwesterly wind of force 6, rough seas, heavy swell and continuous moderate rain, while *S. S. Talma* at Lat. $20^{\circ} 6' N.$, Long. $88^{\circ} 7' N.$, at 1730 hours reported a SW/W wind of force 6, very rough sea, heavy swell and showers of heavy hail and rain; upper winds had also strengthened and the cyclonic circulation in the upper air could be traced up to a height of 3 km.

Pressure fell rapidly after the evening of the 7th, and by the early morning of the next day the depression became deep. It was centred at 2 hours that morning about 60 miles to the southeast of Saugor Island, the pressure departure in the central region being $-0.20''$. The depression continued

to deepen rather rapidly, the pressure deficiency at the centre being of the order of $0.30''$ by 8 hours when the centre lay about 50 miles to the southeast of Saugor Island; by this time, it was possibly already a storm of small extent, although it was not until 11 hours that winds of force greater than 7 were reported and the disturbance could be definitely called a storm. By about 3 P.M. the storm had become severe, as seen from the observations at Saugor Island, where at 2.45 P.M. the wind rose to force 11 (63 m. p. h.). *R. S. V. Guide* anchored at 14.5 nautical miles to the northeast of Saugor Island light house experienced winds of force 10-12 between 3.40 and 4 P.M. Danger signals had been hoisted at the Hoogly ports and in the districts of 24-Parganas and Midnapore at about 13 hours of the 8th. During the course of the day, the storm moved in a northwesterly direction and by the evening crossed the coast near Saugor Island, winds of force 8 or more however continued to blow in the northwest angle of the Bay till the next morning.

It may be mentioned here that at Saugor Island, the wind shifted from NNW to WSW between 1 and 2 P.M., the force falling to 4 at the same time but rising to 11 three-quarters of an hour later. At the *R. S. V. Guide*, the wind shifted from NE/N to SW and fell to force 3 at 2.45 P.M., which was also the time of the lowest barometer reached there during the storm, and rose to force 10 at 3.40 P.M. These observations indicate that the central region of the storm was a region of comparatively light winds and passed near Saugor Island at about 2 P.M. and near the *R. S. V. Guide* at about 2.45 P.M.

The storm caused vigorous monsoon in the north and central Bay; *S. S. Karoa*, situated at 1530 hours of the 8th at Lat. $20^{\circ} 1' N.$, Long. $89^{\circ} E.$, reported a southwesterly wind of force 8, rough sea, heavy swell and showers with squalls. *F. L. V. Star*, Lower Gaspar Station (Lat. $21^{\circ} 28' N.$, Long. $88^{\circ} 07' E.$), reported southwesterly winds of force 7-8 between 11 hours of the 8th and 12 hours of the 9th. It experienced squally weather with heavy seas and swell in the forenoon of the 8th, the squalls getting heavier as the wind shifted from W to SW. Heavy rain with squalls was experienced between 11 hours and 20 hours after which the rain moderated. Rain stopped after 23 hours although squally weather and heavy seas continued. Inland stations near the head of the Bay also experienced stormy weather; for instance, Calcutta reported cyclonic weather with intermittent squalls on the 8th night and the 9th morning, a squall of 33 m. p. h. being recorded on the 8th afternoon.

The changes in wind direction and force at the Sandheads and Saugor Island with the progress of the storm between 2 hours of the 8th and 8 hours of the 9th given below may be of interest as these stations were near the central region of the storm.

Station.	Date.	Hour.	WIND.		Sea.	Swell.	WEATHER REMARKS.
			Dir.	For.			
Saugor Island	8	02	NNE	6	..	..	Squally weather.
	8	08	N	6	Slight	..	Ugly threatening sky.
	8	11	NNW	6	Moderate	3	Ugly threatening sky.
	8	14	WSW	4	Moderate	3	Ugly threatening sky.
	8	17	SW	7	High	5	Heavy squalls.
	9	02	SW	6	..	..	Ugly threatening sky.
	9	08	SW	6	Very rough	5	Overcast.
	Sandheads	8	02	SW	6	Rough	7
8		08	WSW	6	Very rough	7	Squally.
8		11	WSW	8	Very rough	7	General bad weather.
8		17	SW	9	Very rough	7	General bad weather.
9		02	SSW	8	Very rough	7	General bad weather.
9		08	SSW	8	Very rough	7	Cloudy.

Extracts from an interesting account of the storm received from the Commander of *R. S. V. Guide** are given below:—

“On Sunday the 7th instant, the weather was suspicious with good visibility and variable winds. In the morning the wind was ENE with dense ugly clouds banked from SE to NW. These clouds worked rapidly to eastward and a very heavy squall was experienced from the east lasting from 7-40 A.M. to 8-20 A.M. after which the sky cleared up. Between 9-00 A.M. and 3-00 P.M. the sky was alternately blue and cloudy with the wind veering from ENE through E and S to SW then backing through S to SE and later through E, N and W to W×S. Between 1 P.M. and 3-00 P.M. heavy squalls were experienced from SE. The barometer gave no indication of the formation of the depression up to 8-00 P.M., the reading at that hour being 29.43, only three hundredths below the corresponding reading the previous evening.

“On Monday the 8th at 6-00 A.M. the sky was cloudy, visibility very good and wind NNE, force 3 (Beaufort's Scale). Barometer had fallen eight hundredths since 8-00 P.M. the previous evening. By 10-00 A.M. there was a further drop of nine hundredths and the wind had increased to

force 6, being still NNE and accompanied by moderate squalls. At 1-00 P.M. the barometer fell a further seven hundredths; the wind veered to NE×N, force 6, and was accompanied by increasingly frequent and heavy squalls. Sky uniformly overcast.

“At 2-45 P.M. the barometer fell a further five hundredths to 29.14 (the lowest reading obtained during the storm) and the wind shifted without pause to S×W, blowing at force 3. At the same time the sky from E to SSW became extremely ugly and threatening. Moderate rainfall.

“At 3-40 P.M. the wind suddenly increased to force 10, blowing a whole gale from S×W accompanied by heavy blinding rain. Barometer steady at 29.14.

“By 4-15 P.M. the wind had increased to force 10-12, blowing with hurricane force from S×W. Heavy, driving rain, tumultuous sea. Barometer steady at 29.14.

“At 4-30 P.M. the wind veered to SSW still blowing a whole gale though now exceedingly gusty. Rain less heavy. Barometer rose to 29.17.

“From now on the barometer rose steadily to 29.33 at 11-00 P.M. At 6-00 P.M. the wind hauled to SW and its force lessened to 7 at 9-00 P.M., thereafter increasing again until at 11-00 P.M. it was again blowing a whole gale but with little rain.”

* The *R. S. V. Guide* was anchored N×E distant 14.5 nautical miles from Saugor Light House.

Barometer readings were taken with a compensated aneroid, with corrections applied, which was tested on the 4th instant by an Inspector from the Observatory.

"Throughout Tuesday, the 9th, the wind blew from SW, decreasing from force 9 at 6-00 A.M. to force 5 at 8-00 P.M. Barometer rose steadily to 29.39 at 8-00 P.M.

"A feature of this cyclonic storm was the rapidity with which it formed and travelled and the comparatively little

rain that accompanied it. Apart from the very heavy rain at the time when the storm passed my vessel the rainfall was moderate."

The tables below show the state of the weather on the 7th and 8th July near Saugor Island.

R. S. V. Guide.

(Sunday, 7th July 1935.)

Time.	Wind direction.	Wind Force.	Sky.	Barometer.	Thermometer.
6-00 A.M.	ENE	2	Overcast	29.47	84
10-00 A.M.	SE	2	Partly clouded	29.48	83.5
1-00 P.M.	SW	2	Partly culoded	29.42	86
4-00 P.M.	SE	3-4	Overcast, Rain	29.40	84
8-00 P.M.	W/S	2	Partly clouded	29.43	83

Comparative Table showing Wind Force and Direction on board R. S. V. Guide and at Saugor Island Light House on Monday, 8th July 1935.

Time.	WIND DIRECTION.		WIND FORCE.		Weather.	Barometer.	Thermometer.
	Guide.	Saugor.	Guide.	Saugor.			
6-00 A.M.	NNE	N	3	6	Cloudy	29.35	82
10-00 A.M.	NNE	NNW	6	6	Squally	29.26	82.5
12-00 noon	NE/N	N	6	3	Squally	..	..
1-00 P.M.	NE/N	NNW	6	5	Overcast, Rain	29.19	84
2-45 P.M.	S/W	SSW	3	11	Rain	29.14	..
3-40 P.M.	S/W	..	10	..	....	29.14	..
4-00 P.M.	S/W	SSW	10-12	9	Overcast, Rain	29.14	83.5
6-00 P.M.	SSW	SW	8-10	10	....	29.19	..
8-00 P.M.	SW	SW	7-8	8	Overcast, Rain	29.26	83.5
10-00 P.M.	SW	SW	8-9	9	....	29.33	..
12-00 (midnight)	SW	SSW	10-12	9	....	29.31	..

On the 9th, the storm lay as a deep depression near Ranchi and moved to east Central India on the following morning, remaining still deep. Moving northwestwards, the depression then gradually weakened and lay to the north of Nowgong on the 11th. Thereafter, it moved westwards and was near

Kotah on the 12th morning. Afterwards, it weakened further and filled up.

In connection with this storm, widespread and locally heavy rain fell in Orissa on the 7th and 8th. It strengthened the monsoon over the region extending from the

Orissa-Ganjam coast to Gujarat and in the United Provinces and Rajputana and brought it into the Punjab and Sind.

Name of Station.	6th.	7th.	8th.	9th.	10th.	11th.	12th.
<i>Orissa.</i>							
Bargarh	6	..	..	..	..	..
Bisra	6	8	..	..	..	..
Sundargarh	7	..	..	..	..
Dhankanal	6	..	..	..	..
Bonlagarh	6	..	..	..	..
Jagatsinghpur	7	..	..	..	..	..
Jajpur	6	..	..	..	..	..
Aul	7	..	..	..	..	..
Binjharpur	6	..	..	..	..	..
Rajkanika	6	..	..	..	..	..	..
Pata Mundal	7	..	..	..	..	..
Chandbali	6	..	..	..	..	..
Sambalpur	9	..	..	..	..	..
<i>Central Provinces.</i>							
Sarangarh	8	..	..	..	..	..	..
Sakti	7	..
Jubbulpore	6	6	..	..	..
Saugor	6	..	..

According to newspaper reports, the rains associated with this disturbance caused heavy floods in Gujarat, Bihar, the United Provinces, the Punjab and the central parts of the country, leading to considerable damage to property and interruption in railway and other traffic.

6. *Depression of 14th to 21st July 1935 in the Bay of Bengal.*—With the passing inland of the storm on the 9th, the monsoon became generally active over the country. Pressure began to fall in Burma from the 10th and a feeble cyclonic circulation was noticed off the Arakan coast on the 11th morning, *S. S. Masimpur* at Lat. $18^{\circ} 49' N.$, Long. $90^{\circ} 33' E.$ reporting a southwesterly wind of force 3 and drizzle, *S. S. Cape St. Francis* at Lat. $18^{\circ} N.$, Long. $91^{\circ} 5' E.$ reporting a northwesterly wind of force 3, intermittent heavy rain and moderate swell and Akyab reporting an easterly wind of force 2 and intermittent drizzle.

Well-marked negative pressure departures were also noticeable in the north Andaman Sea and Lower Burma on the same morning, while the upper winds of Akyab, Sandoway, Rangoon and Mandalay indicated the existence of a low pressure area over Burma. By the afternoon of the same day, pressures had fallen further in Lower Burma and the low pressure area was then more marked both in the surface and upper air charts. In the course of the next two days, the pressure fell round the Bay and the low pressure area over Burma moved westwards into the west central Bay by the morning of the 13th. Upper winds at Sambalpur and Vizagapatam on this day showed a cyclonic circulation in the upper levels also. Observations from coast stations and steamers on the 14th morning suggested that a depression had formed with central region at 8 hours within a degree

Some of the noteworthy falls of 6" and above in connection with this storm are given below:—

Name of Station.	6th.	7th.	8th.	9th.	10th.	11th.	12th.
<i>Central India.</i>							
Guna	7	..	..
Chhapihara	7	..	..	..	..	..
<i>United Provinces.</i>							
Nawabganj	6	..	..	..	..
<i>Punjab.</i>							
Jogindar Nagar	7	..	..	..	..
<i>Rajputana.</i>							
Dharamjaygarh	8	..	..	..	..
Raipur	6	..	..	..	..	..
Baikunthpur	6	..
Nand	9
Pushkar	10
Merta	7
<i>Gujarat.</i>							
Jawhar	7	..	..
Vyara	6	..	..
Veraval	6	..	..	..	..	..	..

of Lat. $15\frac{1}{2}^{\circ} N.$, Long. $87^{\circ} E.$, the pressure departure at the central region being of the order of 0.100". The upper winds of Vizagapatam and Madras also confirmed the intensification of the low, the winds at Madras blowing with force 7-9 up to 1.5 km.

Pressures continued to fall in the central Bay and on the 15th morning, the depression was centred near Lat. $16\frac{1}{2}^{\circ} N.$, Long. $86\frac{1}{2}^{\circ} E.$

During the next 24 hours, the depression moved in a north-westerly direction without further intensification and at 8 hours of the 16th was centred about 125 miles south of Puri. The depression then took a northeasterly course, moving by 8 hours of the 17th to about 80 miles to the southeast of Puri. Travelling slowly thereafter in a northerly direction, it was centred off Chandbali on the 18th morning, the pressure deficiency at the centre at this stage being of the order of—0.150". On the morning of the 19th, the depression lay midway between the Sandheads and Balasore and remained practically stationary until the 21st when it entered inland. It lay as a low pressure area over Chota Nagpur on the 22nd morning, whereafter it merged into the normal monsoon trough of low pressure.

This disturbance caused strong monsoon in Orissa, the central parts of the country, the north Madras coast, parts of the Deccan, Gujarat and east Rajputana, locally heavy rain occurring in the Circars—Coromandel coast on the 13th and along the Orissa-Ganjam coast on the 17th. According to newspaper reports, severe floods occurred in Gujarat and the Central Provinces, several villages in Cutch being

washed away. Notable amounts of rainfall are given below :—

Name of Station.	17th.	18th.	19th.	20th.	21st.
Gopalpur	6	..	..	..	..
Sutna	5	..	..	..
Dwarka	5	..	..	..
Sarangarh	11	..	..
Chandbali	10	..	..
Rairokhal	5	..	..	..
Navasari	6	..	..
Pachmarhi	6
Bargarh	7	..

7. *Unsettled Conditions of 24th to 26th July 1935 in the Bay of Bengal.*—On the morning of the 24th, a large fall of pressure was noticed along the Chittagong—Arakan coast; a well marked area of negative pressure departures also appeared round the head of the Bay. During the course of the day, pressure fell further along the Chittagong—Arakan coast and general heavy rain fell along the coast from Amherst to Akyab in course of 9 hours. By the morning of the next day, pressure had fallen markedly in the northwest angle of the Bay, which then became the area of maximum pressure deficiency, viz., $-0.200''$. Both the surface and upper air charts indicated that the low which had persisted over Chota Nagpur and the adjoining areas during the previous two days protruded into the northwest angle of the Bay. There was a marked increase of rainfall in Orissa and the Ganjam coast during the 24 hours ending at 8 hours on the 25th.

All these facts showed that weather was markedly unsettled in that area. In course of the next 24 hours, however, the unsettled conditions passed inland through Orissa without further intensification and strengthened the monsoon in the central parts of the country and the United Provinces and also maintained its activity in Burma, north-east India and the Punjab.

8. *Unsettled Conditions between the 28th and 29th July 1935 in the Bay of Bengal.*—On the morning of the 28th, a fall in pressure occurred in the northwest angle of the Bay where a feeble cyclonic circulation was also noticed on both the surface and upper air charts. The pressure departure in the area was of the order of $-0.150''$. These facts suggested that conditions were unsettled in the northwest angle of the Bay. The unsettled conditions, however, passed inland in the course of the next 24 hours and concentrated as a low pressure area over Chota Nagpur on the morning of the 29th. This low pressure area then moved westwards and filled up by the morning of the 1st August. These disturbed conditions were responsible for widespread moderate to heavy rain in Chota Nagpur and the Orissa—Ganjam coast on the 28th. They caused a vigorous monsoon in the central parts of the country between the 28th and 31st and also served to maintain its activity in Burma, northeast India and the United Provinces.

9. *Unsettled Conditions of 1st to 4th and Depression of 5th to 6th August in the Bay of Bengal.*—After the passage inland

of unsettled conditions from the northwest angle of the Bay on the 28th July, the monsoon continued to be strong in the Bay. On the 29th, pressures began to fall in Tenasserim, where, during that day, widespread and locally heavy rain occurred.

On the next day, a marked fall of pressure occurred over the region extending from the north Andaman Sea to the north Bay off the Chittagong—Arakan coast and a well marked area of negative pressure departures appeared there on the morning of the 31st July. Upper winds at Calcutta which were southerly or southeasterly on the 31st July changed in the course of the next 24 hours to between east and north up to 4 km. (limit of pilot balloon ascent), suggesting thereby that a low pressure wave had travelled across Tenasserim towards the north Bay, where weather became markedly unsettled by the 2nd morning. The unsettled conditions persisted for the next two days, and, by 2 hours of the 5th were concentrating into a depression to the east of the Sandheads; at that hour stations round the head of the Bay were experiencing drizzle or rain and Akyab reported a southerly wind of force 6.

By 8 hours of the same day, a depression had formed about 80 miles to the east of Saugor Island. Moving in a north-westerly direction, the depression crossed the southwest Bengal coast the same afternoon. It weakened thereafter and became unimportant by the 6th afternoon. It caused strong monsoon in the central parts of the country, the United Provinces and northeast India.

10. *Land Depression of 12th to 16th August 1935.*—On the afternoon of the 10th, there was a tendency for pressure to fall in parts of Bihar and the east United Provinces and a shallow low pressure area appeared over Bihar. In the upper air, a cyclonic circulation extended up to a height of 3 km. This low persisted there for two days, intensifying at the same time, and by the morning of the 12th lay as a depression with centre between Gaya and Naya Dumka. The depression remained practically stationary till the next day and thereafter began to move in a westnorthwesterly direction. It was centred near Jhansi on the 15th morning and weakened considerably by the morning of the 16th, merging into the seasonal low over northwest India during the course of that day. Associated with this depression, widespread rain with locally heavy falls occurred along and near its track. According to newspaper reports, severe floods occurred as a result of heavy rain, chiefly in the rivers of west Bengal, Bihar and the Punjab. Noteworthy falls, viz., of 5" and above, are given below :—

Station.	9th.	10th.	11th.	12th.	13th.	14th.	15th.
Asansol . . . . .	..	..	7	..	..	..	..
Gangarampur (Dinajpur) . . . . .	..	..	5	..	..	..	..
Itahar (Dinajpur) . . . . .	..	..	8	..	..	..	..
Rangpur . . . . .	..	6	6	..	..	..	..
Bihar (Patna)	7	..	..	..	..	..	..
Bikram (Patna)	5	..	..	..	..	..	..
Naubatpur	9	..	..	..	..	..	..
Jhanabed (Gaya)	6	..	..	..	..	..	..

Station.	9th.	10th.	11th.	12th.	13th.	14th.	15th.
Ageon (Shahabad)	5	..	5	..	..	..	..
Rajauli (Gaya)	..	5	..	6	..	..	..
Raffiganj (Gaya)	..	5	..	..	..	..	..
Manoharpur (Shahabad)	5	..	..	..	..
Bassawan (Shahabad)	5	..	..	..
Mahanin (Shahabad)	5	..	..	..
Sasaram (Shahabad)	6	..	..	..
Nabinagar (Gaya)	6	..	..	..
Aurangabad (Gaya)	8	..	..
Gaya	5	..	..
Akbarpur (Shahabad)	9	..	..
Adhaura (Shahabad)	9	..	..
Bhagalpur	8	..	..	..	..	..	..
Bansi (Bhagalpur)	6	..	..	..	..
Sultanganj (Bhagalpur)	13	..	..	..	..	..	..
Kisanganj (Purnea)	5	..	..	..	9
Jamtara (Santal Parganas)	5	..	..	..	..
Jarmundi (Santal Parganas)	9	..	..	..
Kalikund (Santal Parganas)	5	..	..	..
Madhupur (Santal Parganas)	..	5	..	..	..	..	..
Sarawan	7	..	..	..
Sarath	8	..	..	..
Paraiya	5	..	..	..	..
Parachamba (Giridih)	5	..	..	..	..
Golu (Hazaribagh)	6	..	..	..	..
Dumri	7	..	..	..	..
Dhanwar	..	6	..	..	..	..	..
Bagodar	8	..	..	..	..
Hunterganj (Hazaribagh)	5	..	..	..	..
Gobindpur (Manbhum)	7	..	..	..	..
Raghunathpur (Manbhum)	8	..	..	..	..
Dhanbad	10	..	..	..	..
Topchanchi	9	..	..	..	..

11. *Unsettled Conditions of 26th to 31st August 1935 in the Bay of Bengal.*—A weakening of the pressure gradient over the Bay was noticeable on the 25th August. During that day, pressures fell appreciably along the Burma coast and widespread rain, with locally heavy falls, occurred in Tenasserim. On the 26th morning, the pressure distribution was flat over the central Bay and the north Andaman Sea. Widespread rain with locally heavy falls again occurred in Tenasserim on the 26th. On the next day, a trough of low pressure extending from the north Andaman Sea to off the Circars—Coromandel coast made its appearance and a cyclonic circulation in the upper air was also noticed over the Andaman Sea up to a height of 500 metres. By the morning of the 28th, weather became unsettled in the north and central Bay off the Chittagong—Arakan coast. The upper winds between 1 km. and 4 km. at the coast stations on the 28th afternoon and the next morning and the surface chart of the 29th indicated that the unsettled conditions were concentrating in the west central Bay. They persisted there till the 30th and passed away without further intensification by the morning of the 31st.

12. *Deep Depression of 6th to 11th September 1935.*—A strengthening of the monsoon in the north and central Bay was noticed on the 5th morning with general rain along the coast from Victoria Point to Chittagong. During the next 24 hours, pressure fell appreciably round the head of the Bay and there was again widespread rain with locally heavy falls along the Burma coast. On the 6th morning, conditions became markedly unsettled at the head of the Bay east of the Sandheads. The unsettled conditions developed into a depression by the same afternoon with centre at 17 hrs. about 100 miles to the southeast of Saugor Island. The depression remained practically stationary, intensifying at the same time. By 8 hours on the 7th, it was fairly deep, the pressure deficiency near the centre that time being of the order of 0.30".

The depression moved slowly during the next 24 hours and, at 8 hours of the 8th, was centred about 60 miles to the south of the Sandheads. Thereafter, it showed signs of weakening and moved in a westerly direction. On the morning of the 9th, it was centred near Puri and moved over, during that day, to the Central Provinces, where it persisted till it filled up a couple of days later.

The depression strengthened the monsoon generally in Burma, northeast India and the central parts of the country between the 6th and 11th. Widespread rain also occurred in east Rajputana, east Gujarat, the Konkan and the north Deccan between the 9th and 11th under its influence.

13. *Unsettled Conditions of the 12th to 15th September 1935 in the Bay of Bengal.*—With the filling up of the depression over the Central Provinces on the 12th, an elongated trough of low pressure extended from the Central Provinces to the central Bay. On the 13th morning, conditions became unsettled at the eastern end of this trough off the Orissa—Circars coast.

The unsettled conditions persisted for the next two days without further intensification and by the morning of the 15th passed inland as a low pressure wave across the Orissa—Ganjam coast.

Fairly widespread rain occurred in this connection along the Circars and in the east Central Provinces, Chota Nagpur, Orissa and southwest Bengal.

14. *Shallow Depression of 20th to 21st September 1935 in the Bay of Bengal.*—Following the northwestward movement of a low pressure wave across Tenasserim between the 14th and 16th September, the monsoon strengthened in Lower Burma and in the Bay of Bengal to the south of Latitude 15°N. and a trough of low pressure appeared off the Orissa—Circars coast on the morning of the 18th. This trough moved to the north Bay in the course of the next 24 hours and by the morning of the 20th a definite cyclonic circulation had established itself in the north Bay. By the same afternoon, a shallow depression formed with central region within a degree of Lat. 19°N., Long. 89°E. The depression moved rapidly in a northerly direction and at 2 hours of the 21st was centred midway between Saugor Island and Balasore. Continuing to move in the same direction, it crossed the Bengal coast to the west of Saugor Island by the afternoon of the same day. On the morning of the 22nd, it lay near Naya Dumka and filled up in the course of the next 24 hours. In

association with this depression, widespread rain fell in northeast India with locally heavy falls in Bihar between the 19th and 23rd and in the east United Provinces on the 20th. According to newspaper reports, this heavy rainfall caused floods in Bihar and Bengal and breaches in the railway lines on the Eastern Bengal Railway. Some of the falls of 8" and above recorded at 8 hours on different days in connection with this depression are given below :—

Station.	15th.	16th.	17th.	18th.	19th.	20th.	21st.	22nd.
Siwan	19	..	..	..	..
Sitamari (Muzaffarpur)	13	..	..	..	..	..
Paru	8	..	..	..
Sheohar	8	..	..	..	..
Pupri	10	..	..	..	..	..
Shahebganj	8	..	..	..
Katra	9	..	7	..	..	..
Rosra	10	..
Begusarai	9
Gidhaur	9	..
Naya Dumka	11	..
Rangpur	..	9	..	..	..	..	..	..
Bagdogra (Nilphamarhi)	9	..	..	..	..	..	..	..
Kurigaon	..	8	..	..	..	..	..	..
Ulipur	..	14	..	..	..	..	..	..
Sunderganj	..	9	..	..	..	..	..	..

15. *Shallow Low of 1st to 7th October 1935 in the Bay of Bengal.*—On the morning of the 1st, pressure fell appreciably in the Andaman Sea and the neighbourhood and a concentrated area of negative pressure departure appeared over Pegu. The upper winds over Rangoon which were northwest or west on the 30th September changed to northeast or north on the following day. These facts suggested that a low pressure wave was passing westwards across north Tenasserim and Pegu. By the morning of the 2nd, a shallow low had formed over the Gulf of Martaban. This low did not intensify further but passed on the next day inland into Burma as a low pressure wave which later on travelled north-westwards and became unimportant over Bengal by the 8th. It was responsible for a strengthening of the monsoon in Burma between the 2nd and 5th and a temporary revival of the monsoon in Bengal and Assam between the 5th and 8th.

16. *The Bay of Bengal Storm of 18th October 1935.*—On the 15th morning, a feeble cyclonic circulation was noticed in the southeast Bay of Bengal suggesting that conditions were becoming unsettled there. The unsettled conditions then travelled northwestwards and became more marked by the afternoon of the 16th when a definite cyclonic circulation was established over the south Bay.

By the next morning, these unsettled conditions concentrated into a depression with central region within a degree of Lat. 10°N. and Long. 83°E. The depression moved in a northwesterly direction intensifying at the same time and by 2 hours of the 18th developed into a storm of small extent centred within a half degree of Lat. 11½°N. and Long. 82½°E. At Madras at this hour, a northnortheasterly gale (force 8) was blowing, rain was falling and the sea was rough. The storm moved very rapidly in a northwesterly direction and at 8 hours of the same day was centred about 100 miles to the southeast of Madras. The upper winds at Madras blew with force 10 from the east up to 1 km. this morning and the pressure departure near the centre of the storm was at least—0.35". Continuing its course the storm weakened and crossed the coast near Madras at about noon of the 18th. Thereafter, it moved westwards across the Peninsula as a

deep depression and passed out on the 19th into the Arabian Sea off the Kanara—Konkan coast. It moved in a northwesterly direction and was centred to the west of Karwar near Lat. 15°N., Long. 73°E., on the 20th morning. It was practically stationary there till the next morning. Minicoy registered 2" of rain on the 19th morning and experienced squally weather on the 19th and 20th, while at Amini Devi rainy weather and fairly strong winds and squalls were experienced on these days, the wind occasionally attaining gale force between 3 and 5 A.M. on the 20th. Seas were very rough at Amini Devi on the 20th, and high to very high at Minicoy between the 19th and 22nd. The weather at these islands improved after the 21st.

The depression moved northwest between the 21st and 23rd, but changed its course thereafter to a westward direction. On the 27th, it was near Lat. 16½°N., Long. 64°E. On the next day, it began to get diffused, and degenerated by the 29th morning into an elongated trough of low pressure extending north to south over the central Arabian Sea.

This disturbance was responsible for widespread rain generally in the Peninsula, rainfall being locally heavy in the north Madras coast, southeast Madras, Malabar and Mysore. According to newspaper reports, these heavy rains caused floods in the rivers and dislocated road traffic considerably. The Coromandel as well as the Malabar—Konkan coasts experienced rough weather and several boats, including the mail boat at Alleppey, are reported to have capsized. Sailings of coastal boats and fishing operations were seriously interfered with. Below is given an extract from the report of the Port Officer, Madras :—

17th—"Light drizzle, heavy rain and rain at intervals between 07-36 and 24-00. Lightning at intervals between 19-00 and 05-45 the following day. Highest velocity was 44 miles per hour at 09-28, direction ENE. The weather was cloudy, misty and rainy. No fall in barometer."

18th—"Heavy rain, drizzle and rain at intervals between 00-01 and 22-05. Sea very rough inside, very high outside harbour; the highest wind velocity was 54 miles per hour at 01-55, direction NNE. Sea moderated inside harbour at 3 P.M. The weather was overcast, cloudy, misty, rainy. Barometer dropped 0.17" in 24 hours."

The following observations from Madras will show the progress of weather at the station with the approach of the storm :—

18th October 1935.

Time of Observation.	Wind Direction.	Wind Force.	WEATHER REMARKS.
2 hours . . .	NNE (unusual gustiness).	8	Int. Mod. Rain, Thunderstorm.
8 hours . . .	E . . .	8	Int. Sl. Rain, Thunderstorm.
11 hours . . .	SE . . .	3	Rain.
14 hours . . .	SSE . . .	6	Overcast, Rain.
17 hours . . .	SSE . . .	5	Rain.

Some of the noteworthy heavy falls of 7" and above in connection with the disturbance is given below:—

Station.	18th.	Station.	18th.
	"		"
Madras	7	Ambalapuzha	8
Kathur (Chingleput)	11	Chenganur	8
Attipet	8	Haripad (Karthikapalli)	8
Sathiavedu	8	Panthanom Thitta	7
Cuddalore	8	Mavelikara	9
Kurunjipadi	7	Kayankulam	10
Peermade (Travancore)	7	Adur (Kunnathur)	7
		Kallaragara	8

17. Storm of 22nd October 1935 in the Bay of Bengal.—On the morning of 18th October, pressures were observed to have fallen over Tenasserim and Pegu. By the next morning, pressure fall had occurred further over the region and also extended to the Andaman Islands, leading to the appearance of a concentrated area of negative pressure departure over the Andaman Sea. Diamond Island reported a squall in the afternoon of the 19th and again in the morning of the next day. *S. S. Nirpura*, situated at 15-30 hours of the 19th to the northwest of Port Blair near Lat. $14\frac{1}{2}^{\circ}$ N., Long. $90\frac{1}{2}^{\circ}$ E., reported heavy squall, while *S. S. Karapara* near Diamond Island experienced rainsqualls at 1-30 hours of the 20th. By 8 hours of the 20th, pressure had fallen further over Port Blair but risen over Lower Burma and a depression had formed with centre about 50 miles to the west of Table Island. The depression moved northwestwards during the course of the day and was centred in the afternoon within a degree of Lat. $14\frac{1}{2}^{\circ}$ N., and Long. $91\frac{1}{2}^{\circ}$ E. The following observations are relevant in this connection.

Station or Steamer.	Hours of Observation.	POSITION.		WIND.		Sea.	WEATHER REMARKS.
		Lat. N.	Long. E.	Dir.	For.		
	I. S. T.	°	'	°	'		
Port Blair	17-00	..	..	SW	6		
S. S. Ethiopia	16-00	15	5	ESE	6	Rough.	
S. S. Masimpur	17-30	12	4	NW	3		
S. S. Nirpura	15-30	11	6	W	5	Rough	Rainsquall.

The depression moved in a northwesterly direction, intensifying at the same time, and by 8 hours of the 21st became fairly deep with centre within a degree of Lat. $15\frac{1}{2}^{\circ}$ N. and Long. $89\frac{1}{2}^{\circ}$ E. It maintained its northwesterly course and at 17 hrs. of the same day was centred within a degree of Lat. 17° N. and Long. 88° E. Thereafter, the deep depression began to recurve to the northeast and by the morning

of the 22nd was centred within a degree of Lat. 19° N. and Long. 89° E. The pressure deficiency at its centre was now of the order of 0.30" and apparently it was intensifying, if it had not already done so, into a storm of moderate intensity and small extent. The extract of observations given below of *S. S. Chantala* shows that, by the afternoon of the day, it had definitely intensified into a storm.

S. S. Chantala (22nd October).

Hour.	POSITION.		Bar. (uncorr.).	WIND.		Weather at time of observation.	Sea.	Swell.	REMARKS.
	Lat. N.	Long. E.		Dir.	For.				
	°	'	"						
4 A.M.	21	31	29.83	ENE	4	Overcast, Rain-squalls.	Mod.	Mod.	Cont. rain. Visibility 6.
8 A.M.	22	03	29.84	NE	4	Ditto	Rough.	Mod.	7-00 A.M. Vessel anchored off Kutubdia Islands. Cont. rain. Visibility 4.
9 A.M. . . . .	..	..	29.82	NE	5				
10 A.M. . . . .	..	..	29.80	NE	6				
11 A.M. . . . .	..	..	29.76	NE	6				
Noon	22	03	29.71	NE	7	Overcast, Rain-squalls, Thunder, Lightning.	Very Rough	Low	Cont. rain. Visibility 2.
1 P.M. . . . .	..	..	29.69	E	8	....	..	..	1 P.M. Weighed anchor and proceeded to run southwards.
2 P.M. . . . .	..	..	29.55	SE	8	....	..	..	2.30. Weather moderating.
3 P.M. . . . .	..	..	29.59	S	6				
4 P.M.	21	36	29.61	SSW	5	Overcast, Showers	Rough	Heavy	Visibility 7.
8 P.M.	22	27	29.79	W	2	Ditto	Slight	Mod.	Ditto.
10 P.M. . . . .	..	..	29.80	WNW	2				
12 (Midnight)	22	11	29.80	WNW	2	Cloudy	Slight	..	Visibility 8.

The movement of the storm, after 8 hours of the 22nd, was very rapid. It crossed the coast near Chittagong by midnight of the 22nd and became unimportant by the next day. The following extracts from the accounts given by *S. S. Chantala*, which passed near the centre of the storm, will be found interesting :—

“After leaving Akyab at 5-30 P.M. on 21st October wind E×N force 4 the weather was dull an overcast. At 8 P.M. wind remained in the same quarter, sky heavily overcast with nimbus accompanied by vivid lightning. Shortly after 8 P.M. rain commenced which continued until 12. At midnight the sky was thickly overcast the wind ENE force 4 visibility 4. The vessel was rolling easily to a moderate swell.

“After midnight the barometer commenced falling, continuous rain persisted accompanied by squalls, wind remained from ENE. South Patches light was abeam bearing 081° distant 2.5 miles at 3-36 A.M. From thence various courses were steered and engines manœuvring owing to poor visibility. At 7 A.M. the vessel anchored owing to poor visibility the estimated position being Lat. 22°03' N., Long. 91°43' E.

“From 8 A.M. to noon the wind remained NE but increasing in force from force 4 at 8 A.M. to gale force (8) shortly after noon, the barometer falling to 29.71” (uncorrected) at noon. At 1 P.M. the wind being gale force accompanied by squalls of extreme violence and continuous torrential rain, the anchor was weighed and the vessel stood to the southward, this being the only direction in which the vessel could run owing to proximity of land and shoals. The wind now commenced to veer, the barometer continued falling until 2 P.M. when it registered 29.55” (uncorrected) this being the lowest reading recorded. From 2 P.M. the barometer commenced rising, the wind continued to veer and the weather began to improve. By 4 P.M. the rain had ceased, wind had veered to SSW and fallen to force 5, barometer risen to 29.61.”

“By this time (*i.e.*, 8 P.M.) the wind had veered to west and fallen to force 2. Barometer risen to 29.79” (uncorrected), slight sea. Course was set to position off Kutubdia

Island and thence to anchorage off Norman Point. The vessel arrived off this latter point at midnight and anchored shortly afterwards wind now being WNW force 2 barometer 29.80” (uncorrected) slight sea, fine, clear, cloudy.

“From the above it would appear that the vessel’s anchorage at noon was nearly in the path of the disturbance as the wind had till then remained in the same direction NE increasing in force with a falling barometer and the vessel running to the southwards the weather cleared very quickly and it appears likely that storm of moderate intensity and small extent passed to the northward of the vessel in the afternoon. From the rapid clearing of the weather this disturbance must have filled in fairly rapidly after approaching and crossing the Chittagong coast for the vessel experienced winds of only force 2 on running up the coast between 8 and 12 P.M. This conclusion is also verified by the rapidly rising barometer, *i.e.*, from 29.55” at 2 P.M. to 29.79” at 8 P.M. both readings uncorrected.

“The vessel anchored off Norman Point at 00.16. The barometer continued rising, wind remained westerly force 2, weather fine clear and cloudy at 8-30 P.M. the anchor was weighed and the vessel proceeded up the Karnaphuli River to Chittagong arriving at 10 A.M.”

This disturbance was responsible for widespread rain in Burma and the Orissa and Bengal coasts ; some noteworthy falls of 5” and above are given below :—

Station.	22nd.	23rd.	Station.	22nd.	23rd.
	“	“		“	“
Chittagong	5	Manikseri . . .	6	..
Kutubdia	5	Akyab . . .	..	6
Mahalchari	5	Kyaukpyu . . .	..	6

18. *Deep Depression of 1st to 3rd November 1935 in the Bay of Bengal.*—Conditions became unsettled in the southwest Bay on the morning of the 31st October as indicated by the observations from the following ships :—

Date.	Name of ship.	POSITION.		Hour of Obsn.	WIND.		REMARKS.
		Lat. N.	Long. E.		Dir.	For.	
31st October . . .	S.S. Rahmani . . .	14 3	85 3	0630	NE	2	
31st October . . .	S.S. Rajula . . .	10 5	80 8	0130	NE	3	Intermittent rain.
31st October . . .	S.S. Rizwani . . .	8 7	83 7	0630	W	1	Rain.
31st October . . .	S.S. Havildar . . .	8 3	87 7	0630	SW	4	Continuous rain.
31st October . . .	S.S. Garbeta . . .	10 8	88 2	0630	SSW	3	

On the next morning, a trough of low pressure appeared over the region extending from the southwest Bay to the north Andaman Sea. During the course of the day, it con-

centrated into a depression in the north Andaman Sea with central region at 17 hrs. near Lat. 13½°N., Long. 95°E. At 8 hrs. of the 2nd, the depression became fairly deep and

was centred near Lat. 14°N ., Long. 94°E . By this time, the cyclonic circulation extended in upper air up to a height of 4 km. The deep depression continued to move in a north-westerly direction and on the afternoon of the same day was centred near Lat. 15°N ., Long. $93\frac{1}{2}^{\circ}\text{E}$. It then began to move in a northerly direction and at 8 hrs. of the 3rd was centred near Lat. $16\frac{1}{2}^{\circ}\text{N}$., Long. $93\frac{1}{2}^{\circ}\text{E}$. Thereafter, the depression began to weaken while recurving towards the Arakan coast and in the course of the next 24 hours became unimportant. Fairly widespread rain fell in Burma in connection with this depression during the first week of November.

19. *Severe Storm of 13th to 15th November 1935.*—The northeast monsoon strengthened in the south Bay of Bengal in the beginning of the second week of November and conditions became unsettled there by the 9th. Trincomalee recorded a heavy fall of 5" on the 10th morning. The unsettled conditions became marked near Lat. 9°N ., Long. 87°E . on the 10th. By the morning of the following day, they had concentrated into a depression near Lat. 9°N ., Long. $86\frac{1}{2}^{\circ}\text{E}$. Port Blair reported 3" of rain on that morning and ships to the west of the Nicobar Islands experienced moderate to rough seas and occasional rainsqualls. On the

morning of the 12th, the depression was centred near Lat. $9\frac{1}{2}^{\circ}\text{N}$., Long. 85°E . and was showing signs of deepening, and several ships in the neighbourhood reported rough seas and rainsqualls. On this day, the upper winds over Madras were blowing from northeast with force 7 to 8 upto 1.5 km. and in the afternoon, strong northerly breeze was blowing all along the south Coromandel coast and seas were rough to very rough along the coast from Madras to Trincomalee. The depression was centred on the 13th morning near Lat. 10°N ., Long. $84\frac{1}{2}^{\circ}\text{E}$. By the afternoon of that day, it developed into a cyclonic storm with central region at 17 hrs. near Lat. 10°N ., Long. 84°E ., the deficiency of pressure near the centre at this stage being of the order of $0.30''$.

Continuing its westward movement, the cyclone intensified further and became a storm of severe intensity by 8 hrs. of the 14th when it was centred near Lat. 10°N ., Long. 82°E . At this stage, the pressure deficiency near the core was of the order of half an inch. *S. S. Rohna* whose position in the early hours of the 14th lay about 50 miles to the southeast of the cyclonic centre was experiencing southwesterly winds of gale and storm force. Extracts from the log of this steamer are given below :—

Date.	Hour.	POSITION.		WIND.		Sea.	Swell.	WEATHER REMARKS.
		Lat. N.	Long. E.	Dir.	For.			
		°	'					
13	2 A.M.	9 16	83 53	WNW	6	Rough	Moderate	Overcast, showers and squalls.
	3 A.M.	9 18	83 45	W/N	6	Confused	Moderate	Overcast, showers.
	4 P.M.	9 20	83 39	WSW	7	..	Heavy	Overcast, showers and squalls.
	5 P.M.	9 21	83 31	WSW	7-8	Very rough	Heavy	Overcast, showers.
	6 P.M.	9 23	83 25	WSW	8	Very rough	Heavy	Overcast, showers.
	7 P.M.	9 24	83 18	SW/W	7	Very rough	Heavy	Overcast, showers.
	8 P.M.	9 26	83 11	SW/W	6	Rough	Heavy	Overcast, showers.
	9 P.M.	9 28	83 04	SW	5	Rough	Heavy	Overcast.
	10 P.M.	9 29	82 56	SSW	5	Rough	Heavy	Overcast.
	11 P.M.	9 34	82 44	S	3	Moderate	Heavy	Overcast.
	Midnight	9 38	82 38	S	2	Slight	Heavy	Overcast.
14	1 A.M.	9 40	82 30	S/W	7-8	Very rough	Confused	Overcast, rain, squalls.
	2 A.M.	9 41	82 33	S	10	Very high	Confused	Overcast, rain, squalls.
	3 A.M.	9 39	82 38	S/W	11	Very high	Confused	Overcast, rain, squalls.
	4 A.M.	9 36	82 40	S/W	9	Very high	Confused	Overcast, rain, squalls.
	5 A.M.	9 30	82 40	S	7-8	High	Confused	Overcast, Rain.
	6 A.M.	9 23	82 40	S/W	7	Very rough	Confused	Overcast, Rain.
	7 A.M.	9 18	82 40	SSW	6	Very rough	Confused	Overcast.
	8 A.M.	9 24	82 46	SSW	6	Very rough	Heavy	Overcast.

On the 14th noon, the cyclone was centred about 120 miles eastsoutheast of Negapatam and at 17 hrs. of that day about 70 miles to its eastsoutheast. It crossed the coast in the early hours of the 15th just to the south of Negapatam and lay as a deep depression near Trichinopoly at 8 hrs. of that day. Travelling thereafter across south Madras, it passed out into the southeast Arabian Sea off Malabar by the morning of the 16th. While moving further westwards, it caused moderate to heavy rain in Minicoy and Amini Devi Islands on that day. During the next 24 hrs., it continued to move westwards, weakening at the same time, and had become unimportant by the 19th morning.

In association with this storm, widespread and heavy rain fell in the south of the Peninsula, Kodaikanal registering 14" during the 24 hrs. ending at 8 hrs. of the 16th; other noteworthy falls of 7" and above are given in the table at the end of this account. According to newspaper reports, severe floods occurred in the rivers of south Malabar as a result of the heavy rain. Bridges were damaged and houses in flooded areas were submerged under water. An Arab vessel capsized near Calicut owing to rough seas. Railway and other vehicular traffic and telegraphic and electrical transmission were considerably dislocated in southeast Madras. Negapatam faced considerable damage and its municipal water supply was seriously interfered with. According to the report of the Port Officer, Negapatam, that port experienced, with the approach of the storm, rough weather with rainsqualls, high seas, confused swell and winds of gale or storm force between the evening of the 14th and the forenoon of the next day, after which the weather moderated. *S. S. Rohma* with mails, passengers, repatriates and cargo, due to arrive at Negapatam from Malaya on the 15th, could not call there owing to the weather conditions and was asked to proceed direct to Madras.

The following account of the winds and weather experienced by *S. S. Gogra*, which proceeded from Negapatam to Jaffna in order to avoid the fury of the storm, will be found interesting :—

"On 12th November, while lying in Negapatam roads, the vessel was compelled by rising wind and sea, to cease discharge of cargo and to shift anchorage to deep water. It then became apparent from the disturbance in weather conditions and from weather reports that there was a likelihood of a storm forming in the Bay and crossing the coast near the port. It was therefore considered prudent to proceed to the next port of call—Jaffna—in order to avoid, as far as possible, the force of the storm.

"In the morning of 13th November at 7-33 A.M., *I. S. T.*, the anchor was weighed and the vessel proceeded. The wind which at the time was from NNW with force 6, veered to NNE at noon, but by 4 P.M. had backed again and was blowing steadily from north, still with force 6. Jaffna was reached at 5-05 P.M. and the vessel anchored off the port.

"Cessation of the barometer's diurnal range was now noticed together with a slight fall and the wind gradually backed, making it apparent that the vessel was in the left hand semicircle of the storm. By noon on 14th wind had backed to NW/W and was blowing with force 8. The sky was overcast and heavy continuous rain was falling. Although the sea was rough, the shoal water and partly land-

locked condition of the anchorage prevented either sea or swell from attaining alarming height, and at no time was the swell more than moderate.

"The barometer continued to fall and the wind to back and increase until at 1 A.M. on 15th November when the barometer was at its lowest point—29.69" (uncorr.). Temperature was 78°, and the wind was WSW with force 10, with very rough sea, moderate westerly swell, overcast sky and frequent fierce rainsqualls. It was judged that the storm was now about to cross the coast and this view was later confirmed by weather report.

"The force of the wind now gradually decreased, backing steadily the while, and the barometer commenced to rise, until by noon, 15th November, there was merely a strong breeze (force 6) from S/W with only a moderate sea and swell, while the barometer read 29.86" (uncorr.), temperature, 79°. However, the weather continued squally during the afternoon, but by 8 P.M. was clearing rapidly and it was then deemed that the disturbance was over. This was also confirmed by weather report."

The following reports appeared in *The Hindu*, Madras, on the 19th November 1935 and give an idea of the great havoc played by the storm in the districts of Tanjore and South Arcot :—

"The storm which swept over Vedaraniyam and Agastiyampalli and Point Calimere on the 14th instant was one of the severest that was ever experienced within the last forty years or so and it has played great havoc in this part of the country, resulting in loss of human lives and countless cattle and damage to about a thousand houses.

"The storm here was at its full velocity at midnight and people had to flee for safety leaving their belongings. Many hundreds of people were rendered homeless.

"The number of casualties has not yet been exactly known, since it is impossible to approach the village parts as communications have been cut off.

"From the information received so far from the affected villages, it is feared that about a hundred lives have been lost.

.....

"The portion of the Agastiyampalli—Point Calimere Railway line, the construction of which was almost completed, covering the swamp area extending over six furlongs, had been washed away and the permanent way is hanging topsy-turvey. Positions of the earthwork near Point Calimere beyond the forest were also washed away to a length of about 300 feet on either side of the girder bridge and the loss by damage in this connection is estimated at about Rs. 15,000.

.....

"The recent storm is reported to have caused considerable havoc to fruit-bearing trees in the Tiruturaipundi and Mannargudi Taluks, besides damage to dwelling houses. Mr. K. S. Sivasubramania Aiyer, M.L.C., has received information from Idumbhavanam village in Tiruturaipundi Taluk that more than 20,000 coconut trees were uprooted and the loss is estimated at a lakh of rupees. A number of poor

people have been rendered homeless. The loss of live stock is also reported from a number of villages. The Gopalasamudram school shed and the sheds put up in connection with the Health Week Celebrations came down due to heavy winds."

Some of the noteworthy falls of 7" and above which occurred in south Madras in connection with the above storm are :—

Station.	15th.	16th.
	"	"
Tiruppundi (Tanjore)	7	..
Vedaraniyam (Tanjore)	8	..
Muthupet (Tanjore)	7	..
Ilupur (Trichinopoly)	..	9
Marungapuri (Trichinopoly)	..	8
Aravakuruchi (Trichinopoly)	..	7
Annavasal (Pudukkottai State)	..	7
Ponnamaravati (Pudukkottai State)	..	8
Natham (Madura)	..	8
Dindigul (Madura)	..	7
Chatrapatti (Madura)	..	9
Dharapuram (Coimbatore)	..	7
Marayur (Travancore)	..	7

20. *Depression of 6th to 9th December 1935 in the Bay of Bengal.*—On the morning of the 5th December, an area of negative pressure departures appeared over the Andaman Sea and the neighbourhood indicating that conditions were becoming unsettled there. In the course of that day, the unsettled conditions developed into a depression which was centred at 8 hrs. of the 6th within a degree of Lat. 11°N., Long. 94°E. The depression moved northeastwards, weakening at the same time, and at 8 hrs. of the next day its centre lay in the neighbourhood of Lat. 13½°N., Long. 95½°E. Thereafter, it remained practically stationary and degenerated into a trough of low pressure area which became unimportant by the 9th. Under the influence of this disturbance, there was widespread rain in Tenasserim and the Andamans between the 4th and 8th.

21. *Low Pressure Wave of the 18th to 21st December 1935.*—Associated with the strengthening of the northeast monsoon, widespread moderate to heavy rain fell along the south Coromandel coast and in Ceylon on the 17th, Negapatam reporting 6", Cuddalore 4" and Trincomalee 3". A concentrated area of pressure fall and negative pressure departure appeared over Ceylon on the 18th morning, when the movement of upper winds over Colombo showed a tendency to change from east to northeast or north. These facts suggested that weather was becoming unsettled in the south-west Bay to the east of Ceylon. The unsettled conditions became more marked by the afternoon of the same day, but thereafter travelled westwards without further intensification as a low pressure wave across Ceylon into the south-

east Arabian Sea where it became unimportant by the 21st. Under the influence of this low pressure wave locally heavy rain again fell along the Coromandel coast and in Ceylon on the 19th, Negapatam reporting 6" and Colombo 5".

WESTERN DISTURBANCES.

The following is a list of the western disturbances which affected the weather in northern India during the year with the dates on which they did so and brief notes on the precipitation that they produced :—

Serial No.	Date.	REMARKS.
	<i>January.</i>	
1	31st Decem-ber 1934—3rd Janu-ary 1935.	Local rain or snow in north Baluchistan and Kashmir and in the hills of the Punjab and the United Provinces with scattered falls of rain in the east United Provinces and Chota Nagpur on the 1st, widespread rain in the Punjab hills, the United Provinces, Bihar and Orissa and Chota Nagpur on the 2nd and light showers in Bengal, Assam and Upper Burma on the next day.
2	4—5 . . .	A few falls of rain or snow in northeast Baluchistan, Kashmir and the Punjab hills on the 5th.
3	6—14 . . .	A few light showers in Baluchistan on the 6th and 7th, and fairly widespread rain or snow there on the next two days, in the North-West Frontier Province on the 10th and in Kashmir and the hills of the Punjab and the United Provinces between the 10th and 14th.
4	19—25 . . .	Local falls of rain or snow along the north-west frontier and in Kashmir and the Punjab between the 19th and 25th and light local showers in the United Provinces between the 23rd and 25th.
5	26—30 . . .	A few light showers in Baluchistan on the 26th, widespread rain from the north-west frontier to the central parts of the country between the 27th and 29th and light falls of rain or snow in the North-West Frontier Province, Kashmir, the hills of the Punjab and the United Provinces and in Assam on the 30th. (This disturbance developed into a storm in the northeast Arabian Sea off the Mekran—Sind coast. For a description, see page 1.)
	<i>February.</i>	
6	1—5 . . .	Fairly widespread rain or snow in Baluchistan and Sind and from the North-West Frontier Province and Kashmir to Bengal and Assam.
7	4—9 . . .	Local rain in the North-West Frontier Province on the 4th and in Baluchistan and Kashmir on the 4th and 5th; scattered light showers in north Bengal and Assam between the 6th and 9th.
8	9—17 . . .	Widespread rain or snow in Baluchistan, the North-West Frontier Province and Kashmir and local rain in Sind, the Punjab and the Kumaon hills between the 9th and 13th with locally heavy falls in Kashmir on the last day. Fairly widespread rain in Kashmir, the Punjab and the west United Provinces with scattered falls in east Rajputana on the 14th and 15th and light local showers in the east United Provinces, Bihar, Bengal, Assam and north Burma between the 16th and 17th.

Serial No.	Date.	REMARKS.
	<i>February— contd.</i>	
9	17—20 .	Light showers over the western Himalayas between the 17th and 18th and in Bengal, Assam and Upper Burma on the next two days.
10	22—24 .	A few light showers along the western Himalayas between the 22nd and 24th.
11	23—27 .	Light showers along the frontier and in Kashmir on the 23rd and 24th and in the hills of the Punjab and the United Provinces between the 24th and 27th.
	<i>March.</i>	
12	1—2 .	A few light showers in Baluchistan.
13	10—11 .	Local thunderstorm rain in the North-West Frontier Province and a few light showers in Kashmir.
14	14—15 .	Local falls of rain or snow in Kashmir on the 14th and 15th and in the North-West Frontier Province on the former date.
15	17—22 .	Local falls of rain or snow in Kashmir on the 19th and in the Punjab hills on the 19th and 20th. Widespread thunderstorm rain in Bengal and Assam with a few showers in Orissa and Upper Burma on the 21st.
16	22—24 .	Fairly widespread thunderstorm rain along the north-west frontier and the western Himalayas between the 22nd and 24th with widespread duststorms in the Punjab on the 23rd.
17	26—30 .	Thunderstorm rain from the north-west frontier and Kashmir to the west United Provinces between the 26th and 27th and local thundershowers in Chota Nagpur, Bengal and Assam between the 27th and 29th.
18	29—30 .	A few falls of rain in Kashmir on the 30th.
	<i>April.</i>	
19	1—6 .	Widespread rain from the north-west frontier to the United Provinces on the 4th and 5th.
20	5—8 .	Local rain in the north-west frontier on the 5th and 6th and along the western Himalayas between the 7th and 8th.
21	12—15 .	Fairly widespread rain along the north-west frontier and in Kashmir and the Punjab hills on the 12th, rainfall extending along and near the hills of the United Provinces on the next two days.
22	16—18 .	Caused no precipitation.
23	25—27 .	A few thundershowers in Kashmir and the North-West Frontier Province between the 25th and 27th.
	<i>May.</i>	
24	2—5 .	Local thundershowers in the North-West Frontier Province and Kashmir and widespread duststorms along the north-west frontier and in and around the Punjab on the 3rd and 4th.

Serial No.	Date.	REMARKS.
	<i>April— contd.</i>	
25	7—9 .	A few thundershowers in Baluchistan on the 7th and scattered showers there and in the Punjab on the next two days.
26	10 .	Scattered dust or thunderstorms in northwest India and west Rajputana on the 10th.
27	14—16 .	A few thundershowers in Baluchistan on the 14th, local thunderstorm rain there and in the Punjab hills and along the north-west frontier on the next two days; also duststorms in the southwest Punjab on the 16th.
28	20—21 .	Local thundershowers in the North-West Frontier Province, Kashmir and the north Punjab between the 20th and 21st.
29	28—30 .	Nearly general thunderstorm rain in Kashmir on the 28th and a few falls in the North-West Frontier Province on that day and in Kashmir on the next two days.
	<i>June.</i>	
30	9—12 .	Widespread dust or thunderstorms in the North-West Frontier Province and the Punjab with local thundershowers in Kashmir on the 10th and dust or thunderstorms in the Punjab hills and the United Provinces on the next day.
31	12—14 .	Fairly widespread thundershowers in the south-west Punjab, the North-West Frontier Province and Kashmir and scattered dust or thunderstorms in the Punjab hills and Baluchistan between the 13th and 14th.
32	14—16 .	Scattered thundershowers along the north-west frontier and in Kashmir with local dust or thunderstorms in the Punjab on the 15th and 16th.
33	20—24 .	Widespread dust or thunderstorms along and near the western Himalayas and in the plains of the Punjab between the 20th and 24th.
	<i>July, August and September.</i>	No well-defined western disturbances.
	<i>October.</i>	
34	9—14 .	Local rain in Kashmir with widespread rain in the Punjab hills on the 10th and 11th.
35	18—20 .	A few light showers in the North-West Frontier Province on the 19th and in Kashmir on the next day.
	<i>November.</i>	
36	6—9 .	Local rain in Kashmir, the east and north Punjab and the west United Provinces on the 6th and 7th and in Assam on the 9th.
37	11—12 .	A few light shower in Kashmir on the 11th and 12th.
38	13—14 .	A few falls in the North-West Frontier Province, Kashmir and the Punjab hills on the 13th and local rain or snow in Kashmir on the next day.
39	19—20 .	Gave no precipitation.

Serial No.	Date.	REMARKS.
	<i>November— contd.</i>	
40	23—29	Local rain or snow along the north-west frontier on the 24th and in Kashmir on the 24th and 25th; a few showers in the east and north Punjab on the 24th and in the Punjab hills on the next day; also a few light showers in Assam between the 27th and 29th.
41	29—30	A few light showers in Kashmir on the 30th.
	<i>December.</i>	
42	4—9	Local rain in Kashmir between the 4th and 7th, fairly widespread rain in the east and north Punjab and the west United Provinces between the 7th and 9th and an extension of rain into east Rajputana, the central parts of the country and in the east United Provinces between the 6th and 9th.
43	8—11	Scattered falls of rain in the North-West Frontier Province, Kashmir and the west United Provinces between the 9th and 10th and thunderstorm rain locally in east Rajputana and the United Provinces and at a few stations in the central parts of the country between the 10th and 11th.
44	11—13	A few falls of rain in Baluchistan on the 12th and local rain or snow in Kashmir with a few light showers in the north-west frontier and the Punjab hills on the next day.
45	16	Gave no precipitation.
46	18—20	Gave no precipitation.
47	21—22	A few light falls of rain in Kashmir on the 22nd.
48	22—24	A few light showers in Baluchistan on the 23rd and local rain or snow in Kashmir on the next day.
49	25—26	Gave no precipitation.
50	28—29	Scattered light falls of rain or snow in Kashmir on the 29th.
51	29—31	A few light fall of rain or snow in Kashmir on the 30th and 31st.
52	30	Fairly widespread rain in Baluchistan on the 31st; the disturbance was still affecting the weather over the country at the end of the month.

LOCAL STORMS.

Of the local storms reported in the newspapers, the following are noteworthy :—

March 21st.—A severe thunderstorm, which passed over Rangoon at about 7 O'clock in the afternoon, damaged the telegraph lines causing a complete stoppage of telegraphic communication with India for nearly 20 hours. Nor'westers of severe intensity also occurred in the districts of east Bengal.

March 22nd.—A nor'wester blew over Noakhali for about an hour causing considerable damage. A Boy Scout Training Camp at Maijdi was blown off and some of the campers

injured. At Banchhanagar several houses and trees were brought down and about a dozen persons severely injured.

A severe thunderstorm suddenly burst over Barisal Town and lasted about 20 minutes. A large number of trees and the roofs of several houses were blown down. Many boats sunk in the river Khariabad and two people were reported drowned.

March 29th.—A violent thunderstorm passed over Darjiling causing considerable damage. It lasted for threequarters of an hour and the whole town was plunged in darkness due to the break-down of electric wires. Telephone connection was also dislocated.

April 1st.—A severe hailstorm occurred at Jamshedpur during the night. The mango crops suffered heavily and considerable damage was done to tiled houses and telephone wires.

April 5th.—Two persons were struck by lightning and killed near Ambala during a severe hailstorm.

April 6th.—About 20 persons were injured and several houses damaged as a result of a hailstorm which passed over Lohardaga (Ranchi). Ten of the injured persons had to be treated in hospital.

—During a violent thunderstorm followed by heavy rain at Narsobavadi in Kurundwad State near Kolhapur six Mahars who had taken shelter near a hay-stack lost their lives being buried under the hay-stack when it collapsed.

—Herds of cattle were killed and the roofs of many houses were blown away as the result of a severe hailstorm which passed over Banda. Two boats were sunk in the Ken river and the pontoon bridge across the river was damaged rendering traffic unsafe. Some of the hail-stones were reported to be as big as cricket balls and several villagers who were caught in the storm were seriously injured.

—A severe hailstorm caused a great deal of damage to the standing crops in 50 villages in Kasur Division, Lahore District. It is reported that some of the hail-stones weighed as much as 20 tolas ($\frac{1}{2}$ lb.).

April 15th.—Four people were killed when a house collapsed during a severe thunderstorm which passed over Sylhet.

April 16th.—Calcutta experienced a severe thunderstorm between 7 and 8 P.M. At one period the wind attained a velocity of 71 miles per hour and the storm was accompanied by heavy rain. Several trees which were blown down fell on the tram line wires, wrecking them and bringing all traffic to a stand-still for several hours. An Inspector of the Tramways was electrocuted. The electric lights failed in several parts of the city and the telegraphic communications were also interrupted.

April 17th.—One man and two women were struck by lightning and killed in a village about 40 miles from Madura.

April 21st.—A woman was struck by lightning and killed at Vithalpeth, Jalgaon.

April 22nd.—During a severe thunderstorm, accompanied with hail, which passed over Trimulgherry near Secunderabad, a woman and a boy were killed by lightning.

April 23rd.—A man and his cattle were struck by lightning and killed when a thunderstorm passed over the village of Bokhara in Bareilly District.

April 25th.—A country boat carrying merchandise was overturned by a heavy gale and sunk in the Godavari near Bhimavaram. The loss is estimated to be Rs. 8,000.

April 27th.—A cartman was killed and two women seriously injured when a nor'wester passed over a number of villages near Sutahata (Midnapore, Bengal). Many houses in the villages of Sandhya Chak and Tarwan Chak were blown down. The storm was accompanied by a water-spout which was visible near the junction of the river Cossai and the Hooghly.

—While ploughing a field near Kodumalore village (south-east Madras) two men were struck dead by lightning.

May 14th.—During a thunderstorm at Bogra, a middle-aged woman while picking mangoes was killed by a fall of a branch of a big mango tree.

—The severity of the gale was so great that several wagons of a goods train running between Gabtali and Sukhanpukur were derailed blocking the traffic for some time.

—A carpenter was struck dead and two people were seriously injured by lightning at Kodaikanal.

—A severe thunderstorm which passed over Sansabari (Tangail) at about 3-30 p.m. blew away the roofs of many public buildings and jute godowns. One of the jute godowns which completely collapsed caused the death of one person and injuries to several coolies.

May 20th.—Five persons were reported killed and many more injured in a severe thunderstorm which passed over Natore Town. The storm was accompanied by a heavy shower; several trees were uprooted, telegraph wires were blown down and about 100 houses were razed to the ground.

May 21st.—A man was struck by lightning and killed instantaneously in the village Balakolla near Ootacamund.

May 25th.—Two persons were killed and fourteen injured in a severe thunderstorm which passed over 40 villages in Gurdaspur and Singrathana. At Chandrapur (Bengal) several houses were demolished and many boats capsized in the river.

June 1st.—A passenger train was blown off the track in a violent thunderstorm between Purulia and Muri on the B. N. Railway. The force of the wind was so great that it caused several of the vehicles to fall on their sides. No serious injuries were caused to passengers, but 23 passengers had to receive medical attention.

June 6th.—Several people were injured, a man was killed and considerable damage to property was caused when a violent duststorm followed by a heavy shower swept over Nasik. The duststorm raged for about an hour uprooting hundreds of trees. Electric wires were damaged and the city was plunged in darkness till midnight.

June 9th.—A violent thunderstorm passed over the northern parts of the Berhampore District (Bengal) causing extensive damage. At Lalbagh, a place about 7 miles to the north of Berhampore, a big banyan tree was uprooted and three men were crushed to death and two others severely injured. At Manykuyahar, a village about 20 miles from

Berhampore, the thunderstorm was accompanied by hail. Several men and a large number of cattle were injured. Two boats at Azimganj capsized in the river, but the occupants were rescued.

June 11th.—A violent duststorm swept over the west United Provinces, uprooting trees, damaging telegraph wires and mango crops and causing a series of accidents. A serious road accident occurred at Khandauli near Agra when blinded by the duststorm the drivers of two lorries coming from opposite directions collided, resulting in some deaths and injuries to several passengers.

June 15th.—A flock of 150 sheep and a horse with its rider were struck by lightning and killed in Maindargi, a village in Akalkot State.

June 16th.—In the village of Kedagaon, three miles from Ahmednagar, three women and two bullocks were struck dead by lightning.

June 22nd.—Some huts in the Harijan locality at Kolki, Gondal State, were burnt down by lightning. Fourteen Harijans were reported killed and four injured.

June 24th.—Two deaths and extensive damage to property and telegraph wires were caused by lightning and a severe thunderstorm in Batala 60 miles from Lahore in Gurdaspur District.

June 29th.—Lightning struck a building as a result of which about 50,000 bales of grass caught fire. The blaze continued for nearly 24 hours. Four buffaloes were also killed.

July, first week.—A man was killed by lightning in Karasar, a village near Bahraich.

—Several dust or thunderstorms occurred in the Punjab and the North-West Frontier Province and caused considerable damage to crops and buildings, dislocation of railway and other vehicular traffic, and break-down of electric and telephonic connection.

July 4th.—A severe thunderstorm accompanied by a sharp shower passed over Delhi as a result of which several trees were uprooted and many buildings damaged. Electric and telephonic connections were broken down and some parts of the town were plunged in darkness.

July 8th.—During a duststorm at Peshawar, a gust of 70 m. p. h. was experienced.

July 10th.—A violent thunderstorm swept over Mohalberia, a village near Jamshedpur, blowing away hundreds of huts and injuring several persons.

July 27th.—During a thunderstorm in Kheri village in Gurdaspur District, lightning struck and killed a cartman and set his cart on fire. The bullocks stampeded with the blazing cart and knocked down and killed a young girl.

July 28th.—A person was killed and two others were injured at Dadu (Sind) during a severe duststorm.

August 8th.—Three shepherds while grazing their sheep were killed by lightning in a field near Mallapuram hills, Madura District.

August 12th.—Owing to strong wind two houses collapsed at Nar in Gujarat. Two persons who were buried in the debris died. Two others received serious injuries.

August 14th.—Two persons were reported killed and two others injured when two houses collapsed during a thunderstorm in a village in Kaira District.

September 14th.—A hailstorm which raged for about 2 hours destroyed all paddy crops in Maduar and Chayaduar in Tezpur District. Several trees were uprooted and many huts damaged.

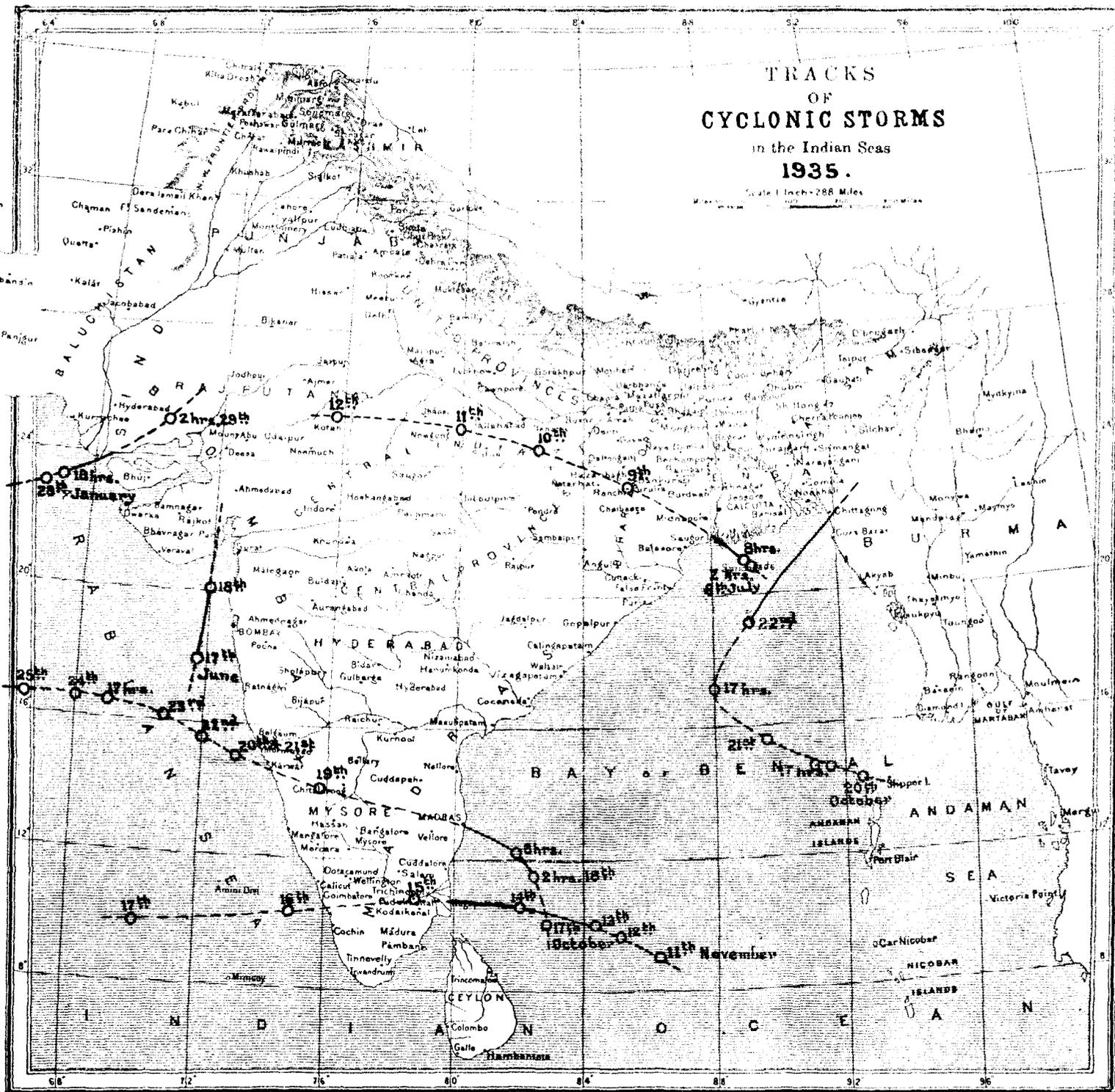
November 5th.—Lightning struck a building at Keezhillam near Perumbavoor in Travancore. A youth who was inside the house met with instantaneous death.

WINDS OF FORCE NINE OR MORE IN INDIAN SEAS.

Excluding dates of storms and depressions, a description of which has been given above, winds of force nine or more

were recorded on ships in the Indian seas during the year 1935 on the following occasions :—

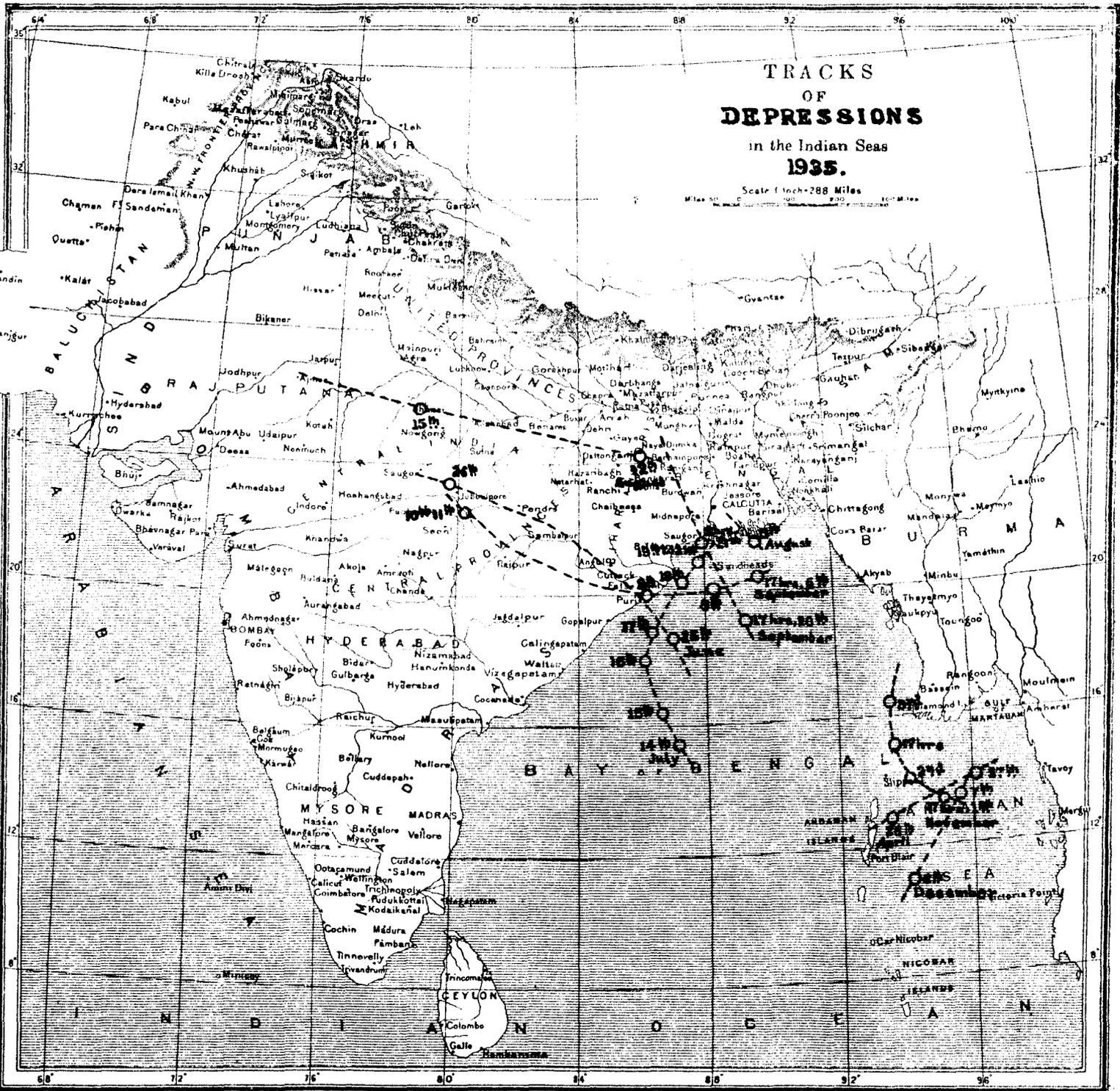
Date.	Name of ship.	APPROXIMATE POSITION.	
		Lat. °N.	Long. °E.
28th January .	S.S. Masimpur . . .	24	67
3rd July . . .	S.S. Clan Murray . . .	13	57
17th July . . .	S.S. Lichtenfels . . .	13-12	55-57



The tracks in the Arabian Sea of the Storms of 27th to 29th January 1935 and 17th to 25th October 1935 which lie outside the boundaries of the map are defined by the following positions :-

	Lat.N.	Long.E.		Lat.N.	Long.E.
(1) 27th January 1935	22°½	62°			
(2) 26th November 1935	16°½	65°	27th November 1935	16°½	64°

--- Depression ————— Storm ————— Severe Storm.



ERRATUM: OMIT THE COLUMN "ε" FROM THE TABLES OF
 CONSTANTS OF MILNE-SHAW SEISMOGRAPH PRINTED AT
 THE TOP OF THE BOMBAY SEISMIC DATA FOR THE
 YEARS 1923 TO 1931.

Errata to India Weather Review, 1935, Annual Summary, Part D.

Page.	Place.	For.	Read.
D 4	April 16, hour 0 44 50, column phase	\overline{is}	is
D 8	July 29, hour 7 52 39, column phase	P_1	P
D 9	August 23, hour 14 13 9, column phase	SR	SR_1
D 15	January 1, hour 13 38 46, column phase	$eP' (?)$	$eP' (?)$
D 23	July 29, hour 8 1 22, column phase	$\overline{ScPc PcS}$	$\overline{ScPc PcS}$
D 29	December 28, hour 2 53, column amplitude	12	>1250
D 30	Station co-ordinates, height above M. S. L.	7. slight 1 metre	7.1 metres
D 31	January 31, hour 12 3 10, column phase	P	\overline{P}
D 36	September 15, hour 14 30 7, column phase	P_1	P
D 39	December 14, hour 22 24 59, column phase	P_1	P
D 43	May 30, hour 21 51, column amplitude	7334	>334
D 44	July 29, hour 7 52 17, column phase	eP_1	eP

INDIA WEATHER REVIEW, 1935.

ANNUAL SUMMARY.

PART D.

SEISMIC RECORDS.

Station—Upper Air Observatory, Agra.

Lat. 27° 8' 15" N. Long. 78° 0' 45" E.

Height above m. s. l. 163 metres. Lithologic Foundation—Indo-Gangetic Alluvium.

Instruments—Omori-Ewing Seismograph North-South (N) component, and Milne-Shaw Seismograph East-West (E) component, both installed in an underground constant temperature room.

INSTRUMENTAL CONSTANTS.

Component	Steady mass (Kg.)	T (sec.)	Vm	ε	Paper speed (mm./min.)
N	45	32.5	29	1	12
E	0.47	12	250	20:1	8

TABLE D₁.

Date.	Compt.	Phase.	G. M. T.	Period.	Amplitude.	△	Remarks.	Date.	Compt.	Phase.	G. M. T.	Period.	Amplitude.	△	Remarks.	
1935.			H. M. S.	Sec.	μ	Km.		1935.			H. M. S.	Sec.	μ	Km.		
Jan. 2	E	aP	22 25 34	940	Apparently an after shock of the great Tibet earthquake of Dec. 15, 1934.	Jan. 4	E	P	8 3 10	975		
		eP	26 24					P	3 58	
		S	27 14					S	4 55	
		SR ₁	27 26					F	26	
		S	28 31			Jan. 4	E	e	10 27 34	
		Mn	30 12	7	11	...				F	55		
Jan. 3	N, E	iP	1 52 34	980	Great Epc: Tibet.	Jan. 4	E	iP	14 49 34	4820	Epc: Turkey. Destructive in Marmara Islands.	
	N	iS	54 18	...	...	...				PR ₁	51 3	...	...	...
	N	S	55 8	...	...	...				IPR ₂	51 44	...	...	...
	N	Mn	...	...	...	>397	Motion of recording pen restricted by side-stops for about 3 minutes.			iS	56 3	...	...	...
	N	F	3 23					SR ₁	58 39
Jan. 3	E	e	14 36 41	...	...	...	Tremors.			SR ₂	59 51	...	...	...
		F	45					L	15 2 29
Jan. 3	E	F	17 15	...	...	...	Do.			Mn	6 14	...	...	...
Jan. 3	E	e	18 22 18	Do.	Jan. 4	E	P	16 28 8	4820		Aftershock of the Turkey earthquake.
Jan. 3	E	e	18 31 19	...	...	...	Do.			ePR ₁	29 39	...	...	...
Jan. 3	E	e	22 43 22	...	...	...	Do.			PR ₂	30 22	...	...	...
Jan. 3	E	e	22 43 22	...	...	...	Do.			S	34 37	...	...	...
Jan. 4	E	e	5 10 2	...	...	900				SR ₁	37 27	...	...	...
		S	10 39	...	...	...				SR ₂	38 27	...	...	...
		S	11 34	...	...	...				L	41 3	...	...	...
		F	22	...	...	...				Mn	47 5 16 25	...	...	...
										F	Covered by the following shock.					

TABLE D₁—contd.

Date.	Compt.	Phase.	G. M. T.	Period.	Amplitude.	△	Remarks.	Date.	Compt.	Phase.	G. M. T.	Period.	Amplitude.	△	Remarks.
1935.			H. M. S.	Sec.	μ	Km.		1935.			H. M. S.	Sec.	Km.		
Feb. 3	N	P	2 13 9	...	...	1000	Felt in North India.	Feb. 27	E	P	9 18 29	...	...	5545	
	E	iP	13 5	...	...	...				S	25 47	...	...	...
	N	IS	15 2	...	...	...				F	10 16	...	...	...
	E	IS	14 59	...	...	...		Mar. 2		e	6 10 25	...	...	...
	E	F	3 39	...	...	...				v	23	...	...	...
Feb. 3	N	e	16 42 33	...	...	...		Mar. 3	E	eP	22 48 29	...	...	1055	
	E	e	41 9	...	...	...				IS	50 13	...	...	...
	E	Mn	47 30	10	7	...				S*	50 53	...	...	...
	N	F	17 5	...	...	...				eS?	51 29	...	...	...
	E	F	34	...	...	...				Mn	53 3	10	8	...	
Feb. 4	E	i	8 2 25	...	...	...				F	23 16	...	...	...
		F	39	...	...	...		Mar. 4	E	P	16 17 37	...	...	1055	
Feb. 4	E	e	21 16 35	...	...	...			N	e	19 23	...	...	...
		i	24 4	...	...	...			E	S	19 21	...	...	...
		F	50	...	...	...			E	S	20 33	...	...	...
Feb. 7	E	e	17 37 17	...	...	...			E	Mn	22 23	8	9	...	
		e	43 33	...	...	...			N	F	43	...	...	...
		F	18 34	...	...	...			E	F	52	...	...	...
Feb. 19	E	e	20 19 37	...	...	...		Mar. 5	E	e	3 33 5	...	...	...
		e	27 11	...	...	...				i	35 15	...	...	...
		F	21 15	...	...	...				F	44	...	...	...
Feb. 21	E	e	18 44 11	...	...	...		Mar. 5		e	10 31 46	...	...	...
		i	48 59	...	...	...				e	35 58	...	...	...
		F	19 26	...	...	...		Mar. 5	N, E	iP	22 16 51	...	...	310	Epc: Rohilkhand in U. P. Felt through out North India.
Feb. 22	N	e	9 19 16	...	...	...			N	IS	17 45	...	...	...
	E	e	4 25	...	...	...		Mar. 6	E		0 1	...	...	...
	E	Mn	21 27	14	10	...		Mar. 7	E	e	7 32 37	...	...	...
	E	F	58	...	...	...				F	54	...	...	...
Feb. 22	N	e	17 17 28	...	...	8045	Epc: Aleutian Archipelago.	Mar. 7	E	e	10 46 41	...	...	...
	E	eP	17 23	...	...	...				F	11 29	...	...	...
	E	PR ₁	20 19	...	...	...		Mar. 11	E	e	11 36 37	...	...	...
	E	S	26 43	?	...	...	Failure of light near S.			e	40 1	...	...	...
	E	SR ₁	31 39	?	...	...				Mn	51 25	15	6	...	
	E	SR ₂	34 25	...	...	...				F	12 22	...	...	...
	E	L	40 35	...	...	...		Mar. 11	E	e	15 21 13	...	...	...
	N	Mn	46 55	23	53	...		Mar. 11	E	e	20 13 54	...	...	...
	E	Mn	49 10	19	179	...				F	30	...	...	...
Feb. 23	N	F	18 48	...	...	...		Mar. 13	E	e	3 19 1	...	...	...	Felt at Netrakona in Bengal.
	E	i	3 58 52	...	...	...				i	21 11	...	...	...
		F	5 1	...	...	...				F	45	...	...	...
Feb. 23	E	e	21 14 17	...	...	...						...	...	...
		F	35	...	...	...						...	...	...
Feb. 25	N	e	2 59 47	...	...	4580		Mar. 15	N, E	P	10 34 42	...	...	310	A slight aftershock of Rohilkhand earthquake.
	E	iP	59 41	...	...	...			N, E	IS	35 37	...	...	...
	N	i	3 6 22	...	...	...			N	F	47	...	...	...
	E	S	6 4	...	...	...			E	F	11 2	...	...	...
		SR ₁	8 24	...	...	...						...	...	...
		SR ₂	9 23	...	...	...						...	...	...
		F	4 23	...	...	...						...	...	...

TABLE D₁—contd.

Date.	Compt.	Phase.	G. M. T.	Period.	Amplitude.	△	Remarks.	Date.	Compt.	Phase.	G. M. T.	Period.	Amplitude.	△	Remarks.	
			H. M. S.	Sec.	μ	Km.					H. M. S.	μ	Km.			
1935.								1935.								
Mar. 15	E	e	12 7 5	...	...	...		Apr. 5	E	i	18 58 41	...	...	...
Mar. 15	E	c	12 30 55	...	...	...				F	19 8 ...	...	...	...
		F	58 ...	...	...	...		Apr. 10	E	e	12 26 52	...	...	...
Mar. 16	E	e	8 0 2	...	...	...				F	13 32 ...	...	...	...
		i	7 53	...	...	...		Apr. 10	E	c	19 48 57	...	...	...
		F	46 ...	...	...	...				F	20 10 ...	...	...	...
Mar. 17	E	i	13 14 6	...	...	...		Apr. 11	E	iP	1 22 46	...	...	2455	
		F	17 ...	...	...	...			N	eP	22 52	...	...	...
Mar. 17	E	e	20 31 36	...	...	...			E	iS	26 48	...	...	...
		F	45 ...	...	...	...			N	eS	27 ...	...	...	...
Mar. 17	E	e	22 40 4	...	...	...			E	SR ₁	27 47	...	...	...
		F	23 5 ...	...	...	...			E	L	29 9	...	...	...
Mar. 20	E	eP	23 9 49	...	...	9500			E	Mu	34 30	16	33	...	
		ScPcs	20 11	...	...	...			E	F	3 13 ...	...	...	...
		PS	21 11	...	...	...		Apr. 11	E	e	4 36 26	...	...	...
		SR ₁	25 55	...	...	...				F	56 ...	...	...	...
		F	Masked by the following shock.						Apr. 11	N	e	23 19 51	2645	Epc: Iran (Near Caspian Sea) Destructive.
Mar. 21	N,E	iP	0 6 36	...	...	1110	Epc: North Bengal.		E	iP	19 44	...	...	...
	N,E	S	8 40	...	...	...			E	PR ₁	20 27	...	...	...
	N,E	F	Lost while changing chart.						N,E	iS	24 2	...	...	...
Mar. 21	E	e	8 27 51	...	...	...			E	SR ₁	24 58	...	...	...
		F	42 ...	...	...	...			E	L	26 14	...	...	...
Mar. 24	E	i	0 2 2	...	...	...			N,E	F	Lost while changing chart.				
		Mn	5 32	10	7	...		Apr. 12	E	P	1 11 41	...	...	2565	An aftershock of the Iranian Earthquake.
		F	25 ...	...	...	...				PR ₁	12 7	...	...	...
Mar. 28	E	i	23 55 22	...	...	...				S	15 51	...	...	...
		i	0 1 22	...	...	...				SR ₁	16 47	...	...	...
		F	Lost while changing chart.						Apr. 12	E	iP	12 49 34	2620	Do.
Mar. 29	E	e	12 44 ...	...	...	...				PR ₁	50 3	...	...	...
		i	53 34	...	...	...				iS	53 46	...	...	...
Mar. 30	E	eP	21 29 1	...	...	5700				SR	54 36	...	...	...
		iS	36 30	...	...	...				Mn	13 0 14	11	14	...	
		PS	37 1	...	...	...				F	14 0 ...	...	...	...
		eSR ₁	40 11	...	...	...		Apr. 12	E	P	22 36 54	...	...	2620	An aftershock of the Iranian Earthquake.
		Mn	54 47	15	18	...				ePR ₁	37 23	...	...	...
		F	23 16	...	...	...				iS	41 7	...	...	...
Mar. 31	E	e	3 37 17	...	...	...				SR ₁	42 11	...	...	...
		F	4 12 ...	...	...	...				F	23 21 ...	...	...	...
Apr. 3	E	e	6 59 45	...	...	...		Apr. 16	E	e	0 43 5	...	...	...	Felt at Darbhanga.
		F	8 14 ...	...	...	...				iS	44 50	...	...	...
Apr. 3	E	e	10 2 48	...	...	...				F	Lost while changing chart.				
		F	9 ...	...	...	...		Apr. 18	E	e	15 6 26	...	...	...
Apr. 3	N	eP	11 14 35	...	...	1078	Epc: Along western border of Kashmir in N.-W. F. Province.			F	32 ...	...	...	...
	E	iP	14 31	...	...	...					...	...	...	...
	N,E	iS	16 31	...	...	...					...	...	...	...
	N	F	39 ...	...	...	...					...	...	...	...

TABLE D₁—*contd.*

Date	Compt.	Phase.	G. M. T.	Period.	Amplitude.	△	Remarks.	Date.	Compt.	Phase.	G. M. T.	Period.	Amplitude.	△	Remarks.	
1935.			H. M. S.	Sec.	μ	Km.		1935.			H. M. S.	Sec.	μ	Km.		
Apr. 19	N	e	15 32 55	...	...	5965		Apr. 24	E	iP	15 58 42	...	...	2765	
	E	iP	32 49	...	...	...				PR ₁	59 7	...	...	...
	E	PR ₁	34 50	...	...	...				S	16 3 5	...	...	...
	E	PR ₂	35 50	...	...	...				SR ₁	4 10	...	...	...
	N	i	40 16	...	...	...				L	5 22	...	...	...
	E	iS	40 25	...	...	...				Mn	8 42	11	21	...	
	E	PS	40 50	...	...	...				F	17 38	...	...	...
	E	SR ₁	44 11			Apr. 24	E	e	17 53 29	
	E	SR ₂	45 58					i	54 39	
	E	L	49 22					Mn	55 56	12	7	...	
	N	Mn	55 41	26	517	...					F	18 12	
	E	Mn	58 15	20	258	...				May 1	E	eP	10 30 59	3400	Destructive in the district of Kara in N. E. Turkey.
	E	F	19 53					E	PR ₁	31 55
Apr. 19	E	e	20 43 13	...	...	...			N,E		S	36 14	...	...	...
	E	e	48 40	...	...	...			E		SR ₁	38 2	...	...	...
	E	F	22 8	...	...	...			E		L?	40 22	...	...	...
Apr. 20	E	P	5 20 11	...	...	5920			N	F	11 11	...	...	...
		PR ₁	22 31	...	...	...			E	F	12 15	...	...	...
		iS	27 52	...	...	...		May 4	E	e	23 11 23	...	...	...
		PS	28 23	...	...	...				F	Lost while changing chart.				
		SR ₁	31 31	...	...	...		May 7	E	eP	6 4 21	...	...	5490	
		L	36 43	...	...	...				S	11 33	...	...	...
Apr. 20	E	i	7 51 47	...	...	...			Mn	28 54	...	...	...
		F	57	...	...	...		May 10	E	eP	17 9 29	...	...	2700	
Apr. 20	N	e	22 9 47	...	...	4300	Great. Destructive in Formosa. △ from (P~SR ₁) interval.			S	13 45	...	...	...
	E	P	9 21	...	...	...					SR ₁	14 49	...	...	...
	E	PR ₁	10 45	...	...	...					eL	16 6	...	...	...
	E	iS	16 11	...	...	...					eM	18 13	...	...	...
	E	SR ₁	17 40	...	...	...				F	18 14	...	...	...
Apr. 20		SR ₂	18 25	...	...	...		May 12	E	eP	5 23	...	...	1165	
	E	L	22 20 13	...	...	...				E	eS	25 8	...	...	...
	N	M	23 36	...	...	...				N,E	S	26 22	...	...	...
	N	Mn	25 36	19	220	...				E	Mn	27 13	11	29	...	
	E	Mn	27 24	...	...	...				E	F	6 9	...	...	...
	N	F	23 25	...	...	...			May 13	E	e	2 19 17	...	...	...
	E	F	Lost while changing chart.									F	33
Apr. 21	E	e	7 36 24	...	...	...		May 13	N,E	eP	19 58 31	...	...	2510	
	E	iS	41 19	...	...	...				PR ₂	59 9	...	...	...
	E	Mn	55 7	19	12	...				N	eS	20 2 45	...	...	...
	E	F	9 3	...	...	...				E	iS	2 38	...	...	...
Apr. 22	E	i	18 21 31	...	...	...			N	eSR ₁	3 37	...	...	...
		F	37	...	...	...			E	SR ₁	3 31	...	...	...
Apr. 23	N,E	P	16 49 11	...	...	1465	Felt practically throughout the Province of Bengal.		N	eL	4 51	...	...	...
	N, E	iS	51 48	...	...	...				E	L	4 47	...	...	...
	N	F	71 22	...	...	...				E	M	6 47	...	...	...
	E	F	18 0	...	...	...				E	Mn	9 49	12	36	...
		F	22 4	...	...	...				N	F	39	...	...	...

TABLE D₁—contd.

Date.	Compt.	Phase.	G. M. T.	Period.	Amplitude.	△	Remarks	Date.	Compt.	Phase.	G. M. T.	Period.	Amplitude.	△	Remarks.	
1935.			H. M. S.	Sec.	μ	Km.		1935.			H. M. S.	Sec.	μ	Km.		
May 14	E	ePR ₁	23 43 5	...	...	13000	△ From (PS ₁ — ePB ₁)	May 28	E	e	17 31 43	...	...	...
		ScPcS	48 33				F		18 6	
		PS	53 51			May 29	E	e	19 56 3	
		F	Masked by the following shock.							F		20 39	
May 15	E	P	2 3 48	...	...	945	Felt in some parts of Upper Sind.	May 30	N	eP	21 35 15	...	...	1020	Disastrous Quetta Earthquake.
	N,E	P	4 18			E	P	35 11		
	N,E	S	5 31			N,E	P*	35 46		
	N	F	45			N	P	36 10		
	E	F	3 54			N,E	S	37		
May 16	E	eP	17 27 12	...	...	1265		N	S*	37 34	...	...	...
	N,E	S	29 30	...	...	...		N	S	38 10	...	...	...
	E	M	31 18	...	...	...		N	Mn	?	...	>1590	...	Motion of the record- ing pen restricted by stops for about 7 minutes.	
	N	F	18 46	...	...	...		E	F	Masked by the following shock.					
	E	F	47	...	...	...		May 30	E	eP	23 36 22	...	...	1020	Apparently aftershock of Quetta Earth- quake.
May 16	E	e	21 1 21	...	...	...		N	e	38 17	...	...	...
		F	23 31	...	...	...		E	eS	38 10	...	...	...
May 21	E	P	4 24 45	...	...	975	Felt at Dhubri, Assam.	E	S	39 17	...	...	...
	N,E	P*	25 12	...	...	...			E	F	Masked by the following shock.				
	E	P	26 38			May 31	E	P	2 5 51	1090	Do.
	N,E	S	26 29	...	...	...			E	P*	6 20	...	...	...
	N	S*	27 3	...	...	...			N	eS	7 45	...	...	...
	N,E	S	27 37	...	...	...			E	iS	7 45	...	...	...
	N	F	54	...	...	...			E	S*	8 23	...	...	...
	E	F	5 2	...	...	...			N,E	S	8 59	...	...	...
May 21	E	iP	7 8 12	...	...	7955		E	Mn	13 20	7	18	...		
		iS	12 35	...	...	...		N	F	49	...	...	...
		PS	13 9	...	...	...		May 31	E	i	8 26 25	...	...	...
		F	8 48	...	...	...		F	Masked by the following shock.						
May 21	E	i	13 17 38	...	...	...		May 31	E	e	9 4 7	...	...	...
		F	14 24	...	...	...		F		44	...	...	...
May 24	E	iP	5 45 1	...	...	5245	Epc: Philippine Is- lands.	May 31	E	e	13 26 39	...	...	...
	E	PR ₁	46 53	...	...	...			F		55	...	...	...
	N	S?	51 54			May 31	E	eP	17 14 36	1050	Apparently aftershock of Quetta Earth quake.
	E	iS	52	...	...	...			N	S	16 28	...	...	...
	E	SR ₁	55 4	...	...	...			E	iS	16 28	...	...	...
	E	SR ₂	56 14	...	...	...			E	S*	17 2	...	...	...
	E	L	59 28	...	...	...			E	S	17 35	...	...	...
	E	Mn	6 7 17	...	...	...			E	Mn	20 20	7	21	...	
	E	F	10 18	...	...	...			E	F	56	...	...	...
May 26	E	P	22 12 19	5180			June 1	N	eP	4 32 36	1020		An aftershock of the great Quetta Earth quake.
		PR ₁	14 9	...	...	...		E	iP	32 36	...	...	...
		PR ₂	14 47	...	...	...		E	P	33 35	...	...	...
		S	19 14	...	...	...		N	eS	34 25	...	...	...
		SR ₁	22 21	...	...	...		E	S	34 25	...	...	...
		L	26 28	...	...	...		E	S*	35	...	...	...
		F	23 59	...	...	...		N,E	S	35 32	...	...	...
May 27	E	e	3 36 54	...	...	...		E	Mn	38 22	7	29	...		
								N	F	58	...	...	...
								E	F	5 22	...	...	...

TABLE D₁—*contd.*

Date.	Compt.	Phase.	G. M. T.	Period.	Amplitude.	△	Remarks.	Date.	Compt.	Phase.	G. M. T.	Period.	Amplitude.	△	Remarks.
1935.			H. M. S.	Sec.	μ	Km.		1935.			H. M. S.	Sec.	μ	Km.	
July 10	E	i	20 40 46	...	...	...		July 26	E	iP	10 36 54	...	...	2335	
		Mn	45 49	12	15	...				PR ₁	37 12	...	...	...
		F	21 11	...	...	...				iS	40 46	...	...	...
July 11	E	i	8 41 20	...	...	...				SR ₁	41 34	...	...	...
		e	44 47	...	...	...				S*	42 33	...	...	...
		Mn	57 58	16	15	...				S̄	43 24	...	...	...
July 12	E	P	1 46 2	...	...	2100				Mn	45 43	8	25	...	
		iS	49 35	...	...	...		July 27	E	e	12 24 42	...	...	...
		SR ₁	50 29	...	...	...				F	47	...	...	...
		L	51 1	...	...	...		July 28	E	P	5 26 25	...	...	1010	
		Mn	52 59	...	...	...				P	27 18	...	...	...
		F	2 17	...	...	...				S	28 20	...	...	...
July 16	E	P	16 26 17	...	...	4235	Near Formosa Island.			F	55	...	...	...
	E	PR ₁	28 5	...	...	...		July 29	E	P ¹	7 52 39	...	...	13720	
	N	eS	32 17	...	...	...			E	ScPcP	55 17	...	...	...
	E	S	32 17	...	...	...			E	PR ₂	56 56	...	...	...
	N	eSR ₁	34 43	...	...	...			E	ScPcS	59 36	...	...	...
	E	SR ₁	34 43	...	...	...			E	ScPcPcS	8 1 8	...	...	...
	E	SR ₂	35 19	...	...	...			E	S	2 16	...	...	...
	E	L	37 43	...	...	...			N, E	PS	4 17	...	...	...
	E	M	40 57	...	...	...			E	PPS	5 56	...	...	...
	E	Mn	44 13	10	26	...			E	SR ₁	10 51	...	...	...
	N	F	17 13	...	...	...			E	SR ₂	15 42	...	...	...
	E	F	18 6	...	...	...			E	L	32 25	...	...	...
July 16	E	e	20 9 49	...	...	...			E	M	41 44	...	...	...
		i	17 11	...	...	...			E	F	10 55	...	...	...
		F	51	...	...	...		July 29	E	P	23 19 41	...	...	1335	
July 17	E	e	5 2 52	...	...	...			N	eS	21 57	...	...	...
		F	6 5	...	...	...			E	S	21 57	...	...	...
July 17	E	e	11 6 17	...	...	...			E	S*	22 45	...	...	...
		Mn	?	23	17	...			N, E	S	23 21	...	...	...
		F	13 23	...	...	...		Aug. 1	E	eP	14 15 2	...	...	5270	
July 17	E	e	16 20 52	...	...	...	Felt at Quetta.			ePR ₁	16 50	...	...	...
		Mn	25 8	8	3	...				PR ₂	17 35	...	...	...
		F	34	...	...	...				S	22 3	...	...	...
July 19	E	P	0 59 8	...	...	5900				SR ₁	25 22	...	...	...
	N	e	59 15	...	...	...				SR ₂	26 30	...	...	...
	E	PR ₁	1 1 9	...	...	...				Mn	37 35	16	12	...	
	N, E	iS	6 43	...	...	...				F	15 39	...	...	...
	N, E	PS	7 23	...	...	...		Aug. 1	E	e	17 3 36	...	...	...
	E	iSR ₁	10 16	...	...	...				F	18 15	...	...	...
	E	iSR ₂	11 53	...	...	...		Aug. 3	N, E	P	1 15 56	...	...	3080	Epc: Near north Sumatra.
	E	L	15 32	...	...	...			N, E	PR ₁	16 33	...	...	...
	E	Mn	23 58	20	80	...			N, E	iS	20 45	...	...	...
	N	F	54	...	...	...			E	SR ₁	22 2	...	...	...
July 26	E	P	9 14 41	...	...	2335			N	L	23 38	...	...	...
		S	18 28	...	...	...			E	L?	23 42	...	...	...
		SR ₁	19 15	...	...	...			E	M	25 48	...	...	...
		Mn	23 25	9	5	...			N	Mn	26 41	24	898	...	
									E	F	4 59	...	...	...

TABLE D₁—cont. c.

Date.	Compt.	Phase.	G. M. T.	Period.	Amplitude.	△	Remarks.	Date.	Compt.	Phase.	G. M. T.	Period.	Amplitude.	△	Remarks.
1935.			H. M. S.	Sec.	μ	Km.		1935.			H. M. S.	Sec.	μ	Km.	
Aug. 3	E	P	11 53 58	...	...	5165		Aug. 31	E	i	17 49 57	...	...	...
		ePR ₁	55 43	...	...	...				i	58 13	...	...	...
		PR ₂	56 22	...	...	...				Mn	18 21 37	16	7	...	
		S	12 0 50	...	...	...		Sep. 3	E	e	11 20 23	...	...	...	Tremors.
		SR ₁	3 53	...	...	...				F	40 ...	...	...	...
		SR ₂	5 2	...	...	...		Sep. 4	E	iP	1 45 13	...	...	4220	Epc: Near Formosa Island.
		L	7 57	...	...	...				PR ₁	46 38	...	...	...
		F	57 ...	...	...	...				PR ₂	46 56	...	...	...
Aug. 3	E	eP	13 23 31	...	...	2220				S	51 14	...	...	...
		iS	27 16	...	...	...				SR ₁	53 33	...	...	...
		Mn	32 16	10	5	...				L	56 38	...	...	...
		F	56 ...	...	...	...				F	5 3 ...	...	...	...
Aug. 3	E	e	14 15 16	...	...	...		Sep. 5	E	e	12 38 49	...	...	...	Reported to have been felt in North Bengal.
		Mn	20 13	9	3	...			N, E	S ?	41 0	...	...	...
Aug. 17	E	P	1 58 38	...	...	11445		Sep. 9	E	P	0 28 1	...	...	6890	
		iPR ₁	2 2 43	...	...	...			E	PR ₁	30 21	...	...	...
		iPR ₂	5 4	...	...	...			E	PR ₂	31 28	...	...	...
	N, E	iScPcS	9 11	...	...	...			N, E	iS	36 33	...	...	...
	N, E	ScPcPrS	9 57	...	...	...			E	PS	37 3	...	...	...
	N, E	S	10 29	...	...	...			N, E	SR ₁	40 41	...	...	...
	N	ePS	11 48	...	...	...			N	iSR ₂ (?)	43 43	...	...	...
	E	PS	11 43	...	...	...			E	SR ₂	42 52	...	...	...
	N, E	PPS	12 26	...	...	...			E	L	47 17	...	...	...
	N, E	SR ₁	17 20	...	...	...			N	F	7 42 ...	...	...	...
	E	SR ₂	21 39	...	...	...			E	F	10 8 ...	...	...	...
	E	L	33 29	...	...	...		Sep. 11	E	e	12 10 55	...	...	...	Tremors.
	E	F	5 18 ...	...	...	...		Sep. 11	N	P	14 13 44	...	...	6120	
Aug. 23	N, E	i	0 57 51	...	...	...	Record partially lost during shifting. Very near slight shock. Felt at Delhi and Meerut.		E	iP	13 44	...	...	...
Aug. 23	N, E	P	14 5 13	...	...	4120			E	PR ₁	16 49	...	...	...
	E	PR ₁	6 24	...	...	...			N	iS	21 31	...	...	...
	N, E	PR ₂	6 45	...	...	...			E	S	21 31	...	...	...
	N, E	iS	11 9	...	...	...			N	PS	22 5	...	...	...
	E	SR	13 9	...	...	...			E	SR ₁	25 22	...	...	...
	E	L	15 54	...	...	...			E	SR ₂	27 7	...	...	...
	E	Mn	22 14	19	31	...			N	eL	30 53	...	...	...
	N	F	15 8 ...	...	...	...			E	L	31 3	...	...	...
	E	F	16 5 ...	...	...	...			E	Mn	...	17	...	...
Aug. 23	E	P	18 37 19	...	...	845	Felt at Muzaffarpur.		N	F	15 48 ...	...	...	...
	N, E	S	38 ...	...	...	...			E	F	18 12 ...	...	...	...
	E	eS*	38 23	...	...	...		Sep. 15	E	P	11 27 15	...	...	8780	
	N, E	S	38 53	...	...	...				S	37 17	...	...	...
	N	F	41 ...	...	...	...				PS	37 55	...	...	...
	E	F	44 ...	...	...	...				SR ₁	42 35	...	...	...
Aug. 23	E	i	23 31 37	...	...	...	Felt at Delhi and Meerut.	Sep. 15	E	P ₁	14 29 18	...	...	18900	
Aug. 25	E	eP	5 19 22	...	...	5155				P ₂	30 28	...	...	...
		eS	26 15	...	...	...				PR ₁	34 18	...	...	...
		eSR ₁	29 22	...	...	...				SR ₁	56 16	...	...	...
		F	6 44 ...	...	...	...						...	...	...

TABLE D₁ --contd.

Date.	Compt.	Phase.	G. M. T.		Amplitude.	△	Remarks.	Date.	Compt.	Phase.	G. M. T.		Amplitude.	△	Remarks.	
			H. M. S.	Sec.							H. M. S.	Sec.				
1935.			H. M. S.	Sec.	μ	Km.		1935.			H. M. S.	Sec.	μ	Km.		
Sep. 18	E	P	8 33 13	...	...	5880		Sep. 28	E	e	8 22 3	...	...	...
		S	40 47	...	...	...				f	24 11	...	...	...
		PS	41 22	...	...	...				F	44 ...	...	...	...
		SR ₁	44 25	...	...	...		Sep. 29	E	e	4 15 27	...	...	...	Tremors.
		SR ₂	45 55	...	...	...				F	27 ...	...	...	...
		L?	49 35	...	...	...		Sep. 29	E	e	6 39 1	...	...	...
		M	53 53	...	...	...				e	41 21	...	...	...
Sep. 19	E	P	2 38 16	...	...	8720				f	43 8	...	...	...
		e(S?)	48 15	...	...	...		Sep. 30	E	e	19 19 31	...	...	...
		i(PS?)	48 49	...	...	...				eL	33 53	...	...	...
		i(SR ₁ ?)	53 33	...	...	...				Mn	37 49	...	...	...
Sep. 20	E	IP	1 57 39	...	...	7660				F	20 0 ...	...	...	...
		PR ₁	2 0 17	...	...	...		Sep. 30	E	P	23 57 21	...	...	5210	
		S	6 47	...	...	...				eS	0 4 23	...	...	...
		PS	7 20	...	...	...				SR ₁	7 27	...	...	...
		SR ₁	11 25	...	...	...				SR ₂	8 39	...	...	...
		F	Masked by the following								L	11 37	
Sep. 20	E	P	5 34 17	...	...	7680	shock.			F	Lost while changing chart.				
		PR ₁	36 56	...	...	...		Oct. 1	E	e	6 15 29	...	...	...	Tremors.
		PR ₂	38 20	...	...	...				F	44 ...	...	...	...
		IS	43 27	...	...	...		Oct. 2	E	IP	5 42 35	...	...	6265	
		PS	43 57	...	...	...				PR ₁	44 46	...	...	...
		SR ₁	48 8	...	...	...				PR ₂	45 45	...	...	...
		SR ₂	50 43	...	...	...				S	50 29	...	...	...
		L	56 22	...	...	...				PS	50 56	...	...	...
		M	6 1 59	...	...	...				SR ₁	54 22	...	...	...
		F	Lost while changing chart.								SR ₂	56 3	
Sep. 20	E	P	21 15 14	...	...	7835		Oct. 4	E	IP	5 23 41	...	...	5000 (?)	L-waves poor.
		S	24 32	...	...	...				ePR ₁	25 19	...	...	...
		PS	25 3	...	...	...				S	30 19	...	...	...
		F	22 48	...	...	...				SR ₁ (?)	33 21	...	...	...
Sep. 23	E	IP	9 29 23	...	...	7680				F	6 24 ...	...	...	...
		PR ₁	32 1	...	...	...		Oct. 4	E	eP	14 53 9	...	...	1190	
		PR ₂	33 31	...	...	...				e	55 8	...	...	...
		IS	38 33	...	...	...				eS	55 21	...	...	...
		PS	39 5	...	...	...				S	56 33	...	...	...
		SR ₁	43 5	...	...	...				F	15 42 ...	...	...	...
		SR ₂	45 52	...	...	...		Oct. 6	E	i	5 0 45	...	...	...
		L	51 31	...	...	...				F	6 10 ...	...	...	...
		M	56 36	...	...	...		Oct. 6	E	e	14 48 30	...	...	...
		F	13 0	...	...	...				Mn	53 39 11 8	...	...	...
Sep. 24	E	P	5 12 7	...	...	7500				F	15 22 ...	...	...	...
		PR ₁	14 35	...	...	...		Oct. 7	E	e	6 14 31	...	...	...	Tremors.
		S	21 9	...	...	...				F	42 ...	...	...	...
		PS	21 43	...	...	...						...	...	...
Sep. 25	E	IP	10 30 47	...	...	7620						...	...	...
		PR ₁	33 12	...	...	...						...	...	...
		IS	39 54	...	...	...						...	...	...
		F	12 4	...	...	...						...	...	...

TABLE D₁—contd.

Date.	Compt.	Phase.	G. M. T.	Period.	Amplitude.	△	Remarks.	Date.	Compt.	Phase.	G. M. T.	Period.	Amplitude.	△	Remarks.
1935.			H. M. S.	Sec.	μ	Km.		1935.			H. M. S.	Sec.	μ	Km.	
Oct. 8	N, E	P	9 22 9	...	...	1280		Oct. 17	E	e	14 39 51	...	...	2300	
	N	S	24 26	...	...	...			N	e	43 57	...	...	...
	E	S	24 19	...	...	...			E	eS	43 40	...	...	...
	E	S̄	25 41	...	...	...			E	SR ₁	44 17	...	...	...
	N	F	57 ...	...	...	...			E	L	45 17	...	...	...
	E	F	10 52 ...	...	...	...			E	M	47 5	...	...	...
Oct. 9	E	i	22 29 15	...	...	...			N	F	15 17 ...	...	...	...
		F	23 26 ...	...	...	...			E	F	16 1 ...	...	...	...
Oct. 10	E	e	20 18 37	...	...	...	Tremors.	Oct. 18	N, E	P	0 21 27	...	...	6265	Epc: Japan
		F	21 4 ...	...	...	...			E	PR ₁	23 33	...	...	...
Oct. 11	E	P	4 22 50	...	...	1045	L-waves poor. Deep-focus (△ from Brunner chart) Felt at Peshawar.		E	PR ₂	24 36	...	...	...
		S	24 43	...	...	...			N, E	-	29 21	...	...	...
		F	52 ...	...	...	...			N, E	SR ₁	33 11	...	...	...
Oct. 11	E	P	22 27 13	...	...	7765			E	SR ₂	35 2	...	...	...
		IS	36 27	...	...	...			N	L	39 1	...	...	...
		PS	36 52	...	...	...			E	L	38 47	...	...	...
		SR ₁	41 9	...	...	...			N	F	Lost while changing chart.				
		L	49 35	...	...	...			E	F	4 2 ...	...	...	...
		F	Lost while changing chart.			...		Oct. 18	E	e	6 21 38	...	...	...	Tremors
Oct. 12	N, E	eP	16 54 50	...	...	6280	Epc: Japan.	Oct. 18	E	F	7 1 ...	...	...	...
	N, E	S	17 2 31	...	...	...			E	iP	11 15 32	...	...	6720	
	E	SR ₁	6 30	...	...	...				PR ₁	18 55	...	...	...
	E	SR ₂	8 19	...	...	...				IS	23 52	...	...	...
	E	L	12 13	...	...	...				SR ₁	27 58	...	...	...
	N	Mn	21 17	16	34	...				L	34 27	...	...	...
	E	Mn	25 20	13	30	...				M	39 18	...	...	...
	N	F	19 3 ...	...	...	...				F	14 21 ...	...	...	...
	E	F	20 19 ...	...	...	...		Oct. 18	E	iP	15 3 24	...	...	6000	
Oct. 13	E	P	2 7 1	...	...	6080				PR ₁	5 30	...	...	...
		PR ₁	9 7	...	...	...				S	10 57	...	...	...
		S	14 49	...	...	...				PS	11 26	...	...	...
		SR ₁	18 27	...	...	...				SR ₁	14 47	...	...	...
		SR ₂	20 17	...	...	...				SR ₂	16 16	...	...	...
		Mn	33 37	15	9	...				M	24 11	...	...	...
						...				Mn	33 55	13	22	...	
Oct. 13	E	e	10 27 27	...	...	...		Oct. 18	E	P	22 0 56	...	...	6210	
		F	11 9 ...	...	...	...				S	8 45	...	...	...
Oct. 13	E	e	19 46 37	...	...	...	Tremors.			SR ₁	12 28	...	...	...
		F	20 7 ...	...	...	...				Mn	27 38	14	7	...	
Oct. 14	E	e	20 26 20	...	...	...		Oct. 19	E	eP	2 48 29	...	...	...
		i	27 19	...	...	...				eS (?)	56 11	...	...	...
		F	51 ...	...	...	...				SR ₁ (?)	59 59	...	...	...
Oct. 15	E	e	17 12 8	...	...	...	Tremors.	Oct. 19	E	e	5 20 27	...	...	...
		F	30 ...	...	...	...				F	6 27 ...	...	...	...
Oct. 15	E	e	21 8 57	...	...	...	Tremors.	Oct. 19	E	i	20 28 33	...	...	...	Felt at Shillong and Jorhat in Assam.
		F	34 ...	...	...	...				F	45 ...	...	...	...
						...		Oct. 20	E	iP	4 55 40	...	...	2200	
						...				S	59 12	...	...	...

TABLE D₁—contd.

Date.	Compt.	Phase.	G. M. T.	Period.	Amplitude.	△	Remarks.	Date.	Compt.	Phase.	G. M. T.	Period.	Amplitude.	△	Remarks.
1935.			H. M. S.	Sec.	μ	Km.		1935.			H. M. S.	Sec.	μ	Km.	
Nov. 30	E	e	3 39 9	...	...	...		Dec. 15	N	i	31 29	...	...	...
		i	56 59	...	...	...			E	PPS	33 27	...	...	...
		F	6 32	...	...	...			E	SR ₁	37 39	...	...	...
Nov. 30	E	e	16 35 39	...	...	...	Felt at Dhubri, Gauhati, Cooch Behar and Jaipalguri.		E	SR ₂	41 35	...	...	...
		i	33 57	...	...	...			E	L?	47 49	...	...	...
		F	53	...	...	...			N	Mn	50 23	31	1016	...	
Dec. 1	E	eP	23 53 9	...	...	4730		Dec. 17	E	e	13 40 2	...	...	...
		S	59 39	...	...	...		Dec. 17	E	iP	19 25 31	...	...	4680	Epc: East of Formosa.
		Mn	0 13 55	11	18	...			E	PR ₁	27 3	...	...	...
		F	Lost while changing chart.			...			N, E	i	27 23	...	...	...	...
Dec. 2	E	e	16 50 50	...	...	...			N, E	iS	31 59	...	...	...
		e(S?)	57 13	...	...	...			N	iSR ₂	35 25	...	...	...
		Mn	17 11 33	13	13	...			E	SR ₂ ?	35 31	...	...	...
Dec. 5	E	eP	18 9 3	...	...	9555		Dec. 18	N	Mn	42 25	24	332	...	
		ScPcS	19 3	...	...	...			E	eP	7 15 32	...	...	2510	
		iSR ₁	25 3	...	...	...			N, E	i	15 40	...	...	...
		F	20 29	...	...	...			E	PR ₁	15 57	...	...	...
Dec. 7	E	e	4 42 25	...	...	...			N, E	S	19 39	...	...	...
		e	43 18	...	...	...			E	SR ₁	20 46	...	...	...
		F	5 7	...	...	...			E	L	21 48	...	...	...
Dec. 8	E	i	17 35 19	...	...	...		Dec. 18	E	F	Masked by the following shock.			2510	
		F	18 32	...	...	...			E	P	8 9 28	...	...	...
Dec. 9	E	e	7 48 46	...	...	...				ePR ₁	9 57	...	...	...
Dec. 9	E	e	16 2 52	...	...	...				iS	13 34	...	...	...
		F	19	...	...	...				SR ₁	14 36	...	...	...
Dec. 11	E	e	9 0 40	...	...	...				Mn	19 16	12	8	...	
		Mn	12 5	12	5	...		Dec. 18	E	e	13 24 2	...	...	...
		F	45	...	...	...		Dec. 18	E	P	17 4 29	...	...	2510	
Dec. 11	E	e	12 19 25	...	...	...			E	PR ₁	4 57	...	...	...
		F	36	...	...	...			N, E	S	8 37	...	...	...
Dec. 14	E	iP	1 49 43	...	...	...			E	SR ₁	9 37	...	...	...
		ePR ₁	52 11	...	...	...			E	Mn	14 18	...	...	...
		S?	59 1	...	...	...			N	F	38	...	...	...
		SR ₂ ?	2 6 17	...	...	...		Dec. 19	E	F	18 14	...	...	...
Dec. 14	E	eP ¹	22 24 43	...	...	15400	Epc: 14° N, 94° W (U. S. C. G. S.)	Dec. 19	E	e	9 48 1	...	...	...
		PR ₁	27 27	...	...	...				Mn	57 47	12	5	...	
	N, E	ScPcP	28 19	...	...	...		Dec. 19	E	e	13 31 47	...	...	...
	E	SR ₁	45 32	...	...	...				i	35 51	...	...	...
	N	Mn	23 29 18	22	65	...				Mn	41 28	...	...	...
	E	F	Lost while changing chart.			...		Dec. 19	E	e	21 32 2	...	...	...
Dec. 15	E	P	7 20 37	...	...	10100	Epc: 12° S, 161° E. (U. S. C. G. S.)	Dec. 19	E	eP	23 13 14	...	...	1005	Felt at Quetta.
	N	e	21 15	...	...	...				iS	15 10	...	...	...
	E	PR ₁	24 13	...	...	...	Felt in Solomon Islands.	Dec. 20	E	e	0 26 39	...	...	...
	E	PR ₁	26 18	...	...	...				F	41	...	...	...
	E	ScPcS	30 57	...	...	...		Dec. 20	E	e	18 49 47	...	...	...
										i	19 0 5	...	...	...
								Dec. 22	E	e	21 39 31	...	...	...
								Dec. 23	E	e	14 53 35	...	...	...
										Mn	15 22 40	20	14	...	

TABLE D₁—concl'd.

Date.	Compt.	Phase.	G. M. T.	Period.	Amplitude.	△	Remarks.	Date.	Compt.	Phase.	G. M. T.	Period.	Amplitude.	△	Remarks.	
1935.			H. M. S.	Sec.	μ	Km.		1935.			H. M. S.	Sec.	μ	Km.		
Dec. 24	E	e	12 43 45	...	...	...	Distant shock.	Dec. 29	E	i	3 54 41	...	...	...
Dec. 28	E	IP	2 41 59	...	...	3620	Great. Epc: North Sumatra	Dec. 29	E	e	18 5 15	...	...	...
		IS	47 23					F	18	
		SR ₁	48 59	
Dec. 28	E	e	17 34 8	...	...	...		Dec. 29	E	IP	23 47 9	...	...	6385	
		i	36 48	...	...	...				PR ₁	49 19	...	...	...
Dec. 28	E	e	19 8 59	...	...	...				IS	55 8	...	...	...
		F	36 ...	...	...	...				PS	55 44	...	...	...
Dec. 29	E	eP	3 35 26	...	...	6355				SR ₁	58 52	...	...	...
		ePR ₂	38 41	...	...	...				SR ₂	0 1 4	...	...	...
		S	43 27	...	...	...				F	Lost while changing chart.	...	...	...
		PS	43 58	...	...	...		Dec. 30	E	e	4 22 39	...	...	...
		SR ₁	47 11	...	...	...				i	25 34	...	...	...
Large waves masked by the following shock.										F	5 17 ...	...	...	...

G. CHATTERJEE,

Meteorologist-in-charge, Upper Air Observatory, Agra.

STATION—COLABA OBSERVATORY, BOMBAY.

Lat. 18° 54' N Long. 72° 49' E. Height above M. S. L. 6 metres.

Lithologic foundation : Trap Rock.

Instruments :—Milne-Shaw seismographs, North-South (N) and East-West (E) components, installed in the underground constant temperature room. Photographic registration.

INSTRUMENTAL CONSTANTS*.

Component.	Steady mass (Kg.)	T. (sec.).	Vm	ε	Paper speed (mm./min.).
N	0.45	12	250	20 : 1	8
E	0.45	12	350	22 : 1	8

TABLE D₂.

Date.	Compt.	Phase.	G. M. T.		Period.	Amplitude.	△	Remarks.	Date.	Compt.	Phase.	G. M. T.		Period.	Amplitude.	△	Remarks.
			H. M. S.	Sec.								H. M. S.	Sec.				
1935.																	
Jan. 1	E	eP ¹ (?)	13 38 46	...	...	18110	Slight. Beginning uncertain.	1935.	E	L	57 26	...	...	...
	E	i	40 17	...	...	...			N	Mn	58 40	7	2	...			
	N	e	...	...	...	...			E	Mn	7 0 3	7	1	...			
	N,E	ScPcS	45 32	...	...	...	Surface waves poorly developed.		N,E	F	7 18	...	...	...
	N,E	ScPoPcS	46 50	...	...	...	Deep focus. Epc: 14° S., 175° W. (J. S. A.), Friendly Islands.	Jan. 3	N,E	e	14 36	...	...	...			Tremors. Probably aftershock of the Great Tibetan earthquake.
	N,E	S	47 47	...	...	...			N,E	f	56	...	...	...
	N,E	PS	49 35	...	...	...								
	N,E	SR ₁	55 53	...	...	...		Jan. 3	N	e	17 10	...	...	...			Do.
	N,E	SR ₂	14 0 20	...	...	...			E	e	9	...	...	...
	N,E	F	15 46	...	...	...			N,E	f	27	...	...	...
	E	F	42	...	...	...		Jan. 3	N,E	e	18 26	...	...	...			Do.
Jan. 2	N,E	eP	22 27 38	...	...	1845	Slight. Probably aftershock of the Great Tibetan shock of Dec. 15, 1934.		N	f	40	...	...	...
	N,E	eS	30 45	...	...	...			E	f	38	...	...	...
	N	Mn	35 17	7	4	...		Jan. 4	N,E	eP	8 5 2	...	...	...	1810		Slight. Aftershock of the Tibetan earthquake of Jan. 3.
	E	Mn	35 41	7	3	...			N,E	eS	8 11	...	...	...
	N	F	23 1	...	...	...			N	Mn	10 44	7	2	...			
	E	F	5	...	...	...			E	Mn	14 23	8	2	...			
Jan. 3	N,E	iP	1 54 23	...	...	1880	Great. Epc: 30° N., 87° E., Tibet. O = 1h. 50m. 26s.		N	F	29	...	...	...
	N,E	PR ₁	54 38	...	...	...			E	F	28	...	...	...
	N,E	P*	55 16	...	...	...		Jan. 4	N	e	10 26 45	...	...	...			Feeble, near.
	N,E	P	56 4	...	...	...			E	i	30 36	...	...	...
	N,E	iS	57 38	...	...	...			E	F	58	...	...	...
	N,E	iSR ₁	58 8	...	...	...			N	F	11 4	...	...	...
	N,E	S*	58 45	...	...	...		Jan. 4	N,E	iP	14 49 39	...	...	...	4845		Moderate.
	N,E	S	59 45	...	...	...			N,E	eS	56 15	...	...	...			Epc: 41° N., 29° E., Turkey. Destructive in Marmora Islands.
	N	Mn	2 2 30	...	258	...	Period uncertain.		N,E	SR ₁	59 5	...	...	...
	l	Mn	1 30	8	270	...			N,E	eL	15 3	...	...	...
	N,E	F	4 5	...	...	...			N	Mn	16 8 38	25	30	...			
Jan. 3	N,E	e	6 38	...	...	...	Tremors.		E	Mn	16 9 26	16	11	...			
	N,E	f	49	...	...	...			N	F	17 27	...	...	...
Jan. 3	N,E	eP	6 58 2	...	...	1810	Beginning near minute break.		E	F	17 25	...	...	...
	N,E	eS	56 11	...	...	...	Slight. Aftershock of the Great Tibetan earthquake.	Jan. 4	N,E	iP	16 28 14	...	...	...	4845		Slight. Aftershock of Marmora Earthquake.
	N,E	SR ₁	56 38	...	...	...			N,E	iS	34 49	...	...	...
	N	L	57 22	...	...	...								

* Erratum :—Omit the Column "ε" from the Tables of Constants of Milne-Shaw Seismograph printed at the top of the Bombay Seismic Data for the years 1923 to 1931,

TABLE D₂—contd.

Date.	Compt.	Phase.	G. M. T.		Amplitude.	△	Remarks.	Date.	Compt.	Phase.	G. M. T.		Amplitude.	△	Remarks.
			H. M. S.	Sec.							H. M. S.	Sec.			
					μ	Km.									
1935.	N,E	L	41 42	...	...	...		1935.	E	i	2 32 42	...	...	...	Slight.
	N	Mn	47 32	23	15	...		Jan. 17	E	i	33 20	...	...	...	P lost in shifting.
	E	Mn	48 9	15	6	...			N	Mn	3 1 30	32	13	...	
	N,E	F	Mixed up with the following shock.						E	Mn	0 37	37	16	...	
Jan. 4	N,E	e	Mixed up with the preceding shock.				Feeble.		N,E	F	Mixed up with microseisms.				
	N,E	F	18 10	...	...	...		Jan. 18	E	i	2 12 30	...	...	...	Slight.
Jan. 4	N,E	e	10 9	...	...	...	Tremors.		N,E	F	Masked by microseisms.				
	N,E	f	22	...	...	...		Jan. 18	N	e	17 22 39	...	...	...	Feeble, distant.
Jan. 4	N,E	M	20 2	...	...	...	Feeble seismic activity about the time.		E	i	22 34	...	...	...
Jan. 4	N,E	e	23 45	...	...	...	Tremors.		E	i	29 42	...	...	...
	N,E	f	0 11	...	...	...			N	Mn	43 42	...	...	...
Jan. 5	N,E	e	10 14 35	...	...	...	Feeble shock. Probably aftershock of moderate quake of 4-1-35.	Jan. 19	N,E	e	12 55	...	...	...	Tremors.
	E	i	16 8	...	...	...			N,E	f	14 19	...	...	...
	N	e	16 18	...	...	...		Jan. 22	N,E	e	15 7 42	...	...	...	Feeble. Distant.
	N,E	i	20 45	...	...	...			N	e	16 42	...	...	...
	N	F	11 11	...	...	...			E	F	16 3	...	...	...
	E	F	0	...	...	...			N	F	20	...	...	...
Jan. 5	E	Mn	16 32 56	...	...	...	Seismic activity.	Jan. 22	N	M	23 48 29	...	...	...	Feeble. Near.
Jan. 6	N,E	IP	7 14 32	...	...	1810	Slight. Aftershock of the great Tibetan Earthquake of 3-1-35.	Jan. 23	N,E	IP	7 37 7	...	...	10155	Great. Epc: 52° N, 170° W (U. S. C. G. S.) Aleutian Islands.
	N,E	S	17 41	...	...	...			N,E	PR ₁	40 42	...	...	...
	N	SR ₁	18 6	...	...	...			N	ScPcS	47 30	...	...	...
	N,E	L	19	...	...	...			N	PS	49 11	...	...	...
	N	Mn	21 51	7	4	...			N,E	SR ₁	54 20	...	...	...
	E	Mn	22 2	9	5	...			N,E	SR ₂	58 16	...	...	...
	N	F	45	...	...	...			N	eL	8 5 0	...	...	...
	E	F	47	...	...	...			E	eL	8 4 43	...	...	...
Jan. 6	N	Mn	11 29 48	...	...	...	Seismic activity.		N	Mn	22 8	20	66	...	
	E	Mn	33 12	...	...	...			E	Mn	22 23	17	35	...	
Jan. 6	N	Mn	18 6 0	...	...	...	Seismic activity.		N	F	11 40	...	...	...
	E	Mn	7 0	...	...	...			E	F	11 20	...	...	...
Jan. 7	N,E	Mn	2 58 30	...	...	...	Feeble. Felt at Dhubri and Gauhati, Assam.	Jan. 25	N	Mn	15 10 27	...	...	...	Seismic activity.
Jan. 9	N,E	Mn	4 21 23	...	...	...	Feeble.	Jan. 27	N,E	e	23 17 0	...	...	...	Feeble. Near.
Jan. 10	N	Mn	11 33 25	9	3	...	Feeble.		N,E	F	27	...	...	...
	E	Mn	34 17	8	2	...		Jan. 30	N	e	30 0 57	...	...	...	Feeble. Near.
Jan. 11	E	Mn	0 40 28	...	...	...	Seismic activity.		N	F	1 10	...	...	...
Jan. 11	N,E	Mn	21 25 9	...	...	...	Seismic activity.		E	Phases masked by microseisms.					
Jan. 13	N	Mn	20 14 36	...	...	...	Seismic activity. E cannot be tabulated owing to overlapping lines.	Jan. 31	N,E	e	12 9	...	...	...	Feeble. Near
Jan. 16	N	Mn	4 52 40	...	...	...	Seismic activity.		N	f	25	...	...	...
	E	Mn	52 27	...	...	...			E	f	22	...	...	...
Jan. 16	E	e	6 22 45	...	...	...	Feeble.		N	e	18 10 0	...	...	...	Slight. Distant.
									E	i	10 0	...	...	...
									N	Mn	19 1 15	...	...	...
									N	F	19 45	...	...	...
									E	F	Masked by microseisms.				
								Feb. 2	N,E	e	15 38 0	...	...	...	Feeble. Near.

TABLE D₂—contd.

Date.	Compt.	Phase.	G. M. T.	Period.	Amplitude.	△	Remarks.	Date.	Compt.	Phase.	G. M. T.	Period.	Amplitude.	△	Remarks.
			H. M. S.	Sec.	μ	Km.					H. M. S.	Sec.	μ	Km.	
1935.	N	F	47 ...	...	...	...		1935.	E	Mn	24 31	11	...	...
	E	F	51 ...	...	...	...			N	F	47 ...	...	...	...
Feb. 3	E	iP	2 14 33	...	...	1855	Slight. Epc: 35°N., 73°E. Kohistan (N. W. Frontier Province) Felt fairly strongly at Deas, Srinagar, Doshi, Cherat and Peshawar.	Feb. 22	N,E	eP	17 18 18	...	...	9235	Great. Epc: 52° N. 175° E. (U. S. C. G. S.) Aleutian Islands.
	E	iS	17 40	...	...	...			N,E	S	28 39	...	...	...
	E	L	19 0	...	...	...			N	eL	47 ...	...	...	...
	N	F	3 24 ...	...	...	...			N	Mn	53 38	17	139	...	
	E	F	18 ...	...	...	...			N	F	20 58 ...	...	...	...
Feb. 3	N,E	iP	16 35 42	...	...	2110	Slight.	Feb. 23	E	e	3 53 ...	...	...	...	Tremors. N-Movements very feeble.
	N,E	iS	39 16	...	...	...			E	f	4 59 ...	...	...	...
	N	Mn	43 7	11	4	...		Feb. 23	N	Mn	21 20 23	...	...	...	Seismic activity E congestion of lines.
	E	Mn	42 58	8	3	...		Feb. 24	E	e	12 2 ...	...	...	...	Tremors.
	N,E	F	17 45 ...	...	...	...			N	e	4 ...	...	...	...
Feb. 4	N,E	e	7 55 50	...	...	...	Feeble.	Feb. 24	N,E	f	31 ...	...	...	...
	N,E	e	8 2 10	...	...	...			N	e	4 ...	...	...	...
	N	Mn	14 15	...	...	...		Feb. 25	N,E	iP	2 59 40	...	...	4890	Moderate. Epc: 35° 5' N., 24° E. (Strasbourg). Destructive in Crete.
	E	Mn	14 37	...	...	...			N,E	iS	3 6 18	...	...	...
Feb. 4	N	Mn	18 39 30	...	...	...	Seismic activity.		N	F	4 17 ...	...	...	...
Feb. 4	N	e	21 25 ...	...	...	...	Tremors.	Feb. 27	N,E	e	9 18 47	...	...	...	Slight. Distant.
	N	f	47 ...	...	...	...			E	Mn	40 29	23	5	...	
Feb. 7	E	F	17 37 46	...	...	5250	Slight. Epc: Luzan District Philippine Islands. Manila Δ = 220 kms.		E	f	10 14 ...	...	...	...
	N,E	iS	44 46	...	...	...			N	f	10 27 ...	...	...	...
	N,E	SR ₁	47 39	...	...	...		Mar. 3	N,E	eP	22 50 24	...	...	2020	Slight.
	N	F	18 33 ...	...	...	...			N,E	eS	53 51	...	...	...	Epc.: 36°N., 81° E., Tibet.
	E	F	18 16 ...	...	...	...			N,E	L	55 15	...	...	...
Feb. 9	E	eP	19 28 3	...	...	4955	Slight.		N	Mn	59 20	8	3	...	
	E	PR ₁	29 49	...	...	...	Epc: 24° 2' N., 121° 0' E., (Taihoku), Formosa Island.		E	Mn	57 51	7	3	...	
	N,E	iS	34 45	...	...	...			N	F	23 27 ...	...	...	...
	N	Mn	46 52	15	12	...			E	F	23 14 ...	...	...	...
	E	F	20 17 ...	...	...	...		Mar. 4	N,E	eP	16 19 27	...	...	1920	Slight.
	N	F	20 38 ...	...	...	...			N,E	eS	22 46	...	...	...	Epc.: Tibet, near previous shock.
Feb. 10	N	Mn	20 33 40	...	...	...	Seismic activity.		N,E	SR ₁ (?)	23 26	...	...	...
Feb. 19	N, E	e	3 26 ...	...	...	...	Tremors.		N,E	eL (?)	24 14	...	...	...
	N	f	35 ...	...	...	...			N	Mn	26 46	8	5	...	
	E	f	36 ...	...	...	...			E	Mn	27 1	8	4	...	
Feb. 10	N	e	20 20 36	...	...	...	Feeble. Distant.		N	F	51 ...	...	...	...
	N	e	29 12	...	...	...		Mar. 5	N,E	c	3 39 ...	...	...	...	Tremors.
	N	Mn	49 34	...	...	...			N	f	46 ...	...	...	...
	N	F	21 12 ...	...	...	...			E	f	49 ...	...	...	...
Feb. 21	N, E	e	18 50 39	...	...	...	Slight. Distant.	Mar. 5	N,E	eP	10 31 57	...	...	2665	Slight.
	N, E	Mn	59 15	...	...	...			N,E	eS	36 16	...	...	...	Epc.: Probably Russian Turkistan.
	N	F	19 18 ...	...	...	...			N,E	L	38 50	...	...	...
	E	F	23 ...	...	...	...			N	Mn	43 12	...	...	...
Feb. 22	N, E	e	9 14 0	...	...	...	Slight. Dis' ant.		E	Mn	42 8	15	15	...	
	N	Mn	23 24	13	3	...			N	F	11 52 ...	...	...	...
									E	F	56 ...	...	...	...

TABLE D₂—*contd.*

Date.	Compt.	Phase.	G. M. T.		Amplitude.	△	Remarks.	Date.	Compt.	Phase.	G. M. T.		Amplitude.	△	Remarks.
			H. M. S.	Sec.							H. M. S.	Sec.			
1935.					μ	Km.		1935.							
Mar. 5-6	N,E	IP	22 18 57	...	...	1190	Moderate. Epc: 28° 5 N. 79° E Rohilkhand (U. P.)	E	eL	18 21	...	...	...
	N,E	S	21 8	...	...	...		E	F	9 6	...	...	...
	N,E	SR ₁	21 31	...	...	...		Mar. 18	N,E	e	8 49	...	...	...	Feeble. Near.
	N,E	L	21 52	...	...	...	Felt strongly at Moradabad, Bareilly and Meerut.	N,E	e	55 40	...	...	...
	N	Mn	24 3	7	144	...		E	Mn	59 3	...	...	...
	E	Mn	22 48	...	...	...		N,E	F	9 36	...	...	...
	N	F	0 0	...	...	...	O: 22h. 16m. 20s. G. M. T.	Mar. 18	N	Mn	9 59 21	...	...	...	Seismic activity.
Mar. 7	N	c	7 23	...	...	...	Tremors.	E	Mn	59 17	...	...	...
	N	f	8 6	...	...	...		Mar. 20	N,E	Mn	9 3 20	...	...	...	Seismic activity.
Mar. 7	N	e	10 44	...	...	...	Tremors.	Mar. 20	N	Mn	10 14 20	...	...	...	Seismic activity.
	N	f	11 26	...	...	...		E	Mn	14 32	...	...	...
Mar. 9	N	e	3 29	...	...	...	Tremors.	Mar. 20	N,E	P	23 10 8	...	...	9680	Slight. Epc: 4° S. 156° E., Solomon Islands.
	N	f	3 42	...	...	...		N,E	S	20 48	...	...	...
Mar. 11	N,E	e	11 36	...	...	...	Tremors.	N,E	eL	39	...	...	...
	N	f	12 24	...	...	...		E	Mn	47 25	2: 10	...	...
	E	f	12 20	...	...	...		N,E	F	Mixed up with the following shock.					
Mar. 12	N	c	13 38	...	...	...	Feeble. Distant.	Mar. 21	N,E	IP	00 7 51	...	...	1655	Slight. Epc: 24° N., 88° 3 E. Bengal.
	N,E	e	40 33	...	...	...		N,E	IS	10 45	...	...	...
	N,E	F	15 9	...	...	...		N,E	SR ₁	11 14	...	...	...
Mar. 13	N,E	e	3 22 45	...	...	...	Feeble. Near.	N,E	IL	11 44	...	...	...		Felt strongly at Berhampur.
	N,E	e	24 15	...	...	...		N	Mn	13 28	5 36	...	...
	N	F	45	...	...	...		E	Mn	13 6	6 17	...	...		O: Oh. 4m. 18s. G. M. T. Calcutta Δ = 160 Kms.
	E	F	50	...	...	...		N,E	F	1 49	...	...	...
Mar. 13	N,E	e	19 0	...	...	...	Tremors.	Mar. 21	N	Mn	8 30 28	...	...	...	Seismic activity.
	N,E	f	19 15	...	...	...		E	Mn	8 27 19	...	...	...
Mar. 14	N,E	e	9 25	...	...	...	Tremors.	Mar. 22	N	e	23 25	...	...	...	Tremors.
	N,E	f	9 45	...	...	...		E	f	32	...	...	...
Mar. 14	N,E	c	12 27	...	...	...	Tremors.	Mar. 24	N,E	e	0 4 0	...	...	...	Feeble. Near.
	N,E	F	15 0	...	...	...		N,E	F	21	...	...	...
Mar. 14	E	e	15 52	...	...	...	Tremors.	Mar. 27	E	Mn	3 9 30	...	...	...	Seismic activity.
	N	e	58	...	...	...		Mar. 27	N,E	e	14 46	...	...	...	Tremors.
	N	F	17 24	...	...	...		N	F	15 16	...	...	...
	E	F	18 0	...	...	...		E	F	15 17	...	...	...
Mar. 15	N,E	eP	10 36 50	...	...	1290	Slight. Epc: Aftershock of Rohilkhand earth- quake.	Mar. 28	N,E	P	23 56 26	...	...	5200	Slight
	N,E	eS	39 10	...	...	...		N,E	PR ₁	58 15	...	...	...
	N,E	S (?)	40 27	...	...	...		N	eS	0 3 23	...	...	...
	N	Mn	42 8	7	8	...		E	IS	3 20	...	...	...
	N,E	F	11 5	...	...	...		E	SR ₁	6 25	...	...	...
Mar. 15	N,E	Mn	12 9 0	...	...	...	Seismic activity.	N	F	33	...	...	...
Mar. 15	N,E	I	12 20 30	...	...	...	Slight. Near.	Mar. 29	N,E	eP ¹	12 42 54	...	...	13145	Slight. Epc: Probably New Zealand.
	N,E	I	24 40	...	...	...		N,E	PR ₁	44 6	...	...	...
	N,E	F	57	...	...	...		N,E	Sc PcS	49 54	...	...	...
Mar. 16	E	iP	8 00 18	...	...	6845	Slight.	N,E	S	51 54	...	...	...
	E	IS	8 18	...	...	...		N,E	PS	53 54	...	...	...
								N,E	PPS	55 9	...	...	...

TABLE D,--contd.

Date.	Compt.	Phase.	G. M. T.			△	Remarks.	Date.	Compt.	Phase.	G. M. T.			△	Remarks.
			H. M. S.	Sec.	μ						Km.	H. M. S.	Sec.			μ	Km.
1935.															
	N	Mn	13 35 20	15	7	...		Apr. 9	N,E	e	20 11 ...	...	...		Tremors.
	E	Mn	35 18	16	8	...			N,E	f	30 ...	...	...
	N	F	15 13 ...	...	...	...		Apr. 10	N,E	e	12 25 34	...	...		Slight.
	E	F	25 ...	...	...	...			N	Mn	38 30	...	...
Mar. 30	N	Mn	3 19 30	...	...	...	Seismic activity.		E	Mn	40 16	...	...
	E	Mn	19 34	...	...	...			N,E	F	13 23 ...	...	...
Mar. 30	N	eP	21 30 0	...	...	6755	Slight. Epc: probably Japan.	Apr. 11	E	e	19 43 19	...	...
	E	iP	30 3	...	...	...			N,E	e	47 14	...	...
	N	S	38 24	...	...	...			N,E	f	20 14 ...	...	...
	E	iS	38 27	...	...	...		Apr. 11	N,E	eP	1 23 2	...	...	2535	Slight.
	N	PS	38 48	...	...	...			N,E	PR ₁	23 36	...	...		Epc: 14° N, 96° E. Gulf of Martaban O: 1h. 17m. 56s. G. M. T.
	N,E	SR ₁	43 2	...	...	...			N,E	iS	27 11	...	...
	N,E	SR ₁	45 33	...	...	...			N,E	SR ₁	28 5	...	...
	N	eL	50 ...	...	...	...			N	L	29 ...	...	...		Maximum move- ments lost in shifting.
	E	eL	51 ...	...	...	...			N,E	F	3 2 ...	...	...
	N	Mn	59 8	15	6	...		Apr. 11	N,E	e	4 34 ...	...	...		Slight. Near.
	E	Mn	22 1 33	...	...	...			N,E	e	39 ...	...	...
	N,E	F	23 7 ...	...	...	...			N,E	f	57 ...	...	...
Mar. 31	N,E	e	3 32 ...	...	...	...	Tremors.	Apr. 11	N,E	iP	23 20 4	...	...	2900	Moderate.
	N,E	f	4 26 ...	...	...	...			N,E	PR ₁	20 40	...	...		Epc: 37° N, 53° E, Destructive in Mazanderan district, Iran.
Apr. 1	E	e	2 41 ...	...	...	...	Feeble. Distant.		N,E	iS	24 40	...	...
	N,E	e	45 00	...	...	...			N,E	SR ₁	25 49	...	...
	E	Mn	3 28 30	...	...	...			N,E	L	27 13	...	...
	E	F	4 1 ...	...	...	...			N	Mn	32 52	11	46		O: 23h. 14m. 30s. G. M. T.
	N	F	8 ...	...	...	...			E	Mn	31 0	12	43		
Apr. 3	N,E	e	6 59 27	...	...	...	Feeble. Near.		N,E	F	Masked by the following shock.				
	N,E	i	7 1 31	...	...	...		Apr. 12	N,E	iP	1 11 57	...	...	2900	Slight.
	N,E	L	4 ..	...	...	...			N,E	iS	16 33	...	...		Aftershock of the Iran earthquake.
	N	Mn	8 24	15	2	...			E	SR ₁	17 42	...	...
	E	Mn	11 7	15	3	...			E	L	3 19 16	...	...
	N	F	8 10 ...	...	...	...			N	Mn	24 40	9	5		
	E	F	7 55 ...	...	...	...			N	F	2 0 ...	...	...
Apr. 3	N	Mn	10 9 5	...	...	...	Seismic activity.		E	F	Lost in shifting.				
	E	Mn	8 21	...	...	...		Apr. 12	N,E	iP	12 49 54	...	...	2855	Slight.
Apr. 3	N,E	iP	11 15 53	...	...	1835	Slight. Epc: 34° 5' N. 73° E. North West Fron- tier Province along western border of Kashmir. Felt strongly at Srin- nagar, Peshawar and Drosh O: 11h. 12m. 5s. G. M. T.		E	PR ₁	50 27	...	...		Aftershock of the Iran earthquake.
	N,E	PR ₁	16 7	...	...	...			N,E	eS	54 27	...	...
	N,E	iS	19 4	...	...	...			N,E	SR ₁	55 33	...	...
	N,E	SR ₁	19 31	...	...	...			N	Mn	13 2 26	10	5		
	N,E	L	20 19	...	...	...			E	Mn	2 26	15	7		
	N	Mn	21 16	7	6	...			N,E	F	45 ...	...	...
	E	Mn	21 42	7	6	...		Apr. 12	N,E	iP	22 37 14	...	...	2845	Slight.
	N	F	12 11 ...	...	...	...			E	PR ₁	37 48	...	...		Aftershock of the Iran earthquake.
	E	F	12 13 ...	...	...	...			N,E	iS	41 46	...	...
Apr. 3	N	Mn	12 59 0	...	...	...	Seismic activity.		N,E	L	44 ...	...	...
	E	Mn	59 11	...	...	...			N	Mn	49 56	...	...
Apr. 5	N,E	Mn	4 5 20	...	...	...	Seismic activity.		E	Mn	50 20	11	6		
									N,E	F	23 17 ...	...	...

TABLE D₂--contd.

Date.	Compt.	Phase.	G. M. T.		Period.	Amplitude.	△	Remarks.	Date.	Compt.	Phase.	G. M. T.		Period.	Amplitude.	△	Remarks.
			H. M. S.	Sec.								H. M. S.	Sec.				
1935.																	
Apr. 13	N,E	i	2 34 35	...	...	...	...	Feeble. Distant.		E	Mn	30 45	13	83	...		
	N,E	e	40 0	...	...	...	...			N	F	0 52	...	...	...
	N	Mn	47 53	...	...	...	...		Apr. 21	E	eP	7 34 30	...	...	5065	Slight. After shock.	
	E	Mn	47 52	...	...	...	...			N,E	iS	41 18	...	...	...
	N,E	F	3 5	...	...	...	...			N,E	SR ₁	44 18	...	...	...
Apr. 15	N	Mn	23 25 42	...	...	...	...	Seismic activity.		N,E	L	48 23	...	...	...
	E	Mn	23 16	...	...	...	...			N	Mn	55 19	...	...	...
Apr. 16	N,E	e	0 47	...	...	...	...	Feeble. Near.		E	Mn	54 41	...	...	...
	N,E	F	1 4	...	...	...	...		Apr. 21	N,E	F	9 3	...	...	...
Apr. 18	N,E	e	15 8	...	...	...	...	Feeble. Near.		N	Mn	19 40 30	...	...	...		Seismic activity.
	N	Mn	12 4	...	...	...	...		Apr. 22	N,E	e	13 24	...	...	...		Tremors.
	E	Mn	11 50	...	...	...	...			N,E	f	37	...	...	...
	N	F	26	...	...	...	...		Apr. 23	N,E	iP	16 50 16	...	...	2180	Moderate.	
	E	F	25	...	...	...	...			N,E	PR ₁	50 38	...	...	...	Epc: 25° 5' N., 92° E.,	
Apr. 19	N,E	iP	15 32 41	...	...	5780	Great.	Epc: 32° N. 17° E.,		N,E	iS	55 56	...	...	...	Assam. Felt strongly	
	N,E	PR ₁	34 37	...	...	...	Mediterranean Sea	off coast of Tripoli		N,E	SR ₁	54 11	...	...	...	at Shillong, Mymen-	
	N,E	PR ₁	35 28	...	...	...	0: 15h. 23m. 38s.	G. M. T.		N,E	i	54 38	...	...	...	sing and Dhubri.	
	N,E	iS	40 9	...	...	...				N	F	17 53	...	...	...	O: 16h. 45m. 47s.	
	N,E	PS	40 43	...	...	...			Apr. 24	N	F	17 36	...	...	...	G. M. T.	
	N,E	SR ₁	43 36	...	...	...				N	F	17 36	...	...	...
	N,E	SR ₂	45 4	...	...	...				E	F	17 36	...	...	...
	N,E	L	48 30	...	...	...				N	iP	15 56 45	...	...	2165	Slight	
	N	Mn	58 17	15	132	...				N	iS	16 0 24	...	...	...	Epc: 0° 5' N., 75° E.,	
	E	Mn	57 32	18	151	...				N	L	1 54	...	...	...	Southeast of Maldiv	
	N	F	19 15	...	...	...			Apr. 24	N	Mn	4 31	15	22	...	Islands.	
	E	F	19 20	...	...	...				N	Mn	4 31	15	22	...	O: 15h. 52m. 18s.	
Apr. 19	N,E	i	20 48 30	...	...	...	...	Slight. Distant		N	Mn	18 1 16	...	8	2	Feeble. Near.	
	N	Mn	21 4 16	18	4	...				E	Mn	1 16	...	7	3		
	E	Mn	5 40	15	5	...			Apr. 24	N,E	F	21	...	...	...
	N,E	F	22 1	...	...	...				N	Mn	20 16 30	...	...	...		Seismic activity.
Apr. 20	N,E	iP	5 20 10	...	...	5755	Slight. Epc: After	shock of Mediterr-	Apr. 26	E	Mn	8 45 30	...	...	...		Seismic activity.
	N	PR ₂	23 0	...	...	...	anean sea Earth-	quake.	Apr. 27	N,E	e	17 46	...	...	...		Tremors.
	N,E	iS	27 37	...	...	...				N,E	f	54	...	...	...
	N,E	L	35	...	...	...			Apr. 29	N,E	e	11 57	...	...	...		Tremors.
	N	Mn	47 56	15	12	...				N,E	f	12 23	...	...	...
	E	Mn	44 41	19	20	...			May 1	E	e	4 32	...	...	...		Tremors.
	N,E	F	7 28	...	...	...					f	44	...	...	...
Apr. 20	N,E	iP	22 10 15	...	...	5055	Great.	Epc: 24° N., 121° E.,	May 1	N,E	eP	10 31 25	...	...	3565	Slight.	
	E	PR ₁	11 53	...	...	...	Destructive in For-	mosa Island.		E	PR ₁	32 23	...	...	...	(Strasbourg)	
	E	PR ₂	12 36	...	...	...	O: 22h. 1m. 56s.	G. M. T.		N,E	iS	36 45	...	...	...	Kurdistan.	
	N,E	eS	16 45	...	...	...				N,E	L	41 20	...	...	...
	E	SR ₁	20 2	...	...	...				N	Mn	47 35	16	6	...		
	N,E	SR ₂	21 11	...	...	...				E	Mn	46 36	15	10	...		
	N,E	eL	23	...	...	...				N	F	12 13	...	...	...
	N	Mn	28 7	15	100	...			May 1	E	F	12 27	...	...	...
										N,E	e	14 14	...	...	...		Tremors.
										N,E	f	39	...	...	...

TABLE D₂-contd.

Date.	Compt.	Phase.	G. M. T.	Period.	Amplitude.	△	Remarks.	Date.	Compt.	Phase.	G. M. T.	Period.	Amplitude.	△	Remarks.
			H. M. S.	Sec.	μ	Km.					H. M. S.	Sec.	μ	Km.	
1935.								1935.							
May 4	N	e	23 17 27	...	...	...	Slight. Near.	May 15	N,E	P	2 4 7	...	...	1033	Moderate. Epc: 28° N, 68° 5' E, Upper Sind. O: 2h. 1m. 45s. G. M. T.
	N	Mn	29 49	...	...	...			N,E	P	5 3	...	...
	N	F	0 6	...	...	...			N,E	S	5 57	...	...
May 7	N,E	eP	6 4 45	...	...	5800	Slight. Epc: 7° N., 125° E., Mindana Island. O: 5h. 55m. 35s. G. M. T.		N,E	S*	6 27	...	...
	E	S	12 15	...	...	...			N	Mn	11 12	7	49	...	
	E	Mn	26 37	...	...	...			E	Mn	8 53	6	52	...	
	N,E	F	7 27	...	...	...			E	F	3 48 0	...	...	...
May 10	N,E	e	17 9 45	...	...	...	Slight. Near.	May 16	N	eP	17 28 33	...	...	2055	Slight. Epc: 37° N, 71° E, North Afghanistan. O: 17h. 24m. 25s. G. M. T.
	N	i	15 15	...	...	...			N	PR ₁	28 52	...	...	...
	N	Mn	23 16	...	...	...			N,E	S	32 3	...	...	...
	E	Mn	24 41	...	...	...			N	L	33 38	...	...	...
	N,E	F	18 1	...	...	...			E	L	33 30	...	...	...
May 12	N,E	eP	5 24 30	...	...	1980	Slight. Epc: 36° 5' N., 72° 5' E. Northwest Frontier Province. Felt at Drosh. O: 5h. 20m. 25s. G. M. T.		N	Mn	37 0	7	4	...	
	N,E	eS	27 54	...	...	...			E	Mn	37 26	10	5	...	
	N,E	L	30 0	...	...	...		May 16	N,E	F	18 9	...	...	...
	N	Mn	31 51	8	4	...			N	e	21 4	...	...	...	Feeble. Very distant.
	E	Mn	32 15	...	...	...			N	Mn	22 0 26	...	...	...
	N	F	6 0	...	...	...			E	Mn	0 32	...	...	...
	N	F	6 5	...	...	...			N,E	F	23 1	...	...	...
May 12	N,E	e	20 8	...	...	...	Feeble. Distant.	May 20	N,E	e	5 31 0	...	...	...	Feeble. Distant.
	E	M	38 16	...	...	...			N,E	e	38 44	...	...	...
	E	F	21 16	...	...	...			E	Mn	6 0 23	...	...	...
May 13	N	Mn	2 25 30	...	...	...	Seismic activity.		N,E	F	6 36	...	...	...
	E	Mn	24 15	...	...	...		May 21	N,E	P	4 26 33	...	...	1745	Slight. Epc: 27° 5' N., 87° E. East Nepal. O: 4h. 22m. 52s. G. M. T.
May 13	E	iP	19 59 21	...	...	210	Slight. Epc: 32° N., 101° E., O: 19h. 53m. 45s. G. M. T.		N,E	i	26 58	...	...	...
	N,E	SR ₁	5 8	...	...	...			N,E	S	29 36	...	...	...
	N	Mn	12 7	...	...	...			N,E	SR ₁	30 2	...	...	...
	E	Mn	13 46	9	14	...			N,E	L	30 43	...	...	...
	N	F	22 0	...	...	...			N	Mn	32 14	7	17	...	
	E	F	22 7	...	...	...		May 21	E	Mn	32 4	7	8	...	
May 13	N	Mn	23 39 32	...	...	...	Seismic activity.		N,E	F	57	...	...	...
	E	Mn	37 24	...	...	...			N,E	e	7 3 32	...	...	...	Feeble. Distant.
May 14	N,E	e	19 8 0	...	...	...	Tremors.	May 21	N,E	i	13 12	...	...	...
	N,E	f	25 0	...	...	...			N	F	8 39	...	...	...
May 14	N,E	eP	23 37 36	...	...	12355	Moderate. Epc: 58° S., 25° W., (J.S.A.). South Sandwich Islands.		E	F	8 27	...	...	...
	N,E	ePR ₁	42 6	...	...	...		May 21	N,E	e	13 27 32	...	...	...	Seismic activity.
	N,E	ScPcS	48 0	...	...	...		May 24	N,E	iP	5 45 35	...	...	5665	Moderate. Epc: 12° N. 125° E. North of Samar Island (Philippines) (J. S. A.)
	N,E	ScPc PeS	49 0	...	...	...			E	PR ₁	47 34	...	...	...
	E	S	49 45	...	...	...			N,E	iS	52 57	...	...	...
	N,E	IPS	51 36	...	...	...			N,E	PS	53 22	...	...	...
	N,E	SR ₁	58 6	...	...	...			N,E	L	6 1 0	...	...	...
	N	Mn	0 25 44	19	4	...			N	Mn	15 0	15	18	...	
	E	Mn	0 25 37	19	8	...			E	Mn	12 13	15	23	...	
	N,E	F					Mixed up with the next shock.	May 25	N	eP	0 17 5	...	...	5665	Slight. Aftershock of the previous Philippine Earthquake.
									E	iP					
									N,E	iS	24 27	...	...	...
									E	PS	24 58	...	...	...

TABLE D₂—contd.

Date.	Compt.	Phase.	G. M. T.		Period.	Amplitude.	△	Remarks.	Date.	Compt.	Phase.	G. M. T.		Period.	Amplitude.	△	Remarks.
			H. M. S.	Sec.								H. M. S.	Sec.				
1935.																	
	N,E	L	33 30	...	...	...			1935.								
	N	Mn	41 30	...	...	...			June 1	N,E	e	12 28	...	...	...		Tremors.
	E	Mn	42 28	...	...	...				N,E	f	41	...	...	...
	N	F	1 31	...	...	...			June 1	N,E	i	12 49 3	...	...	...		Seismic activity.
	E	F	1 38	...	...	...			June 2	N,E	iP	9 19 26	...	...	1235		Moderate. Aftershock of the Great Quetta Earthquake.
May 26	N,E	iP	22 13 02	...	...	5445		Slight. Aftershock of the Philippine Earthquake.		N,E	iS	21 41	...	...	...
	N,E	iS	20 17	...	...	...				N,E	SR ₁	22 4	...	...	...
	N	SR ₁	23 47	...	...	...				N,E	L	22 26	...	...	...
	E	Mn	37 37	...	...	...				N	Mn	24 10	7	37	...		
	N,E	F	23 40	...	...	...				E	Mn	24 4	5	33	...		
May 27	N,E	e	3 37	...	...	...		Feeble. Distant.	June 9	N,E	F	11 7	...	...	...
	N	Mn	4 23 26	...	...	...				E	Mn	7 9 35	...	...	...		Seismic activity.
	E	Mn	23 23	...	...	...			June 18	N,E	Mn	16 58 57	...	...	...		Seismic activity.
	N,E	F	5 10	...	...	...			June 18	E	iP	22 36 46	...	...	5520		Slight. Epc: Philippine Islands.
May 28	E	Mn	17 44 30	...	...	...		Seismic activity.		N,E	iS	44 0	...	...	...
	N	Mn	44 50	...	...	...				E	PS	44 38	...	...	...
May 29	N,E	e	20 1	...	...	...		Feeble.		E	Mn	23 2 53	...	...	...
	N	f	34	...	...	...				N,E	F	Mixed up with microseisms.					
	E	f	36	...	...	...			June 22	E	iP	15 57 52	...	...	5720		Slight.
May 30	N,E	iP	21 35 33	...	...	1810		Great Epc: Baluchistan.		E	PR ₁	16 0 3	...	...	...		N—disturbed by insects.
	N,E	iS	37 55	...	...	...				E	iS	5 15	...	...	...
	N,E	SR ₁	38 17	...	...	...				E	L	14	...	...	...
	N,E	L	38 39	...	...	...				E	Mn	20 40	15	8	...		
	N,E	Mn	?	...	400	...				E	F	17 18	...	...	...
May 31	N,E	eP	2 6 2	...	...	1335		Slight. Aftershock of the Great Quetta shock.	June 23	E	e	7 29	...	...	...		Tremors.
	N,E	eS	8 26	...	...	...				E	f	36	...	...	...
	N	Mn	13 23 9 18	...	...	...			June 24-25	N,E	iP	23 36 46	...	...	11220		Moderate. L-waves very poor (Deep-focus). Epc: 19° S., 168° 5' E. (J. S. A.), New Hebrides.
	E	Mn	11 23 10 15	...	...	...				N,E	ScPcS	... 47 12	...	...	...
	N,E	F	56	...	...	...				E	PS	... 49 46	...	...	...
May 31	N,E	i	8 27 32	...	...	...		Feeble. Distant.		N,E	PPS	50 36	...	...	...
	N,E	e	31 3	...	...	...				N,E	SR ₁	55 30	...	...	...
	N,E	i	34 41	...	...	...				N,E	F	Masked by microseisms.					
	N,E	F	Masked by microseisms.			...			June 25	N,E	eP	12 44 51	...	...	7170		Slight.
May 31	N,E	i	13 26 52	...	...	...		Feeble.		N,E	S	53 37	...	...	...
	N,E	F	58	...	...	...				N	Mn	13 16 40	11	5	...		
May 31	N	eP	17 15 13	...	...	1480		Slight. Aftershock of the Great Quetta shock.		E	Mn	12 21 15 8	...	...	...
	N	S	17 51	...	...	...				N,E	F	58	...	...	...
	N	SR ₁	18 14	...	...	...			June 28	E	Mn	3 20 34	...	...	...		Seismic activity.
	N	L	18 36	...	...	...			June 29	E	PR ₁	7 8 27	...	...	15500		Slight.
	N	Mn	23 4	...	...	...				N,E	PR ₂	11 33	...	...	...		△(PR ₁ -PR ₂)=139° 5' of arc.
	N	F	53	...	...	...				N,E	eL(?)	58	...	...	...		Epc: 18° 2' N. 103° 3' W (J. S. A.).
June 1	N,E	eP	4 33 1	...	...	1180		Slight. Aftershock of the Great Quetta shock.		N	Mn	8 19 47 18 10	...	...	...
	N,E	eS	35 11	...	...	...				E	Mn	20 34 17 9	...	...	...
	N,E	L	35 38	...	...	...				N,E	F	Masked by microseisms.					
	N	Mn	39 46 7 8	...	...	...			June 30	N,E	e	8 11	...	...	...		Feeble.
	E	Mn	37 43 6 8	...	...	...				N,E	F	27	...	...	...
	N,E	F	5 13	...	...	...						...	...	...	...

TABLE D₂—contd.

Date.	Compt.	Phase.	G. M. T.	Period.	Amplitude.	△	Remarks.	Date.	Compt.	Phase.	G.M.T.	Period.	Amplitude.	△	Remarks.	
			H. M. S.	Sec.	μ	Km.					H. M. S.	Sec.	μ	Km.		
1935.	N,E	PS	4 44	...	...	...		1935.	N,E	L	33 ...	...	...	...
	N,E	PPS	6 18	...	...	...		Aug. 17	N	Mn	49 7	23	15	...	
	E	Mn	49 47	19	14	...			E	Mn	46 37	23	27	...		
	N	F	10 13	...	...	...			N	F	4 24	...	...	...
	E	F	20 ...	...	...	...			E	F	5 0	...	...	...
July 29	N,E	cP	23 21 40	...	...	2110	Slight. Felt at Srinagar.	Aug. 23	N,E	e	01 0	...	...	1890	Feeble tremors felt at Delhi.
	N,E	cS	25 14	...	...	...			N,E	f	06 ...	...	...	...
	N,E	L	26 43	...	...	...		Aug. 23	N,E	cP	14 4 58	...	...	3935	Moderate. Epc: South Sumatra (Batavia).
	N	Mn	29 10	7	4	...			N,E	PR ₂	6 57	...	...	...
	E	Mn	28 18	11	7	...			N,E	S	10 41	...	...	...
	N,E	F	23 35	...	...	...			N,E	SR ₂	13 21	...	...	...
July 30	N,E	e	0 11	...	...	...	Tremors.		N,E	L	16 ...	...	...	...
	N,E	f	32 ...	...	...	...			N	Mn	20 43	23	30	...	
July 30	N,E	e	5 55	...	...	...	Slight. Distant.		E	Mn	21 5	15	15	...	
	N	Mn	6 14 45	...	...	...			N,E	F	16 13	...	...	...
	E	Mn	14 30	...	...	...		Aug. 25	N,E	e	5 18	...	...	...	Feeble. Distant.
	N,E	F	Masked by microseisms.				...			N	Mn	55 34	15	3	...	
July 31	E	e	10 7	...	...	...	Seismic activity.		E	Mn	55 14	15	4	...	
	N	Mn	11 30	...	...	...			N,E	F	6 34	...	...	...
Aug. 1	E	e	14 12	...	...	...	Slight. Distant.	Aug. 26	N,E	i	12 26 39	...	...	...	Seismic activity.
	N,E	i	23 13			Aug. 26	N	Mn	17 0 31	Seismic activity.
	E	Mn	40 19	...	...	...			E	Mn	17 3 23	...	...	...
	N,E	F	15 33	...	...	...		Aug. 27	N,E	e	5 48	...	...	...	Tremors.
Aug. 1	E	Mn	17 55 28	...	...	...	Seismic activity.		N,E	f	6 7	...	...	...
Aug. 3	N,E	iP	1 15 49	...	...	2955	Great. Epc: 5° 5' N. 96° 5' E. off North Sumatra. O: 1h. 10m. 6s. G.M.T.	Aug. 31	N,E	e	17 45	...	...	...	Feeble. Distant.
	N,E	PR ₁	16 25	...	...	...			N,E	Mn	18 24 27	...	...	...
	N,E	S	20 29	...	...	...			N,E	F	Masked by microseisms.				
	N,E	SR ₁	21 42	...	...	...		Sept. 4	N,E	iP	1 46 00	...	...	4955	Moderate. Epc: 22° 30' N 121° 30' E, (Taihoku) off Formosa Island.
	N	L	23 18	...	...	...			N,E	iPR ₁	48 3	...	...	...
	E	L	23 10	...	...	...			N,E	iS	52 42	...	...	...
	N	Mn	32 13	15	253	...			N,E	L	59 18	...	...	...
	E	Mn	27 25	15	> 378	...			N,E	Mn	2 4 59	19	51	...		
	N	F	4 53	...	...	...			E	Mn	7 58	19	53	...	
	E	F	4 45	...	...	...		Sept. 4	N,E	F	Mixed up with the following shock.				
Aug. 3	E	Mn	12 19 13	...	...	...	Seismic activity.		N,E	i	3 36 36	...	...	...	Aftershock of the previous shock.
Aug. 3	E	e	13 30	...	...	...	Feeble. Near.		N,E	e	43 0	...	...	...
	N	i	34 47	...	...	...			N	Mn	55 0	18	7	...	
	N,E	F	54 ...	...	...	...		Sept. 5	N,E	F	Masked by microseisms.				
Aug. 6	E	Mn	1 10 25	...	...	...	Seismic activity.		N,E	e	12 43	...	...	...	Feeble. Felt locally at Dhubri, Cooch Behar Temors.
Aug. 11	N,E	e	9 6	...	...	...	Tremors.	Sept. 7	N	e	8 1	...	...	...
	N,E	f	20 ...	...	...	...			N	f	22 ...	...	...	...	Felt at Drosh.
Aug. 17	N	cP	1 58 29	...	...	11780	E= Beg. lost in shifting. Moderate.	Sept. 9	N,E	P	6 28 30	...	...	7420	Moderate. L-Waves poor Epc: 5° 8' N., 139° E. (J. S. A.).
	N	PR ₁	2 2 55	...	...	...			N,E	iS	37 28	...	...	...
	N	ScPcS	9 12	...	...	...			N,E	PS	37 48	...	...	...
	N,E	ScPcS	10 7	...	...	...	Epc: 20° S, 171° 5' E, (J. S. A.). Near New Hebrides.		N,E	SR ₁	41 40	...	...	...
	N,E	PS	12 18	...	...	...			E	Mn	57 57	19	18	...	
	N,E	SR ₁	17 55	...	...	...			N,E	F	Masked by microseisms				

TABLE D₂—contd.

Date.	Compt.	Phase.	G.M.T.			△	Remarks.	Date.	Compt.	Phase.	G.M.T.			△	Remarks.
			H. M. S.	Sec.	μ						Km.	H. M. S.	Sec.			μ	Km.
1935.															
Sept. 11	N	Mn	12 58 27	...	...	...	Sept. 20	E	f	21 15 34	...	...	...	Feeble. Distant.
	E	Mn	57 29	...	...	...		N	e	14 ...	...	...	...
Sept. 11	N,E	1P	14 14 42	...	...	7110		N	F	22 34 ...	...	...	...
	N,E	IS	23 25	...	...			E	F	44 ...	...	...	...
	N,E	PS	23 57	...	...		Sept. 23	N,E	e	9 14 ..	...	...	...	Feeble.
	N,E	SR ₁	27 42	...	...			N,E	f	Mixed up with the following shock.				
	E	SR ₂	29 57	...	...		Sept. 23	N,E	1P	9 29 47	...	...	7945	Moderate. After-shock of the great shock of 20th.
	N,E	L	36 ...	...	...			E	PR ₁	32 15	...	...	...
	N	Mn	44 1	9	18	...		N,E	IS	39 10	...	...	...
	E	Mn	46 19	17	53	...		N,E	PS	39 45	...	...	...
	N	F	17 20	...	...	...		N,E	L	53 ..	...	...	...
	E	F	17 23	...	...	...		N	F	12 35 ..	...	...	...
Sept. 12	N,E	Mn	17 27 28	...	...	...		E	F	42 ..	...	...	...
Sept. 15	N,E	e	11 27 38	...	...	...	Sept. 24	N	e	5 12 ..	...	...	...	Feeble. Distant.
	N,E	e	37 46	...	...	...		E	i	12 28	...	...	...
	E	Mn	12 4 17	...	...	...		N,E	f	6 3 ..	...	...	...
	N	Mn	3 20	...	...	...	Sept. 24	N	e	22 3 ..	...	...	...	Feeble. Distant.
	E	F	13 12	...	...	...		N	Mn	23 19 20	...	...	...
	N	F	13 1	...	...	...		E	Mn	15 56	...	...	...
Sept. 15	N,E	e	14 29	...	...	...		N,E	F	53 ..	...	...	...
	N	Mn	15 40 5	18	4	...	Sept. 25	N	eP	10 31 8	...	...	7820	Slight. Aftershock of the great shock of 20th.
	E	Mn	40 27	23	12	...		E	1P						
	N,E	F	16 57	...	...	...		N,E	IS	40 24	...	...	...
Sept. 15	N,E	P	19 33 38	...	...	...		N,E	PS	40 54	...	...	...
	N,E	S	33 45	...	...	...		E	Mn	11 4 24	...	...	...
	N,E	F	Masked by microseisms			...	△ = 30 miles (approximately.) Felt locally at Thana, Thakuri and Dombivii.	Sept. 26	N	Mn	23 22 39	
Sept. 18	N,E	e	8 34	...	...	...	Sept. 29	N,E	e	6 41 ..	...	...	...	Slight. Near.
	E	Mn	9 3 53	...	...	...		N,E	i	45 2	...	...	...
	N,E	F	Masked by microseisms			...		N	Mn	51 14	...	...	...
Sept. 19	E	Mn	3 16 36	...	...	...		E	Mn	50 18	...	...	...
Sept. 20	N,E	P	01 58 02	...	...	7910	Great. Epc: 3°S, 143°E, Near British New Guinea.	N,E	F	7 11 ..	...	...	...
	N	S	2 7 23	...	...	...	Sept. 30	N	Mn	19 46 30	...	...	...	Seismic activity.
	N,E	SR ₁	12 1	...	...	...		E	Mn	47 25	...	...	...
	N,E	SR ₂	15 2	...	...	...		Oct. 1	E	Mn	1 06 18	...	...	...
	N,E	L	21		Oct. 1	N,E	e	6 21	Feeble.
	N	Mn	25 23	26	23	...		N,E	f	42 ..	...	...	...
	E	Mn	32 30	23	283	...		Oct. 2	N,E	1P	5 43 38	7065	Slight. Epc: 40°N., 144°E., near Japanese Islands. O: 5h. 33m. 07s.
	N,E	F	Mixed up with the following shock.			...		N,E	PR ₁	46 6	...	...	...
Sept. 20	N,E	1P	5 34 32	...	...	7945	Moderate. After-shock of the previous great shock.	N,E	IS	52 19	...	...	...
	N,E	PR ₁	37 14	...	...	...		N,E	IS	52 52	...	...	...
	N,E	IS	43 55	...	...	...		E	Mn	6 15 26	18	7	...	
	N,E	SR ₁	51 37	...	...	...		N,E	F	7 8 ...	...	...	...
	N,E	L	58		Oct. 4	E	1P	5 24 6	5190(?)	Slight. Epc: 6° 20' N., 125° E. (Manila), Mindanao Islands. Deep focus.
	E	Mn	7 40	...	...	...		E	IS	31 01	...	...	...
	N,E	F	Masked by microseisms			...		E	F	6 1 ...	...	...	...

TABLE D₂-contd.

Date.	Compt.	Phase.	G.M.T.		Period.	Amplitude.	△	Remarks.	Date.	Compt.	Phase	G.M.T.		Period.	Amplitude.	△	Remarks.
			H. M. S.	Sec.								H. M. S.	Sec.					μ	Km.
1935.									1935.								
Oct. 19	E	Mn	6 0 37	...	...	...	Seismic activity.	Nov. 1	N,E	eP	16 28 1	...	...	3210	Moderate.	
	N	Mn	2 26	...	...	...			N,E	iS	32 59	...	...		Epc: 32° N, 103° E	
Oct. 19	N,E	e	20 31 2	...	...	...	Feeble. Near		N,E	SR ₁	34 24	...	...		Sip-song Chow Thai	
	N	Mn	33 40	6	4	...	Felt at Shillong and Jorhat (Agra), Gauhati and Salona		N,E	L	36 21	...	...		O: 16h 22m 01S	
	N	F	50	...	...	...			N,E	Mn	40 45	18	163	...	G. M. T.	
	E	F	42	...	...	...			N,E	Mn	40 49	12	53	...		
Oct. 20	E	e	4 54	...	...	...	Slight.		N,E	F	Masked by microseisms.					
	N	e	57	...	...	...	Felt at Salona.	Nov. 1	N	e	21 0 0	...	...	...	Seismic activity.	
	E	Mn	5 0 37	14	7	...			N	Mn	12 46	...	...	...
	E	F	6 5	...	...	...		Nov. 3	N,E	e	16 36	...	...	...	Feeble. Near.	
	N	F	5 56	...	...	...			N	Mn	47 29	7	4	...		
Oct. 20	N,E	e	19 2	...	...	...	Feeble seismic movements.		E	Mn	47 32	13	5	...		
	N,E	f	10	...	...	...			N,E	F	17 10	...	...	...
Oct. 25	N,E	e	0 18 28	...	...	...	Feeble. Very distant.	Nov. 5	N	e	21 7 10	...	...	...	Feeble. Distant.	
	N,E	Mn	1 2 20	...	...	...			E	i	6 50	...	...	...
	N,E	F	49	...	...	...			N,E	i	14 20	...	...	...
Oct. 25	N,E	e	18 12	...	...	...	Feeble.		E	Mn	32 30	...	...	...
	N	Mn	17 30	...	...	...			N,E	F	22 4	...	...	...
	E	Mn	18 23	15	4	...		Nov. 10	E	Mn	19 57 30	...	...	...	Seismic activity.	
	N,E	F	41	...	...	...								
Oct. 26	N	e	21 21	...	...	...	Slight. Near.	Nov. 11	N,E	e	13 24	...	...	...	Feeble.	
	N,E	e	25 12	...	...	...			N,E	f	14 42	...	...	...
	N	Mn	28 51	11	4	...		Nov. 12	N,E	eP	21 34 15	...	...	3080	Slight.	
	N,E	F	58	...	...	...			N,E	eS	39 4	...	...	...
Oct. 27	N,E	e	6 47 28	...	...	...	Feeble. Distant.		N,E	i	39 27	...	...	...
	N,E	e	51 6	...	...	...			N,E	SR ₁	40 27	...	...	...
	N,E	f	7 34	...	...	...			N,E	L	42	...	...	...
Oct. 28	N	e	12 11 0	...	...	...	Slight. Near.		N	Mn	48 50	...	...	...
	N,E	e	14 34	...	...	...			E	Mn	48 45	15	8	...		
	N	Mn	18 17	9	4	...		Nov. 14	N,E	F	22 56	...	...	...	Feeble. Distant.	
	E	Mn	18 32	...	...	...			N,E	e	20 9	...	...	...
	N	F	55	...	...	...			N,E	e	19	...	...	...
	E	F	48	...	...	...			N	Mn	Movements small.					
Oct. 30	N,E	e	2 35 37	...	...	...	Slight. Near.		E	Mn	38 30	...	...	...
	N,E	e	39 35	...	...	...			N	F	21 18	...	...	...
	N	Mn	43 16	11	8	...			E	F	34	...	...	...
	E	Mn	43 45	11	4	...		Nov. 16	N,E	e	5 59	...	...	...	Feeble. Distant.	
	N,E	F	3 6	...	...	...			N,E	f	7 8	...	...	...
Oct. 30	N,E	e	16 26	...	...	...	Feeble. Felt at Dhubri, Gauhati and Shillong.	Nov. 17	N,E	e	7 59	...	...	...	Feeble. Distant.	
	N,E	f	17 2	...	...	...			N,E	f	9 15	...	...	...
Oct. 31	E	Mn	19 41 29	...	...	...	Seismic activity.	Nov. 23	N,E	e	8 12 25	...	...	...	Feeble. Distant.	
Oct. 31	N,E	i	23 14 5	...	...	...	Seismic activity.		E	Mn	9 27 32	...	...	...
Nov. 1	N,E	e	6 22 33	...	...	...			N	Mn	Movement small.					
	N,E	i	32 14	...	...	...		Nov. 25	N,E	F	10 0	...	...	...
	N	Mn	7 12 16	...	...	...			N,E	iP	10 8 23	...	...	2680	Moderate.	
	E	MN	15 38	...	...	...			N,E	iS	12 43	...	...	...	Epc: 7° N, 94° E	
	N,E	F	16	...	...	...			N,E	SR ₁	13 46	...	...	...	South of Nicobar Islands.	
									N,E	J	15	...	...	...	O: 10h. 3m. 7s.	
															G. M. T.		

TABLE D₂ - contd.

Date.	Compt.	Phase.	G.M.T.		Period.	Amplitude.	△	Remarks.	Date.	Compt.	Phase.	G.M.T.		Period.	Amplitude.	△	Remarks.
			H. M. S.	Sec.								H. M. S.	Sec.				
1935.									1935.								
Nov. 25	N	Mn	19 16	15 32	...	...	...		Dec. 11	N	e	9 15 51	...	...	...	...	Seismic activity
	E	Mn	20 1	15 48	...	...	...			E	e	20 32	...	...	...	...
	N,E	F	13 18	...	...	...	...		Dec. 11	E	e	12 24 42	...	...	...	...	Seismic activity.
Nov. 26	N,E	c	0 44 37	...	...	...	...	Feeble.	Dec. 14	N	i	1 49 41	...	...	...	...	Slight. Distant.
	N,E	f	1 2	...	...	...	...			N	e	52 5	...	...	...	...
Nov. 26	N	iP	18 38 40	...	...	2810	...	Slight. Epc: Near that of Nov. 25.		N	F	3 54	...	...	...	...
	N	eS	43 14	...	...	...	...		Dec. 14	N	F	3 47	...	...	...	...
	N	SR ₁	44 11	...	...	...	...			N,E	i	12 57 43	...	...	...	...	Feeble. Distant.
	N	L	46	...	...	...	...			N,E	i	13 6 10	...	...	...	...
	N	F	21 3	...	...	...	...			N,E	e	8 10	...	...	...	...
Nov. 29	N,E	c	18 25	...	...	...	...	Feeble. Distance.	Dec. 14	N,E	F	56	...	...	...	...
	N,E	f	Masked by the following shock.				...	...			N,E	P ₁	22 24 58	...	...	16235	Moderate. Epc: 14° N., 94° W. (U. S. C. G. S.)
Nov. 29	N,E	i	19 42 27	...	...	...	...	Slight. Near.		N	i	28 19	...	...	...	...
	N	Mn	49 19	...	...	...	...			N	i	35 5	...	...	...	...
	E	Mn	48 49	...	...	...	...			N,E	SR ₁	47 13	...	...	...	...
	N,E	F	20 11	...	...	...	...			N,E	SR ₂	52 21	...	...	...	...
Nov. 30	N,E	e	3 40	...	...	...	...	Feeble. Very distant.		N,E	L	23 8	...	...	...	...
	N,E	f	6 25	...	...	...	...			N	Mn	32 50	23	61	...	...
	N	f	6 15	...	...	...	...			E	Mn	27 42	29	48	...	...
Dec. 1	N,E	P	23 54 10	...	...	5600	...	Slight.	Dec. 15	N,E	eP	7 21 1	...	...	10145	...	Great. Epc: 12° S., 161° E. (U. S. C. G. S.) Felt in Solomon Island.
	N,E	S	0 1 28	...	...	...	...			N,E	PR	24 54	...	...	...	...
	E	L	10	...	...	...	...			N,E	PR ₂	27 9	...	...	...	...
	N	Mn	18 0 13	4	...	...	...			N,E	S	32 01	...	...	...	...
	E	Mn	18 34 12	4	...	...	...			N,E	SR ₁	38 01	...	...	...	...
	N	F	1 12	...	...	...	...			N,E	SR ₂	42 01	...	...	...	...
	E	F	1 22	...	...	...	...			N,E	L	51	...	...	...	...
Dec. 2	N,E	e	16 51 40	...	...	...	...	Feeble. Distant.		N	Mn	59 16	28	122	...	...
	N,E	c	59 0	...	...	...	...			E	Mn	8 2 50	23	170	...	...
	N	Mn	17 15 28	11 4	...	...	...		Dec. 16	N,E	F	11 50	...	...	...	...
	E	Mn	18 11 10	3	...	...	...						...	...	...	...
	N,E	F	18 7	...	...	...	...		Dec. 17	N,E	i	17 15 53	...	...	...	...	Seismic activity.
Dec. 3	N,E	c	3 26	...	...	...	...	Feeble. Near. Felt at Gaubati.	Dec. 17	N,E	e	13 31	...	...	...	...	Feeble. Distant.
	N,E	f	40	...	...	...	...			N,E	f	14 54	...	...	...	...
Dec. 5	N,E	e	18 10	...	...	...	...	Feeble. Distant.	Dec. 17	E	iP	19 26 22	...	...	5510	...	Moderate. Epc: 24° N., 124° E. East of Formosa. Felt in northern Luzon (Manila).
	E	Mn	19 3 30	...	...	...	...			E	PR ₁	28 28	...	...	...	...
	N	F	20 2	...	...	...	...			E	iS	33 35	...	...	...	...
	E	F	20 11	...	...	...	...			E	PS	34 16	...	...	...	...
Dec. 7	N,E	e	11 58	...	...	...	...	Tremors.		E	SR ₁	36 57	...	...	...	...
	N,E	f	12 38	...	...	...	...			E	L	42	...	...	...	...
Dec. 8	N,E	c	17 27 14	...	...	...	...	Slight.	Dec. 18	E	Mn	49 22	16	31	...	...
	N,E	e	33 4	...	...	...	...			E	F	23 22	...	...	...	...
	E	Mn	41 18	...	...	...	...			N,E	iP	7 16 47	...	...	3155	...	Slight.
	N,E	F	18 38	...	...	...	...			N,E	eS	21 41	...	...	...	...	Epc: 32° N., 103° E. French Indo-China.
Dec. 9	E	e	7 41	...	...	...	...	Feeble. Distant.		N,E	SR ₁	23 9	...	...	...	...
	E	f	9 11	...	...	...	...			N,E	L	25	...	...	...	...
										N	Mn	29 6	13	10	...	...
										E	Mn	30 25	15	10	...	...
										E	F	9 8	...	...	...	...

TABLE D₂—contd.

Date.	Compt.	Phase.	G. M. T.	Period.	Amplitude.	△	Remarks.	Date.	Compt.	Phase.	G. M. T.	Period.	Amplitude.	△	Remarks.	
			H. M. S.	Sec.	μ	Km.					H. M. S.	Sec.	μ	Km.		
1935.								1935.								
Dec. 18	N,E	e	11 53	...	...	...	Tremors.	Dec. 23	N,E	i	14 54 30	...	...	...	Feeble. Felt at Srinagar.
	N,E	f	12 1	...	...	...			N,E	i	15 3 46	...	...	...
Dec. 18	N,E	e	13 24	...	...	...	Tremors.		N,E	f	16 2	...	...	...
	N,E	f	47	...	...	...		Dec. 24	N,E	i	12 43 52	...	...	...	Feeble. Distant.
Dec. 18	N,E	iP	17 5 39	...	...	3155	Slight.		N	Mn	14 6 47	15	4	...	
	N,E	oS	10 33	...	...	...			E	Mn	2 58	16	6	...	
	E	SR ₁	12 3	...	...	...			N,E	F	15 13	...	...	...
	N,E	L	14	...	...	...		Dec. 26	N,E	e	20 25	...	...	...	Feeble. Distant.
	N	Mn	20 33	7	4	...			N,E	f	21 41	...	...	...
	E	Mn	19 26	7	4	...		Dec. 27	N,E	e	19 12	...	...	...	Feeble. Near.
	N,E	F	18 8	...	...	...			N,E	f	30	...	...	...
Dec. 18	N,E	e	21 19	...	...	...	Tremors.	Dec. 28	N,E	iP	2 41 47	...	...	3490	Great. Epc: North Sumatra. O: 2h. 35m. 24s. G. M. T.
	N,E	f	46	...	...	...			N,E	PR ₁	42 37	...	...	...
Dec. 19	N,E	e	9 52	...	...	...	Feeble.		N,E	PR ₂	43	...	...	...
	N,E	f	10 17	...	...	...			N,E	IS	47 2	...	...	...
Dec. 19	N,E	e	13 37	...	...	...	Feeble.		N	SR ₁	48 41	...	...	...
	N,E	f	14 5	...	...	...			E	Mn	53	25	12	...	
Dec. 19	N	e	21 33	...	...	...	Feeble.		N	F	8 8	...	...	...
	N,E	e	37 30	...	...	...			E	F	8 11	...	...	...
	N	Mn	40 6	...	...	...		Dec. 28	N,E	eP	17 28 25	...	...	3380	Aftershock of the great shock of 28d. 2h. 41m. 47s. G.M.T.
	E	Mn	39 58	8	3	...			N,E	S	33 33	...	...	...
	N,E	F	59	...	...	...			N,E	F	Mixed up with the following tremor.				
Dec. 19	N	iP	23 14 40	...	...	1900	Feeble.	Dec. 28	N	Mn	19 8 35	...	...	...	Seismic activity.
	E	eP		...	...	...			E	Mn	7 20	...	...	...
	N	i		15 34	Felt at Quetta.	Dec. 29	N,E	e	3 36 37	Slight.
	N,E	oS		17 57			N,E	e	41 00	
	N,E	F	42	...	...	...			N,E	f	4 56	...	...	...
Dec. 20	N,E	e	18 50 0	...	...	...	Slight. Very distant.	Dec. 29	N,E	iP	23 47 23	...	...	6345	Slight.
	N,E	e	19 0 35	...	...	...			N,E	S	55 23	...	...	...
	N,E	F	21 46	...	...	...			N	PS	56 5	...	...	...
Dec. 22	N,E	e	12 33 30	...	...	...	Feeble.		E	L	00 05	...	...	...
	N,E	e	40 56	...	...	...			N,E	F	1 59	...	...	...
	N,E	f	13 12	...	...	...		Dec. 30	N,E	e	4 15	...	...	...	Feeble. Distant.
Dec. 22	N,E	c	20 33	...	...	...	Slight. Near.		N,E	f	5 41	...	...	...
	N,E	e	37 16	...	...	...		Dec. 31	N,E	e	1 36	...	...	...	Feeble. Distant.
	E	Mn	45 24	...	...	...			N,E	f	2 29	...	...	...
	N,E	F	21 17	...	...	...							

S. C. ROY,

Meteorologist, Colaba Observatory, Bombay.

STATION—ALIPORE OBSERVATORY, CALCUTTA.

Lat. 22° 32' N. Long. 88 °20' E. Height above M. S. L. 7· slight 1 metre.

Lithologic Foundation : Alluvial.

Instrument :—Milne-Shaw Seismograph East—West (E) component.

INSTRUMENTAL CONSTANTS.

Component.	Steady mass (Kg.)	T. (sec.)	Vm	€	Paper speed mm./min .
E-W	0·45	12	250	20:1	8

TABLE D₃.

Date.	Compt.	Phasc.	G. M. T.	Period.	Amplitude.	△	Remarks.	Date.	Compt.	Phasc.	G. M. T.	Period.	Amplitude.	△	Remarks.
			H. M. S.	Sec.	μ	Km.					H. M. S.	Sec.	μ	Km.	
1935.								1935.							
Jan. 1	E	cP	13 34 24	...	...	11,550	Slight.	Jan. 4	E	P	16 29 38	...	...	5,940	Slight.
		PR ₁	38 34	...	...	...	L-waves poor.			S	37 10	...	...	...
		ScPcS	44 52	...	...	...				L	46 30	...	...	...
		SR ₁	53 1	...	...	...				Mn	51 57	15	17	...	
		SR ₂	57 24	...	...	...				F	17 51 ...	...	...	...
		F	15 38	...	...	...		Jan. 4	E	e	17 53 38	...	...	...	Tremor.
Jan. 2	E	cP	22 25 43	...	...	820	Slight.	Jan. 4	E	e	21 52 41	...	...	...	Do.
		S	27 8	...	...	...		Jan. 4	E	e	23 50 56	...	...	...	Do.
		Mn	29 15	8	20	...		Jan. 5	E	e	10 18 47	...	...	...	Slight.
		F	55 ...	...	...	...		Jan. 5	E	e	21 35	...	...	...
Jan. 3	E	P	1 52 21	...	...	860	Great.	Jan. 5	E	e	16 29 32	...	...	...	Tremor.
		S	53 49	...	...	...		Jan. 6	E	P	7 12 24	...	...	800	Slight.
Jan. 3	E	e	3 11	...	...	...	Tremor.			S	13 47	...	...	...
Jan. 3	E	e	6 52 20	...	...	...	Do.			L	14 44	...	...	...
Jan. 3	E	c	12 49 6	...	...	...	Do.			Mn	16 10	5	18	...	
Jan. 3	E	e	14 36 49	...	...	...	Do.			F	41 0	...	...	...
Jan. 3	E	e	17 7 28	...	...	...	Do.	Jan. 6	E	P	11 20 0	...	...	820	Slight.
Jan. 3	E	e	18 22 28	...	...	...	Do.			S	21 25	...	...	...
Jan. 3	E	e	22 39 40	...	...	...	Do.			eL	22 9	...	...	...
Jan. 4	E	e	0 25 33	...	...	...	Do.			F	47 ...	...	...	...
Jan. 4	E	e	5 14 44	...	...	...	Do.	Jan. 6	E	P	17 57 5	...	...	810	Slight.
Jan. 4	E	P	8 4 22	...	...	760	Slight.			S	58 30	...	...	...
		S	5 42	...	...	...				L	59 14	...	...	...
		L	6 22	...	...	...				Mn	18 0 44	8	18	...	
		F	31 ...	...	...	...				F	16 ...	...	...	...
Jan. 4	E	e	10 31 12	...	...	...	Tremor.	Jan. 7	E	P	2 50 30	...	...	440	Slight.
Jan. 4	E	P	14 50 52	...	...	6,030	Moderate.			S	51 17	...	...	...
		S	58 32	...	...	...				L	51 34	...	...	...
		SR ₁	15 2 16	...	...	...				F	3 0 ...	...	...	...
		L	7 54	...	...	...		Jan. 8	E	e	13 2 29	...	...	...	Tremor.
		Mn	18 42	14	23	...		Jan. 9	E	e	4 14 0	...	...	...	Do.
		F	Masked	by	microseisms.	...		Jan. 10	E	e	11 25 38	...	...	...	Do.

TABLE D₃—contd.

Date.	Compt.	Phase.	G. M. T.	Period.	Amplitude.	△	Remarks.	Date.	Compt.	Phase.	G. M. T.	Period.	△	Remarks.	
1935.			H. M. S.	Sec.	μ	Km.		1935.			H. M. S.	Sec.	μ	(Km.)	
Jan. 11	E	eP	0 14 28	...	...	3,265	Slight. Beginning uncertain.	Jan. 31	E	P	17 58 21	...	...	9,270	Slight.
		S	19 29	...	...	...				S	18 8 44	...	...	...
		Mn	29 49	14	10	...				SR ₁	14 22	...	...	...
		F	1 0	...	...	...				F	19 39	...	...	...
Jan. 11	E	e	21 16 40	...	...	...	Tremor.	Feb. 2	E	e	15 33 9	...	...	...	Tremors.
Jan. 12	E	P (?)	4 4 52	...	...	360	Slight.	Feb. 3	E	P	2 15 9	...	...	2,180	Moderate.
		P̄ (?)	5 2	...	...	...				S	18 49	...	...	...
		F	9	...	...	...				SR ₁	19 29	...	...	...
Jan. 14	E	e	22 30 46	...	...	...	Tremor.			L	20 24	...	...	...
Jan. 16	E	e	6 20 57	...	...	...	Do.			Mn	22 19	6	31	...	
Jan. 17	E	P	2 21 43	...	...	...	Slight. Beginning uncertain due to microseisms.	Feb. 3	E	P	16 37 7	...	...	3,650	Slight.
		S (?)	31 35	...	...	...				S	42 32	...	...	...
		F	Mixed with microseisms.			...				L	46 29	...	...	...
Jan. 17	E	e	17 25 4	...	...	...	Tremor.			F	17 26	...	...	...
Jan. 18	E	i	2 20 14	...	...	...	Slight. i probably S.	Feb. 7	E	e	17 37 19	...	...	...	Tremors.
		Mn	27 24	...	...	...				eP	19 26 0	...	...	3,335	Slight.
		F	Mixed up with microseisms.			...				S	31 5	...	...	...
Jan. 18	E	P	17 20 34	...	...	4,920	Slight.			Mn	39 38	18	64	...	
		PR ₁	22 10	...	...	...				F	20 24	...	...	...
		S (?)	28 4	...	...	...		Feb. 10	E	e	20 20 49	...	...	...	Tremors.
		Mn	37 15	14	13	...		Feb. 17	E	e	16 27 18	...	...	...	Do.
		F	18 8	...	...	...		Feb. 19	E	eP	20 18 48	...	...	5,850	Slight.
Jan. 18	E	e	20 57 14	...	...	...	Tremor.			S	26 18	...	...	...
Jan. 19	E	e	13 37 16	...	...	...	Do.			SR ₁	30 1	...	...	...
Jan. 22	E	P	15 6 18	...	...	6,060	Slight.			Mn	39 38	14	3	...	
		PR ₁	8 22	...	...	...				F	54	...	...	...
		PR ₁	9 21	...	...	...		Feb. 21	E	eP	18 45 32	...	...	1,230	Slight.
		S	14 1	...	...	...				S	47 44	...	...	...
		F	58	...	...	...				L	48 30	...	...	...
Jan. 22	E	P	23 40 19	...	...	350	Slight.	Feb. 22	E	eP	9 7 5	...	...	3,050	Slight.
		S	40 54	...	...	...				S	11 48	...	...	...
		L	41 13	...	...	...				SR ₁	13 15	...	...	...
		F	50	...	...	...				L	14 47	...	...	...
Jan. 23	N,E	P	7 36 18	...	...	8,430	Moderate (Omori-Ewing seismograms).			Mn	17 17	10	12	...	
	N,E	S	7 46 4	...	...	...				F	50	...	...	...
Jan. 25	E	e	1 27 52	...	...	...	Tremor.	Feb. 22	E	P	17 17 22	...	...	7,920	Great.
Jan. 26	E	e	18 16 47	...	...	...	Do.			S	26 42	...	...	...
Jan. 27	E	e	23 10 54	...	...	...	Do.			SR ₁	31 29	...	...	...
Jan. 30	E	e	0 45 41	...	...	...	Do.			SR ₁	34 12	...	...	...
Jan. 31	E	P (?)	12 2 50	...	...	550	Slight.			L	40 46	...	...	...
		P	3 10	...	...	...				Mn	47 35	18	127	...	
		S	3 50	...	...	...				F	20 49	...	...	...
		F	33	...	...	...		Feb. 23	E	e	21 8 16	...	...	...	Tremors.

TABLE D₂—contd.

Date.	Compt.	Phase.	G. M. T.		Period.	Amplitude.	△	Remarks.	Date.	Compt.	Phase.	G. M. T.		Period.	Amplitude	△	Remarks.
			H. M. S.	Sec.								H. M. S.	Sec.					μ.	Kms.
1935.			H. M. S.	Sec.	μ.	Km.			1935.			H. M. S.	Sec.	μ.	Kms.		
Feb. 25	E	P	3 1 3	3	...	5,980	Slight.	Mar. 21	E	P	23 8 45	4	...	...	8,190	Slight	
		S	8 42	5	...	...				S	18 19	6	...	...	...
		PS	9 15	5	...	...				L	32 43	10	...	...	...
		SR ₁	12 9	6	...	...				M	38 17	15	14	...	...
		F	Mixed up with microseisms.						Mar. 21	E	P	0 4 36	?	...	...	150	Data from Omori-Ewing E-W. Comp. Moderate. Felt locally.
Mar. 3	E	P	22 49 44	...	...	1,710	Slight.			S	5 8	2	...	...	...
		P*	50 36	...	...	...				L	5 19	3	...	...	...
		S	53 44	...	...	...				F	41 ...	...	...	...	...
		F	23 19	...	...	...			Mar. 24	E	e	0 6 16	2	...	...	...	Slight.
Mar. 4	E		16 18 43	...	...	1,680	Slight.			i	8 31	3	...	...	...
		P*	19 38	...	...	...				F	31 ...	...	...	...	...
		S	21 40	...	...	...			Mar. 28	E	e	23 34 46	...	...	...	...	Tremors.
		F	53 ...	...	...	...			Mar. 29	E	PR ₁	12 42 42	...	...	...	11,450	Slight.
Mar. 5	E	e	3 34 50	...	...	...	Tremors.			ScPcS	49 11	...	...	...	...
		F	46 ...	...	...	...				L	13 28 5	...	...	...	...
Mar. 5	E	e	10 34 23	...	...	...	Slight.			Mn	40 25	20	17	...	...
		i	40 55	...	...	...				F	15 10	...	...	...	...
		Mn	48 51	12	33	...			Mar. 30	E	e	17 43 12	...	...	...	...	Tremors.
Mar. 5	E	P	22 18 21	...	...	1,080	Moderate.			F	51 ...	...	...	...	...
		S	20 13	...	...	...			Mar. 30	E	e	20 47 7	...	...	...	...	Tremors.
		L	21 3	...	...	...				F	21 8 ...	...	...	...	...
		Mn	22 53	8	196	...			Mar. 30	E	P	21 28 24	...	...	...	5,170	Slight.
		F	23 56	...	...	...				S	35 17	...	...	...	...
Mar. 6	E	e	3 58 12	...	...	...	Tremors.			SR ₁	38 23	...	...	...	...
		F	4 16	...	...	...				L	42 33	...	...	...	...
Mar.	E	P	3 23 21	...	...	670	Slight.			Mn	46 50	16	20	...	...
		S	24 36	...	...	...				F	23 2 ...	...	...	...	...
		F	46 ...	...	...	...			Apr. 3	E	eP	6 52 44	...	...	...	3,140	Slight.
Mar. 11	E	e	11 41 37	...	...	...	Tremors.			S	57 37	...	...	...	...
		Mn	47 41	...	...	...				L	7 0 48	...	...	...	...
		F	12 13	...	...	...			Apr. 3	E	P	11 16 28	...	...	...	2,100	Slight.
Mar. 13	E	P	3 16 26	2	...	610	Moderate.			S	20 2	...	...	...	...
		S	17 32	3	...	...				L	21 23	8	...	...	...
		L	17 53	4	...	...			Apr. 3	E	e	12 47 39	...	...	...	...	Tremor.
		F	39 ...	...	...	...			Apr. 11	E	eP	1 20 40	...	...	...	1,130	Moderate. Beginning doubtful.
Mar. 14	E	e	9 19 31	...	...	...	Tremors.			S	22 50	...	...	...	...
Mar. 15	E	eP	10 36 24	...	...	1,078	Slight.			Mn	28 42	10	48	...	...
		S	38 23	...	...	...			Apr. 11	E	eP	4 31 44	...	...	...	550	Slight.
		L	38 55	...	...	...				S	32 44	...	...	...	...
		F	11 2 ...	...	...	...				L	33 4	...	...	...	...
Mar. 16	E	e	7 58 44	...	...	...	Tremors.			F	54 ...	...	...	...	...
Mar. 16	E	e	9 34 17	...	...	...	Do.		Apr. 11	E	P	23 21 21	...	...	...	3,790	Moderate.
Mar. 17	E	e	20 24 40	...	...	...	Do.			S	26 55	...	...	...	...
Mar. 18	E	e	9 52 8	...	...	...	Do.			SR ₁	28 51	...	...	...	...
										L	31 14	...	...	...	...
										Mn	39 27	8	84	...	...

TABLE D₃—contd.

Date.	Compt.	Phase.	G. M. T.		Period.	Amplitude.	△	Remarks	Date.	Compt.	Phase.	G. M. T.		Period.	Amplitude.	△	Remarks.
1935.			H. M. S.	Sec.	μ	Km.			1935.			H. M. S.	Sec.	μ	Km.		
Apr. 12	E	e	1 19 20	...	...	...		Tremor.	Apr. 24	E	e	17 51 43	...	...	...		Tremor.
Apr. 12	E	P	12 51 39	...	...	3,755		Slight.	Apr. 26	E	e	5 41 15	...	...	...		Tremor.
		S	57 11	...	...	...			May 1	E	eP	10 32 33	...	...	4,520		Slight.
		SR ₁	58 56	...	...	...					PR ₂	34 31	...	...	...
		L	13 1 24	...	...	...					S	38 52	...	...	...
		Mn	7 44	10	17	...					SR ₁	42 12	...	...	...
		F	48 ...	...	...	...					cL	44 40	...	...	...
Apr. 1	E	eP	22 38 57	...	...	3,790		Slight. Beginning uncertain due to microseisms.	May 4	E	eP	23 8 12	...	...	3,980		Slight.
		S	44 31	...	...	...					S	13 58	...	...	...
		SR ₁	46 21	...	...	...					L	18 41	...	...	...
		Mn	53 53	8	8	...					M	21 44	10	17	...		
		F	23 27 ...	...	...	...					F	0 10 ...	...	...	...
Apr. 18	E	P	15 1 36	...	...	570		Slight.	May 7	E	eP	6 3 8	...	...	4,220		Slight.
		S	2 28	...	...	...					S	9 9	...	...	...
		L	3 7	...	...	...					F	50 ...	...	...	...
		M	3 37	8	51	...											
		F	26 ...	...	...	...								
Apr. 19	E	P	15 34 14	...	...	7,110		Great.	May 10	E	eP	17 6 25	...	...	2,650		Slight.
		PR ₁	36 41	...	...	...					S	10 43	...	...	...		Beginning doubtful.
		PR ₂	37 56	...	...	...					L	13 5	...	...	...
		S	42 58	...	...	...					M	15 11	8	19	...		
		SR	47 23	...	...	...					F	45 ...	...	...	...
		SR ₂	49 39	...	...	...								
		L	55 3	...	...	...			May 12	E	eP	5 25 2	...	...	2,210		Slight.
		M	16 2 11	16	117	...					S	28 46	...	...	...
Apr. 20	E	P	5 21 32	...	...	6,950		Slight.			L	30 13	...	...	...
		S	30 7	...	...	...					M	32 0	4	16	...		
		SR ₁	34 26	...	...	...					F	6 1 ...	...	...	...
		L	41 10	...	...	...			May 13	E	P	19 56 28	...	...	1,190		Moderate.
		F	6 59 ...	...	...	...					S	58 37	...	...	...
Apr. 20	E	P	22 8 7	...	...	3,410		Great.			SR ₁	58 57	...	...	...
		PR ₁	9 16	...	...	...					L	59 17	...	...	...
		S	13 17	...	...	...					Mn	20 3 57	6	131	...		
		L	17 1	...	...	...					F	21 17 ...	...	...	...
		Mn	23 1	25	123	...											
		F	0 43 ...	...	...	...			May 14	E	PR ₁	23 43 27	5	...	18,010		Slight.
Apr. 21	E	eP	7 33 56	...	...	3,410		Slight.			cPcS	48 43	6	...	...		△ from (PS-PR ₁).
		S	39 5	...	...	...					PS	53 13	8	...	...
		SR ₁	40 40	...	...	...					SR ₁	59 44	10	...	...
		eL	42 46	...	...	...					F	1 27 ...	...	...	...
		F	8 58 ...	...	...	...			May 15	E	P	2 6 6	...	...	2,135		Moderate.
Apr. 21	E	e	19 24 56	...	...	...		Tremor.			S	9 42	...	...	...
Apr. 23	E	P	16 47 7	...	...	530		Felt locally.			L	11 17	...	...	...
		S	48 4	...	...	...			May 16	E	P	17 29 21	...	...	2,410		Slight.
		F	17 46 ...	...	...	...					S	33 20	...	...	...
Apr. 24	E	P	15 58 6	...	...	2,990		Slight.			L	35 14	...	...	...
		PR ₁	59 0	...	...	...					Mn	38 59	10	29	...		
		S	16 2 45	...	...	...					F	18 14 ...	...	...	...
		L	5 39	...	...	...			May 16	E	e	21 3 56	...	...	...		Tremor.
		F	17 30 ...	...	...	...					F	22 54 ...	...	...	...

TABLE D₃—contd.

Date.	Compt.	Phase.	G. M. T.	Period.	Amplitude.	△	Remarks.	Date.	Compt.	Phase.	G. M. T.	Period.	Amplitude.	△	Remarks.
1935.			H. M. S.	Sec.	μ	Km.		1935.			H. M. S.	Sec.	μ	Km.	
July 12	E	e	1 50 11	...	...	...	Tremor.	Aug. 1	E	eP	14 13 44	...	...	4,260	Slight.
		Mn	54 37	...	...	...				PR ₂	15 24	...	...	...
July 15	E	e	14 36 8	...	...	...	Tremor.			S	19 48	...	...	...
July 16	E	P	16 25 11	...	...	3,330	Moderate.			SR ₁	22 6	...	...	...
		S	30 16	...	...	...				SR ₂	22 42	...	...	...
		L	33 45	...	...	...				F	15 36 0	...	...	...
		Mn	39 38	7	34	...		Aug. 3	N,E	P	1 14 35	...	...	2,300	Great.
		F	17 45	...	...	...			N,E	S	18 23	...	...	...
July 17	E	e	11 23 4	...	...	...	Tremor.		N,E	L	20 9	...	...	...
		Mn	48 29	...	...	...		Aug. 3	E	e	7 51 36	...	...	...	Tremor.
		F	12 53	...	...	...		Aug. 3	E	P	11 54 27	...	...	5,270	Slight.
July 19	E	P	0 58 29	...	...	5,510	Moderate.			S	12 1 27	...	...	...
		S	1 5 42	...	...	...				L	8 50	...	...	...
		Mn	21 21	20	52	...				F	39 ...	...	...	...
		F	2 24	...	...	...		Aug. 3	E	P	13 25 34	...	...	1,060	Slight.
July 23	E	e	4 4 56	...	...	...	Tremor.			S	27 26	...	...	...
		Mn	15 1	...	...	...				L	28 10	...	...	...
July 26	E	eP	9 16 47	...	...	1,060	Slight.			M	30 10	10	26	...	
		S	18 39	...	...	...				F	55 0	...	...	...
		L	19 25	...	...	...		Aug. 3	E	P	14 14 6	...	...	930	Slight.
		M	21 19	8	19	...				S	15 46	...	...	...
		F	36 ...	...	...	...				L	16 21	...	...	...
July 26	E	eP	10 35 20	...	...	2,290	Moderate.			F	37 ...	...	...	...
		PR ₁	35 49	...	...	...		Aug. 11	E	e	9 1 41	...	...	...	Tremor.
		S	39 8	...	...	...				F	21 ...	...	...	...
		L	40 50	...	...	...		Aug. 17	E	P	1 57 56	...	...	10,300	Moderate.
		Mn	43 27	10	186	...				RP ₁	2 1 36	...	...	...	L—waves poor.
		F	11 55	...	...	...				ScPcS	8 21	...	...	...
July 28	E	P	5 28 27	...	...	2,210	Slight.			PS	10 12	...	...	...
		S	32 9	...	...	...				Mn	32 36	20	64	...	
		L	33 49	...	...	...				F	4 45 ...	...	...	...
		F	58 ...	...	...	...		Aug. 17	E	e	13 50 26	...	...	...	Tremor.
July 29	E	eP	7 51 20	...	...	12,650	Moderate.	Aug. 17	E	e	20 38 30	...	...	...	Tremor.
		PR ₁	55 57	...	...	...		Aug. 23	E	P	14 3 59	...	...	3,190	Moderate.
		PR ₂	58 27	...	...	...				PR ₁	4 42	...	...	...
		ScPcS	8 1 50	...	...	...				S	8 54	...	...	...
		PS	4 25	...	...	...				eL	12 10	...	...	...
		PPS	5 27	...	...	...				Mn	25 57	14	45	...	
July 29	E	eP	23 21 26	...	...	2,370	Slight.			F	16 3 ...	...	...	...
		S	25 23	...	...	...		Aug. 23	E	e	18 36 39	...	...	...	Slight.
		SR ₁	26 10	...	...	...				S (?)	37 22	...	...	...
		L	27 10	...	...	...				F	18 48 ...	...	...	...
July 30	E	eP	5 56 45	...	...	4,570	Slight.	Aug. 25	E	P	5 21 33	...	...	6,350	Slight.
		PR ₁	58 15	...	...	...				S	29 33	...	...	...
		PR ₂	58 49	...	...	...				L	39 18	...	...	...
		S	6 3 5	...	...	...				Mn	47 48	20	23	...	
		eL	9 13	...	...	...				F	6 48 ...	...	...	...

TABLE D₂—contd.

Date.	Compt.	Phase.	G. M. T.		Amplitude.	△	Remarks.	Date.	Compt.	Phase.	G. M. T.		Amplitude.	△	Remarks.
			H. M. S.	Sec.							Period.	μ				H. M. S.	Sec.	Period.	μ	Km.
1935.			H. M. S.	Sec.	μ	Km.					H. M. S.	Sec.	μ	Km.	
Aug. 26		E	16 46 38	...	...	...	Tremor.	Sept. 20	E	P	5 33 6	...	...	6,650	Moderate.
		F	17 22 0	...	...	...				S	41 24	...	...	...
Aug. 27	E	e	5 36 50	...	...	...	Tremor.			L	51 59	...	...	...
		F	6 10 ...	...	...	...		Sept. 20	E	P	21 14 14	...	...	6,750	Slight.
Aug. 31	E	e	17 31 17	...	...	...	Slight.			S	22 38	...	...	...
		i	43 33	...	...	...				L	33 23	...	...	...
		Mn	18 17 58	16	8	...		Sept. 23	E	P	9 28 19	...	...	6,000	Slight.
		F	44 ...	...	...	...				PR ₁	30 36	...	...	...
Sept. 4	E	P	1 44 0	...	...	3,270	Great.			S	36 34	...	...	...
		PR ₂	45 8	...	...	...				SR ₂	42 42	...	...	...
		S	49 1	...	...	...				L	46 55	...	...	...
		SR ₁	50 21	...	...	...		Sept. 24	E	P	5 11 4	2	...	6,440	Slight.
		L	52 10	...	...	...				S	19 9	...	...	...
		Mn	56 46	10	145	...		Sept. 24	E	P	22 36 52	...	...	6,390	Slight.
		F	3 7 ...	...	...	...				S	44 55	...	...	...
Sept. 4	E	e	3 35 36	...	...	...	Slight.			eL	54 55	...	...	...
		Mn	47 56	20	58	...				F	23 50	...	...	...
Sept. 5	E	P	12 36 48	...	...	500	Slight.	Sept. 25	E	P	10 29 43	...	...	6,450	Slight.
		S	37 41	...	...	...				S	37 48	...	...	...
		L	38 2	...	...	...				eL	48 4	...	...	...
		Mn	13 38 22	3	30	...						...	...	...
		F	55 ...	...	...	...		Sept. 29	E	P	6 44 23	...	...	2,120	Slight.
Sept. 9	E	P	6 26 56	...	...	5,950	Moderate.			S	47 58	...	...	...
		S	34 33	...	...	...				L	49 23	...	...	...
		L	43 26	...	...	...				Mn	51 28	7	8	...	
		Mn	47 19	15	57	...				F	7 10 ...	...	...	...
Sept. 11	E	P	14 13 11	...	...	5,670	Moderate.	Oct. 1	E	P	6 14 54	...	...	1,580	Slight.
		S	20 33	...	...	...				S	17 41	...	...	...
		L	28 50	...	...	...				SR ₁	18 7	...	...	...
		Mn	38 1	12	41	...				L	18 31	...	...	...
		F	17 39 ...	...	...	...				Mn	20 1	8	65	...	
Sept. 15	E	e	11 28 14	...	...	...	Slight.			F	41 ...	...	...	...
		i	35 57	...	...	...		Oct. 2	E	P	5 42 5	...	...	5,620	Slight.
		F	12 25 ...	...	...	...				S	49 25	...	...	...
Sept. 15	E	P ₁	14 30 7	...	...	17,020	Slight.			PS	50 0	...	...	...
		PR ₁	33 56	...	...	...				SR ₁	52 53	...	...	...
		PR ₂	37 23	...	...	...				L	57 33	...	...	...
		PPS	47 17	...	...	...		Oct. 4	E	i	5 22 25	...	...	...	Slight. L-waves poor.
		SB ₂	59 24	...	...	...				f	59 ...	...	...	...
		Mn	34 34	18	14	...		Oct. 4	E	P	14 55 33	...	...	2,370	Slight.
		F	16 45 ...	...	...	...				PR ₁	55 56	...	...	...
Sept. 18	E	e	8 39 46	...	...	...	Tremor.			S	59 28	...	...	...
Sept. 20	E	P	1 56 34	...	...	6,620	Great.			L	15 1 13	5	19	...	
		S	2 4 50	...	...	...				Mn	2 8 5	...	...	...
		L	15 57	...	...	...				F	46 ...	...	...	...
		Mn	19 24	15	286	...		Oct. 6	E	e	7 27 21	...	...	...	Tremor.
										f	37 ...	...	...	...

TABLE D₃—contd.

Date.	Compt.	Phase.	G. M. T.		Period.	Amplitude.	△	Remarks.	Date.	Compt.	Phase.	G. M. T.		Period.	Amplitude.	△	Remarks.
1935.			H. M. S.	Sec.	μ	Km.			1935.			H. M. S.	Sec.	μ	Km.		
Oct. 6	E	P	14 48 24	...	...	1,820	Slight.	Oct. 18	E	P	0 20 50	...	...	...	5,550	Moderate.
		S	51 34	...	...	...				S	28 5	...	...	...	...
		SR ₁	52 5	...	...	...				L	36 11	...	...	...	...
		L	52 38	...	...	...				Mn	45 11 15	79	...	...	...
		Mn	54 3	10	36	...				F	Lost in microseisms.						
		F	15 22	...	...	...		Oct. 18	E	P	11 14 33	...	...	...	15,590	Moderate.
Oct. 8	E	*P	9 24 10	...	...	2,430	Moderate.			PR ₁	16 25	...	...	...	...
		PR ₁	24 34	...	...	...				S	21 51	...	...	...	...
		S	28 11	...	...	...				L	30 0	...	...	...	...
		SR ₁	29 0	...	...	...				Mn	37 51	12	27	...	...
		L	30 6	...	...	...				F	13 12	...	...	...	...
		Mn	33 33	6	71	...		Oct. 18	E	P	15 2 48	...	...	...	5,600	Slight.
		F	10 4	...	...	...				S	10 6	...	...	...	...
Oct. 10	E	e	20 15 21	...	...	...	Tremor.			L	18 15	...	...	...	...
		f	21 0	...	...	...				Mn	27 40	13	21	...	...
Oct. 11	E	eP	4 24 56	...	...	2,110	Slight	Oct. 18	E	P	22 0 20	...	...	...	5,650	Slight.
		sP	25 45	...	...	...	L—waves poor. Deep focus (△ from Brunner chart).			S	7 42	...	...	...	...
		S	28 21	...	...	...		Oct. 19	E	e	1 22 47	...	...	...	...	Tremor
		F	58	...	...	...		Oct. 19	E	e	2 52 41	...	...	...	...	Tremor.
Oct. 11	E	P	22 26 8	...	...	6,450	Slight.	Oct. 19	E	P	20 25 20	...	...	...	400	Slight.
		PR ₁	28 21	...	...	...				S	26 1	...	...	...	...
		S	34 14	...	...	...				L	26 19	4	...	...	...
		L	44 21	9	...	...				F	45	...	...	...	...
		F	0 12	...	...	...		Oct. 20	E	P	4 57 22	...	...	...	3,070	Slight.
Oct. 12	E	P	16 54 8	...	...	5,490	Moderate.			S	5 2 10	...	...	...	...
		PR ₁	56 19	...	...	...				L	5 8	8	...	...	...
		S	17 1 20	...	...	...				F	6 6	...	...	...	...
		PS	1 55	...	...	...		Oct. 26	E	i	8 41 7	...	...	...	...	Slight. Very near L-waves poor.
		eL	10 25	7	...	...				i	42 18	...	...	...	...
		Mn	18 40	15	89	...				F	Lost in microseisms.						
		F	19 47	...	...	...		Oct. 26	E	i	21 25 59	...	...	...	...	Slight. Probably S.
Oct. 13	E	P	2 6 19	...	...	5,570	Slight.			F	57	...	...	...	...
		S	13 35	...	...	...		Oct. 27	E	e	6 55 42	...	...	...	...	Tremor.
		eL	21 43	8	...	...				e	...	...	...	...	...
		F	Lost in microseisms.						Oct. 28	E	i	12 15 18	...	...	...	Slight.
Oct. 14	E	P	20 29 7	...	...	,900	Slight.			F	46	...	...	...	...
		S	32 24	...	...	...		Oct. 30	E	P	2 34 40	...	...	...	780	Slight.
		L	33 32	5	...	...				P (?)	35 26	...	...	...	...
		F	58	...	...	...				S	36 00	...	...	...	...
Oct. 17	E	P	14 37 28	...	...	2,350	Slight.			Mn	38 5	7	21	...	...
		PR ₁	37 51	...	...	...				F	Lost in microseism.					
		S	41 21	...	...	...		Oct. 31	E	e	19 34 6	...	...	...	...	Tremor.
		L	43 6	...	...	...				F	20 2	...	...	...	...
		Mn	49 23	16	24	...					...	...	...	...	...
		F	15 32	...	...	...					...	...	...	...	...

TABLE D₃—contd.

Date.	Compt.	Phase.	G. M. T.		Period.	Amplitude.	△	Remarks.	Date.	Compt.	Phase.	G. M. T.		Period.	Amplitude.	△	Remarks.	
			H. M. S.	Sec.	μ		Km.					H. M. S.	Sec.	μ	Km.			
1935.									1935.									
Oct. 31	E	e	23 4 19	...	...	...		Tremor.	Nov. 25	E	P	10 7 10	...	...	1930		Moderate.
		F	47 ...	...	...	...					PR ₁	7 25	...	...	...
Nov. 1	E	e	6 22 41	...	...	...		Tremor.			S	10 30	...	...	...
		F	7 35 ...	...	...	...					SR ₁	11 4	...	...	...
Nov. 1	E	P	16 25 24	...	...	...	1,590	Great.			L	11 44	...	...	...
		S	28 12	...	...	...					Mn	25 27	10	183	...		
		L	29 12	10	...	...					F	12 52	...	...	...
		Mn	33 42	15	682	...			Nov. 26	E	eP	0 37 26	...	...	550		Slight.
		F	18 35 ...	...	...	...					S	38 26	...	...	...
Nov. 1	E	e	21 0 10	...	...	...		Tremor.			L	38 46	5	...	...	
		F	20 ...	...	...	...					F	1 2 ...	...	...	...
Nov. 3	E	e	16 37 32	...	...	...		Slight.	Nov. 26	E	P	16 37 32	...	...	1,970		Slight
		Mn	42 42	7	...	...					S	40 55	...	...	...
		F	Lost in microseism.				...					L	42 14		
Nov. 5	E	P	21 5 18	...	...	...	3,850	Slight.			Mn	53 0	11	39	...		
		PR ₂	6 45	...	...	...			Nov. 29	E	e	19 39 3	...	...	...		Slight
		S	10 55	...	...	...					c	41 12	...	...	...
		L	15 20	7	...	...					F	20 2 ...	...	...	...
		F	22 5 ...	...	...	...			Nov. 30	E	e	3 38 10	...	...	...		Tremor.
Nov. 12	E	e	18 51 20	...	...	...		Tremor.			Mn	53 37	...	...	...
		F	19 9 ...	...	...	...			Nov. 30	E	e	4 55 49	...	...	...		Tremor.
Nov. 12	E	P	21 32 58	...	...	...	2,370	Moderate.			Mn	5 8 25	...	...	...
		S	36 53	...	...	...					F	6 1 ...	...	...	...
		L	38 41	...	...	...			Nov. 30	E	eP	16 23 45	...	...	350		Slight.
		Mn	44 57	15	43	...					S	24 25	...	...	...
		F	22 33 ...	...	...	...					L	24 31	...	...	...
Nov. 14	E	P	20 7 47	...	...	...	7,350	Slight.			F	16 30 ...	...	...	...
		S	16 42	...	...	...			Nov. 30	E	P	16 32 20	...	...	430		Slight.
		SR ₁	21 12	...	...	...					S	33 8	...	...	...
		F	21 1 ...	...	...	...					eL	33 20	...	...	...
Nov. 16	E	eP	5 57 30	...	...	...	3,970	Slight.			F	16 54 ...	...	...	...
		PR ₂	59 2	...	...	...			Dec. 1	E	eP	23 52 18	...	...	4,000		Slight.
		S	6 3 15	...	...	...					PR ₂	53 51	...	...	...
		eL	7 59	...	...	...					S	58 4	...	...	...
Nov. 17	E	P	18 16 20	...	...	...	610	Slight.			SR ₂	0 0 36	...	...	...
		S	17 23	...	...	...					L	2 50	...	...	...
		eL	17 44	...	...	...					Mn	9 48	10	19	...		
		F	18 37 ...	...	...	...					F	Lost in microseisms.					
Nov. 22	E	P	12 1 55	...	...	...	1,000	Slight.	Dec. 2	E	eP	16 49 48	...	...	4,010		Slight.
		S	3 42	...	...	...					S	55 36	...	...	...
		L	4 18	...	...	...					L	17 0 38	...	...	...
		F	21 ...	...	...	...					Mn	7 11	14	16	...		
Nov. 23	E	e	9 58 47	...	...	...		Slight.	Dec. 5	E	e	18 8 37	...	...	...		Tremor.
		F	10 11 ...	...	...	...					Mn	48 29	20	17	...		
											F	Lost in microseisms.						

TABLE D₃—concl'd.

Date.	Compt.	Phase.	G. M. T.	Period.	Amplitude.	△	Remarks.	Date.	Compt.	Phase.	G. M. T.	Period.	Amplitude.	△	Remarks.
1935.			H. M. S.	Sec.	μ	Km.		1935.			H. M. S.	Sec.	μ	Km.	
Dec. 7	E	P	4 41 25	...	...	450	Slight.	Dec. 19	E	e	9 49 43	...	...	...	Tremor.
		S	42 11	...	...	...		Dec. 19	E	e	13 33 29	...	...	...	Slight, near.
		L	42 33	...	...	...				Mn	38 32	...	...	...
		F	55 ...	...	...	...				F	14 0 ...	...	...	...
Dec. 9	E	c	16 6 2	...	...	...	Tremor.	Dec. 19	E	e	21 31 20	...	...	...	Slight, near.
		f	17 ...	...	...	...				Mn	34 40	...	...	...
Dec. 14	E	eP	1 50 34	...	...	8,100	Slight.	Dec. 19	E	P	23 15 15	...	...	2,210	Slight.
		PR ₁	54 54	...	...	...				S	18 57	...	...	...
		S	2 0 4	...	...	...				L	20 34	...	...	...
		SR ₁	7 46	...	...	...				F	40 ...	...	...	...
		L	14 4	...	...	...		Dec. 20	E	P	18 48 56	...	...	8,630	Slight.
		F	3 33 ...	...	...	...				S	58 51	...	...	...
Dec. 14	E	i	12 55 53	...	...	...	Tremor.			SR ₁	19 4 4	...	...	...
		f	13 56 ...	...	...	...				eL	14 15	...	...	...
Dec. 14	E	P ₁	22 24 59	...	...	16,370	Moderate.	Dec. 22	E	e	12 31 22	...	...	...	Tremor.
		ScPc PcS	34 59	...	...	...		Dec. 22	E	e	20 39 36	...	...	...	Tremor.
		PScPcS	38 37	...	...	...	Epc: 14° N, 94° W (U. S. C. G. S.)	Dec. 23	E	e	5 22 22	...	...	...	Slight, near.
		SR ₁	47 26	...	...	...				Mn	25 35	...	...	...
		L	23 11 37	...	...	...		Dec. 23	E	c	11 36 4	...	...	...	Tremor.
		Mn	31 12	25	97	...				f	50 ...	...	...	...
		F	0 56 ...	...	...	...		Dec. 24	E	e	12 44 6	...	...	...	Slight, very distant.
Dec. 15	E	P	7 19 50	...	...	8,940	Great			i	50 10	...	...	...
		PP ₁	24 38	...	...	...	Epc: 12° S, 161° E (U. S. C. G. S.)	Dec. 24	E	e	12 44 6	...	...	...
		S	29 58	...	...	...				i	13 7 44	...	...	...
		PS	30 40	...	...	...	Felt in Solomon Islands.	Dec. 28	E	P	2 40 43	...	...	2,720	Great.
		F	11 0 ...	...	...	...				S	45 6	...	...	...	Epc: North Sumatra.
Dec. 17	E	e	13 31 26	...	...	...	Tremor.	Dec. 28	E	P	17 27 27	...	...	2,670	Slight.
Dec. 17	E	P	19 24 28	...	...	3,720	Moderate.			S	31 48	...	...	...	Aftershock of the previous one.
		S	29 57	...	...	...	Epc: East of Formosa.	Dec. 29	E	P	23 45 59	...	...	5,110	Slight.
		L	34 11	...	...	...				S	52 50	...	...	...	Data from Omori-Ewing.
		Mn	39 59	20	56	...		Dec. 30	E	eP	4 16 21	...	...	2,680	Slight.
		F	21 52 ...	...	...	...				S	20 41	...	...	...
Dec. 17	E	e	22 42 48	...	...	...	Tremor.			eL	22 56	...	...	...
Dec. 18	E	P	7 14 22	...	...	1,710	Slight.	Dec. 30	E	e	16 4 58	...	...	...	Tremor.
		S	17 22	...	...	...				F	25 ...	...	...	...
		L	18 22	...	...	...		Dec. 31	E	e	1 41 4	...	...	...	Tremor.
		Mn	20 1	7	46	...						...	...	...
Dec. 18	E	Mn	8 16 40	...	...	...	Seismic activity, masked by microseisms. Tremor.					...	...	...
Dec. 18	E	e	13 21 49	...	...	...						...	...	...
Dec. 18	E	eP	17 2 42	...	...	1,710	Slight.					...	...	...
		S	5 42	...	...	...						...	...	...
		L	6 43	...	...	...						...	...	...
		Mn	9 50	10	29	...						...	...	...
		F	18 3 ...	...	...	...						...	...	...
Dec. 18	E	e	21 15 23	...	...	...	Tremor.					...	...	...
		F	38 ...	...	...	...						...	...	...

S. N. SEN,

Meteorologist, Alipore Observatory, Calcutta.

STATION—SOLAR PHYSICS OBSERVATORY, KODAIKANAL.

Lat. 10° 13' 50"N, Long. 77° 28' 00"E.

Height above M. S. L. 2,343 m. Lithologic Foundation : Rock.

Instruments : Milne-Shaw Seismograph East-West (E) Component.

INSTRUMENTAL CONSTANTS.

Component.	Steady mass. (Kg.)	T. (sec.).	Vm	ε	Paper speed (mm/min.)
E-W	0.45	11.5	250	20:1	8

TABLE D. 4.

Date.	Compt.	Phase.	G. M. T.	Period.	Amplitude.	Δ	Remarks.	Date.	Compt.	Phase.	G. M. T.	Period.	Amplitude.	Δ	Remarks.	
1935.			H. M. S.	Sec.	μ	Km.		1935.			H. M. S.	Sec.	μ	Km.		
Jan. 1	E	e	13 37 8	12,220	Beginning uncertain. Long waves poor.	Jan. 4	E	eP	16 29 24	6,110	Tremors.	
		ScPc ₃	46 10				PR ₁	31 29		
		SR ₁	55 37				PR ₂	32 29		
		F	16 21				eS	37 11		
Jan. 3	E	IP	1 55 12	...	...	2,565			PS	37 40	...	...	...
		IS	59 23	...	...	...			SR ₁	40 56	...	...	...
		Mn	2 4 17	9	248	...			SR ₂	42 41	...	...	...
		F	4 12	...	...	...			L	46 6	...	...	...
Jan. 3	E	e	6 11 27	Tremors.	Jan. 4	E	e	19 46 36		Tremors.
		F	7 28	...	...	...			F	20 12	...	...	...	...
Jan. 4	E	e	0 25 18	Tremors.	Jan. 5	E	IP (?)	10 13 26	3,510		Tremors.
		F	1 9	...	...	...			PR ₁	14 31	...	...	...
Jan. 4	E	e	8 10 6	...	...	...	Tremors.		IS	18 43	...	...	...
		F	28	...	...	...			L	21 48	...	...	...
Jan. 4	E	e	10 34 12	...	...	...	Feeble shock.		Mn	24 11 23	9	...	...	
		F	11 10		Jan. 5	E	e	16 22 48	Feeble shock.	
Jan. 4	E	eP	14 50 50	...	...	5,865	Mixed up with the following shock.		F	17 28	...	...	...	...
		ePR ₁	52 43			Jan. 6	E	e	7 15 22	Feeble shock.
		ePR ₂	53 38				F	8 13	
		eS	58 23			Jan. 10	E	e	11 31 35	Time not estimable.
		PS	5 57	...	...	...				Mn	36 4 11	3	...	...
		SR ₁	15 1 56	...	...	...				F	12 6	...	...	...
		SR ₂	3 26			Jan. 11	E	?	?	Feeble shock.	
		L	6 57			Jan. 13	E	e	15 52 23	
		Mn	18 56	16	20	...				F	16 3	

TABLE D₄—contd.

Date.	Compt.	Phase.	G. M. T.	Period.	Amplitude.	△	Remarks.	Date.	Compt.	Phase.	G. M. T.	Period.	Amplitude.	△	Remarks.
1935.			H. M. S.	Sec.	μ	Km.		1935.			H. M. S.	Sec.	μ	Km.	
Jan. 17	E	eP	2 21 35	...	...	3,310		Feb. 13	E	e	17 37 29	...	...	...	Feeble shock.
		PR ₁	22 22	...	...	...				F	19 12	...	...	...
		S	26 30	...	...	...		Feb. 14	E	e	15 53 31	...	...	...	Tremors.
		SR ₁	28 8	...	...	...				F	16 40	...	...	...
		L	30 18	...	...	...		Feb. 19	E		No minute marks.			Feeble shock.	
		Mn	32 51	9	8	...		Feb. 22	E	eP	17 18 47	...	...	9,700	
		F	3 55	...	...	...				PR ₁	21 51	...	...	...
Jan. 18	E		No time marks.				Feeble shock.			iPR ₂	23 56	...	...	...
Jan. 18	E	e	11 49 40	...	...	...	Tremors.			ScPcS	29 4	...	...	...
		F	12 16	...	...	...				iS	29 28	...	...	...
Jan. 19	E	e	3 14 14	...	...	...	Feeble shock.			L	46 25	...	...	...
		F	36	...	...	...				Mn	59 35	22	66	...	
Jan. 22	E	e	15 7 14	...	...	...	Tremors			F	20 59	...	...	...
		F	50	...	...	...		Feb. 13	E	e	21 6 38	...	...	...	Tremors.
Jan. 23	E	eP	7 37 22	...	...	9,755				F	51	...	...	...
		PR ₁	42 42	...	...	...		Feb. 21	E	e	11 12 45	...	...	...	Tremors.
		ScPcS	47 39	...	...	...				F	12 40	...	...	...
		iS	48 6	...	...	...		Feb. 25	E	P	3 0 ?	...	...	6,000	Beginning lost under clip mark.
		PS	49 8	...	...	...				i	8 14	...	...	...
		PPS	49 36	...	...	...				iSR ₁	12 00	...	...	...
		SR ₁	54 10	...	...	...				L	17 20	...	...	...
		SR ₂	57 51	...	...	...				Mn	25 57	20	16	...	
		L	8 6 58	...	...	...				F	4 26	...	...	...
		Mn	23 53	19	16	1.4		Feb. 28	E	e	13 18 15	...	...	...	Tremors.
		F	11 2	...	...	...				F	33	...	...	...
Jan. 31	E		No time marks.				Tremors.	Feb. 28	E	e	14 28 14	...	...	...	Tremors.
Feb. 3	E	eP	2 16 18?	...	...	...	Time uncertain minute marks being irregular.			F	15 4	...	...	...
		PR ₂	16 5:?	...	...	...		Mar. 4	E	S	16 24 33	...	...	2,980	Beginning uncertain.
		eS	20 26?	...	...	...				L	27 22	...	...	...
		L	22 33?	...	...	...				F	49	...	...	...
		Mn	24 26?	8	19	...		Mar. 5	E	P	10 32 38	...	...	4,400	Beginning uncertain.
		F	5 14	...	...	...				eS	38 50	...	...	...
Feb. 4	E	eP	7 54 36	...	...	3,690				SR ₁	41 20	...	...	...
		iS	8 0 4	...	...	...				SR ₂	42 5	...	...	...
		Mn	8 6 43	22	5	...				L	44 30	...	...	...
		F	9 36	...	...	...				F	11 56	...	...	...
Feb. 5	E		Time not readable.				Feeble shock.	Mar. 5	E	iP	22 20 26	...	...	1,935	
Feb. 5	E	e?	3 49 43	...	...	...	Feeble shock.			iS	23 46	...	...	...
		F	4 22	...	...	...				Mn	26 28	5	70	...	
Feb. 7	E		...	...	...	...	Feeble shock. Phases not clear.			F	24 15	...	...	...
Feb. 7	E	eP	19 27 48	...	...	4,835	Preliminary movements very feeble	Mar. 7	E	e	7 20 53	...	...	...	Feeble shock.
		eS	34 23	...	...	...				F	8 0	...	...	...
		L	43 48	...	...	...		Mar. 12	E		Lines overlapping.				
		Mn	48 25	17	6	...		Mar. 13	E		Lines overlapping.				
		F	22 20	...	...	...						

TABLE D₄—contd.

Date.	Compt.	Phase.	G. M. T.	Period.	Amplitude.	△	Remarks.	Date.	Compt.	Phase.	G. M. T.	Period.	Amplitude.	△	Remarks.	
1935.			H. M. S.	Sec.	μ	Km.		1935.			H. M. S.	Sec.	μ	Km.		
July 23	E	e	3 58 59	...	...	...	No minute marks.	Aug. 17	E	eP	1 58 12	...	...	10900	L-waves poor.
		i	4 41 52				ePR ₁	2 2 7		
		Mn	04 04 7	10	36	...				iPR ₂	4 13		
		F	51 ...	...	...	...			ScPeS	8 36	...	...	...
July 27	E	e	12 12 25	...	...	...	Beginning uncertain.			ScPePeS	9 16	...	...	...
		e	17 09	...	...	...				PS	11 00	...	...	...
		L	19 31	...	...	...				ISR ₁	16 20	...	...	...
		Mn	21 37	10	6	...			Mn	29 0 40	79	...	...	
		F	13 20	...	...	...			F	4 18	...	...	...
July 28	E	e	10 31 30	...	...	...	Phases not clear.	Aug. 23	E	IP	14 3 45	...	...	3,065	
		Mn	56 45	6	5	...				iS	8 33	...	...	...
		F	11 53	...	...	...				ISR ₁	9 51	...	...	...
July 28	E	e	5 30 55	...	...	...				L	11 51	...	...	...
		i	34 50	...	...	...				Mn	13 14 19	37	...	...
		L	36 38	...	...	...				F	15 26	...	...	...
		Mn	38 24	4	5	...		Aug. 25	E	e	5 49 20	...	...	...	Tremors.
		F	6 01	...	...	...			f	6 10	...	...	...
July 29	E	eP ₁	7 52 17	...	...	13510		Sept. 4	E	IP	1 45 50	...	...	4635	
		PR ₁	53 31	...	...	...				PR ₁	47 20	...	...	...
		ScPeP	55 06	...	...	...				iPR ₂	47 47	...	...	...
		PR ₂	56 14	...	...	...				iS	52 15	...	...	...
		ScPeS	59 7	...	...	...				SR ₁	55 2	...	...	...
		ScPePeS	8 00 43	...	...	...				SR ₂	55 48	...	...	...
		S	01 40	...	...	...				L	58 30	...	...	...
		PS	03 43	...	...	...				Mn	2 9 6 10	8	...	...
		PDS	01 56				F	Mixed up with the following shock.					
		SR ₁	10 28			Sept. 4	E	e	3 36 8	Feeble shock.
		SR ₂	14 55	...	...	...				f	4 33	...	...	...
		L	31 30			Sept. 9	E	eP	6 28 8	6,820	
		Mn	41 02	20	12	...				iS	36 36	...	...	...
		F	9 57	...	...	...			PS	37 7	...	...	...
July 29		e	23 27 44	...	...	...	Lines overlapping.			SR ₁	40 43	...	...	...
		Mn	33 35	8	12	...				SR ₂	42 52	...	...	...
July 30	E	e	5 55 30	...	...	...	Other phases not clear.			L	47 29	...	...	...
		L	6 8 37	...	...	...				Mn	52 25 24	28	...	...
		Mn	12 29	17	9	...				F	8 33	...	...	...
		F	7 4	...	...	...		Sept. 11	E	e	12 42 42	...	...	...	Tremors.
				...	...	...			f	13 14	...	...	...
Aug. 1	E	e	14 27 24	...	...	...	Slight shock.	Sept. 11	E	IP	14 14 58	...	...	7,365	
		f	49	...	...	...				PR ₁	17 23	...	...	...
Aug. 3	E	IP	1 14 36	...	...	2245				PR ₂	18 41	...	...	...
		iS	18 21	...	...	...				iS	23 54	...	...	...
		SR ₁	19 6	...	...	...				PS	24 12	...	...	...
		L	20 4	...	...	...				SR ₁	28 21	...	...	...
		Mn	21 45	13	429	...				SR ₂	30 45	...	...	...
		F	3 56	...	...	...				L	35 45	...	...	...
				...	...	...			Mn	51 8 19	16	...	...	
				...	...	...			F	17 25	...	...	...

TABLE D₄—contd.

Date.	Compt.	Phase.	G. M. T.	Period.	Ampli- tude.	△	Remarks.	Date.	Compt.	Phase.	G. M. T.	Period.	Ampli- tude.	△	Remarks.		
1935.			H. M. S.	Sec.	μ	Km.		1935.			H. M. S.	Sec.	μ	Km.			
Sept. 12	E	eP?	17 13 40	...	...	2,180?	Beginning certain.	un-	Oct. 2	E	IP	5 43 57	...	...	7,355	
		eS	17 20	...	...	...					PR ₁	46 19	...	...	...
		L	19 0	...	...	...					S	52 52	...	...	...
		Mn	20 50	9	3	...					PS	53 22	...	...	...
		F	44	...	...	...					SR ₁	57 28	...	...	...
Sept. 15	E	e	11 37 13	...	...	...	Tremors.				SR ₂	59 50	...	...	...
		f	13 1 0	...	...	...					F	7 1	...	...	...
Sept. 15	E	e	14 53 51	...	...	...	Other phases not clear.		Oct. 4	E	i	5 23 28	...	...	...	Feeble. Other phases not clear.
		L	15 22 34	...	...	...					f	49	...	...	...
		Mn	39 35	19	16	...			Oct. 4	E	eP	14 55 41	...	...	2,360	Feeble. L-waves poor.
		F	16 59	...	...	...					S	59 35	...	...	...
Sept. 18	E	e	8 34 30	...	...	...	Feeble shock.				SR ₁	15 0 35	...	...	...
		f	9 38	...	...	...					L	1 18	...	...	...
Sept. 20	E	iP	1 57 18	...	...	7,200					Mn	2 48	6	9	...	
		PR ₁	59 45	...	...	...					F	40	...	...	...
		S	2 6 3	...	...	...			Oct. 6	E	e	14 53 27	...	...	...	Feeble shock
		PS	6 44	...	...	...					f	15 28	...	...	...
		SR ₁	10 33	...	...	...					e	5 39 25	...	...	...	Tremors.
		L	21 20	...	...	...					f	6 38	...	...	...
		Mn	26 51	25	544	...					eP	9 25 40	...	...	2885	
		F	Mixed up with the following shock			...				Oct. 8	E	S	30 15	
Sept. 20	E	iP	5 33 55	...	...	7,255					SR ₁	31 29	...	...	...
		PR ₁	36 17	...	...	...					L	33 0	...	...	...
		PR ₂	37 42	...	...	...					Mn	34 47	7	21	...	
		iS	42 45	...	...	...					F	10 21	...	...	...
		PS	43 15	...	...	...			Oct. 11	E	e	4 27 11	...	...	...	Slight.
		SR ₁	47 18	...	...	...					iS (?)	30 4	...	...	...
		SR ₂	49 33	...	...	...					IP	22 26 56	...	...	7,455	
		L	54 33	...	...	...					PR ₁	29 28	...	...	...
		Mn	6 4 17	15	18	...					eS	35 56	...	...	...
		F	8 44	...	...	...					PS	36 29	...	...	...
Sept. 23	E	iP	9 29 7	...	...	7,310					SR ₂	43 36	...	...	...
		PR ₁	31 36	...	...	...					L ?	49 6	...	...	...
		PR ₂	32 55	...	...	...					F	24 0	...	...	...
		iS	38 0	...	...	...			Oct. 12	E	eP	16 55 35	...	...	7,705	
		PS	38 33	...	...	...					S	17 4 46	...	...	...
		SR ₁	42 30	...	...	...					PS	5 13	...	...	...
		SR ₂	44 50	...	...	...					SR ₁	9 25	...	...	...
		Mn	58 43	18	14	...					SR ₂	12 14	...	...	...
Sept. 24	E	e	22 48	...	...	...	Feeble shock.				L	18 20	...	...	...
		F	0 14	...	...	...					Mn	30 0	15	9	...	
Sept. 25	E	e	10 30 33	...	...	...	Feeble shock.				F	19 30	...	...	...
		f	11 38	...	...	...			Oct. 13	E	e	15 57 52	...	...	...	Tremors.
Sept. 29	E	e	6 48 19	...	...	...	Tremors.				f	16 33	...	...	...
		f	7 17	...	...	...							...	...	...

TABLE D₄—contd.

Date.	Compt.	Phase.	G. M. T.	period.	Ampli- tude.	△	Remarks.	Date.	Compt.	Phase.	G. M. T.	Period.	Ampli- tude.	△	Remarks.
1935.			H. M. S.	Sec.	μ	Km.		1935.			H. M. S.	Sec.	μ	Km.	
Oct 17	E	iP	14 37 24	...	...	2,455		Oct. 30	E	e	2 40 33	...	...	...	Tremors.
		iPR ₁	37 44	...	...	...				f	3 45	...	...	...
		PR ₂ ?	37 52	...	...	...		Oct. 31	E	e	19 32	...	...	...	Tremors.
		iS	41 26	...	...	...				f	20 23	...	...	...
		SR ₁	42 15	...	...	...		Nov. 1	E	e	7 7 13	...	...	...	Tremors.
		eL	43 30	...	...	...				f	8 0	...	...	...
		Mn	45 21	20	7	...		Nov. 1	E	iP	16 27 53	...	...	2,855	
		F	15 31	...	...	...				PR ₁	28 29	...	...	...
Oct. 18		eP	0 22 36	...	...	7,195				iS	32 26	...	...	...
		PR ₁	24 58	...	...	...				L	35 17	...	...	...
		PR ₂	26 15	...	...	...				Mn	40 58	15	57	...	
		iS	31 24	...	...	...				F	19 7	...	...	...
		iPS	31 53	...	...	...		Nov. 3	E	eP	16 46 0	...	...	1,600	
		SR ₁	35 54	...	...	...				eS	48 49	...	...	...
		L	42 24	...	...	...				SR ₁	49 20	...	...	...
		Mn	57 36	17	18	...				L	49 45	...	...	...
		F	2 3	...	...	...				M	51 9	9	3	...	
Oct. 18	E	iP	11 15 45	...	...	6,955				F	17 8	...	...	...
		PR ₁	18 9	...	...	...		Nov. 5	E	iP	21 6 8	...	...	5,300	
		PR ₂	19 17	...	...	...				PR ₁	7 50	...	...	...
		S	24 20	...	...	...				PR ₂	8 27	...	...	...
		PS	24 50	...	...	...				iS	13 10	...	...	...
		SR ₁ ?	28 46	...	...	...				SR ₁	16 14	...	...	...
		SR ₂ ?	30 49	...	...	...				SR ₂	17 20	...	...	...
		L	35 33	...	...	...				L	20 7	...	...	...
		Mn	39 30	20	8	...				Mn	24 4	25	13	...	
		F	12 30	...	...	...				F	22 32	...	...	...
Oct. 18	E	e	15 57 52	...	...	...	Tremors.	Nov. 6	E	Lines overlapping.		Times indecipher- able.		Tremors.	
		f	16 33	...	...	...		Nov. 9	E	e	6 5 25	...	...	...	Feeble.
Oct. 20	E	eP	4 55 45	...	...	...				f	55	...	...	...
		eS	59 15	...	...	...		Nov. 10	E	e	9 14 25	...	...	...	Tremors.
		SR ₁	5 0 9	...	...	...				f	10 18	...	...	...
		L	1 0	...	...	...		Nov. 10	E	e	18 50 25	...	...	...	Distant, Feeble.
		Mn	3 0	14	7	...				f	20 59	...	...	...
		F	55	...	...	...		Nov. 11	E	e	13 23 40	...	...	...	Distant, Feeble.
Oct. 26	E	e	21 27 52	...	...	...	Feeble shock.			f	15 3	...	...	...
		L	31 24	...	...	...		Nov. 12	E	iP	21 33 0	...	...	2,345	
		Mn	32 22	11	8	...				PR ₁	33 31	...	...	...
		f	49	...	...	...				iS	36 53	...	...	...
Oct. 27	E	e	5 49	...	...	...	Tremors.			L	38 37	...	...	...
		f	6 35	...	...	...				M	40 30	20	23	...	
Oct. 28	E	e	12 17 48	...	...	...	Feeble.			F	23 7	...	...	...
		L	20 46	...	...	...		Nov. 14	E	e	20 23 30	...	...	...	Feeble.
		Mn	21 32	10	7	...				f	21 11	...	...	...
Oct. 29	E	e	10 14	...	...	...	Tremors.					...	...	...
		f	49	...	...	...						...	...	...

TABLE D₄-contd.

Date	Compt.	Phase.	G. M. T.		Period.	Amplitude.	△	Remarks.	Date.	Compt.	Phase.	G. M. T.		Period.	Amplitude.	△	Remarks.
1935.			H. M. S.	Sec.		μ	Km.		1935.			H. M. S.	Sec.	μ	Km.		
Nov. 16	E	e	5 58 48	...	...	...	...	Feeble.	Dec. 15	E	eP	7 20 28	...	...	9,500		Epc: 12° S, 161° E (U. S. C. G. S.). Felt in Solomon Islands.
		f	6 56	...	...	...	...				IS	31 04	...	...	...
Nov. 22	E	e	12 3 10	...	...	...	...	Tremors.			L	51 42	...	...	...
		f	30	...	...	...	...				Mn	59 35	20	142	...		
Nov. 23	E	e	9 12 31	...	...	...	...	Tremors.			F	11 18	...	...	...
		f	10 10	...	...	...	...		Dec. 17	E	iP	19 26 12	...	...	5,300		Epc: East of Formosa.
Nov. 25	E	iP	10 6 58	...	...	...	2,045				iPR ₁	28 44	...	...	...
		PR ₁	7 15	...	...	...	...				IS	38 14	...	...	...
		IS	10 27	...	...	...	...				iSR ₁	35 35	...	...	...
		SR ₁	11 10	...	...	...	...				iSR ₂	37 13	...	...	...
		L	11 55	...	...	...	...				iL	39 41	...	...	...
		Mn	18 15	13	60	...	...				Mn	44 00	22	12	...		
		F	13 1	...	...	...	...				F	21 09	...	...	...
Nov. 30	E	e	3 39 40	...	...	...	...	Feeble shock.	Dec. 18	E	e	7 17 00	...	...	...	...	Feeble.
		f	4 36	...	...	...	...				f	8 7	...	...	...	...
Nov. 30	E	e	4 51 38	...	...	...	...	Feeble shock.	Dec. 18	E	e	17 5 45	...	...	...	...	Tremors.
		f	5 56	...	...	...	...				f	48	...	...	...	...
Dec. 1	E	e	23 48 05	...	...	...	...	Tremors.	Dec. 19	E	e	21 38 00	...	...	...	...	Tremors.
		f	43	...	...	...	...				f	21 48	...	...	...	...
Dec. 2	E	...	...	...	...	...	...	Tremors. Lines overlapping.	Dec. 19	E	e	23 19 15	...	...	...	...	Feeble shock.
Dec. 5	E	e	18 7 24	...	...	...	...	Tremors.			f	36	...	...	...	...
		f	38	...	...	...	...		Dec. 20	E	e	18 49 38	...	...	...	...	Feeble shock.
Dec. 5	E	e	18 43 33	...	...	...	...	Feeble shock.			f	20 22	...	...	...	...
		f	19 15	...	...	...	...		Dec. 22	E	e	20 34 23	...	...	...	...	Do.
Dec. 8	E	e	17 31 08	...	...	...	...	Feeble shock.			f	21 9	...	...	...	...
		f	18 08	...	...	...	...		Dec. 24	E	e	12 44 14	...	...	...	...	Tremors.
Dec. 14	E	iP	1 49 47	...	...	...	3,230	Lines overlapping.			f	13 27	...	...	...	...
		iPR ₁	52 21	...	...	...	...		Dec. 24	E	e	13 48 33	...	...	...	...	Feeble shock.
		IS	59 24	...	...	...	...				f	14 37	...	...	...	...
		eSR ₁	4 9	...	...	...	...		Dec. 28	E	iP	2 40 35	...	...	2,600		Great. Epc. North Sumatra.
		eL	8 3	...	...	...	...				IS	44 49	...	...	...	...
		Mn	12 44	24	6	...	...				L	47 02	...	...	...	...
		F	3 14	...	...	...	...				Mn	48 43	22	1,438	...	...
Dec. 14	EP	eP?	22 24 52	...	...	...	3,200	Epc: 14° N, 94° W, (U. S. C. G. S.).			F	6 51	...	...	...	...
		iP ¹	26 10	...	...	...	...		Dec. 28	E	iP	17 27 09	...	...	2,600		
		ScPcPcS	37 13	...	...	...	...				IS	31 23	...	...	...	...
		PScPcS	41 6	...	...	...	...				L	33 31	...	...	...	...
		PPS	43 59	...	...	...	...				Mn	35 30	18	3	...	...
		SR ₁	50 27	...	...	...	...				F	18 21	...	...	...	...
		iSR ₁	56 28	...	...	...	...		Dec. 28	E	e	18 56 47	...	...	...	...	Tremors.
		iL	23 22 00	...	...	...	...				f	19 21	...	...	...	...
		Mn	34 45	22	34	...	...						...	...	...	...
		F	49	...	...	...	...						...	...	...	...

TABLE D₄—concl'd.

Date.	Compt.	Phase.	Time. G. M. T.	Period (Sec.)	Amplitude	△	Remarks.	Date.	Compt.	Phase.	G. M. T.	Period.	Amplitude.	△	Remarks.
1935.			H. M. S.	Sec.	μ	Km.		1935.			H. M. S.	Sec.	μ	Km.	
Dec. 29	E	e	3 41 11	...	...	...	Feeble shock.	Dec. 30	E	eP	4 15 57	...	...	2,600	
		f	4 38					iS	20 11
Dec. 29	E	iP	23 46 36	...	...	6,635				L	22 20	...	...	...
		iPR ₁	49 07	...	...	...				Mn	24 25	18	4	...	
		iPR ₂	50 15	...	...	...				F	5 11 ...	...	...	...
		iS	54 53	...	...	...		Dec. 31	E	e	1 35 27	...	...	...	Feeble shock.
		iPS	55 24	...	...	...				f	2 27 ...	...	...	...
		L	0 6 07	...	...	...						
		F	1 24 ...	...	...	...						

T. ROYDS.
Director, Kodaikanal Observatory.

The following table contains a list of earthquakes that were reported by voluntary observers from various stations.

TABLE D₅.

Station	Date.	Time (G.M.T.) of earth quake.	Duration.	Intensity (Rossi-Forel scale).	Number of shocks.	Remarks.	Station.	Date.	Time (G.M.T.) of earth quake.	Duration.	Intensity (Rossi-Forel scale).	Number of shocks.	Remarks.
	1935.	H. M.	Sec.					1935.	H. M.	Sec.			
Salona	Jan. 3	13 09	5 to 7	4	1		Srinagar	Apr. 3	11 16	About 3	8	2	
Dhubri	" 7	02 50	4	5	1		Muzaffarabad	" 3	11 15	2	4	1	
Drosh	" 9	04 20	4	6	1		Drosh	" 5	18 50	30	5	2	
Angul	" 21	15 30	About 3	5	1		Srinagar	" 5	19 04	About 1	7	1	
Dhubri	" 22	23 42	5	7	2		Salona	" 10	18 36	" 10	4	1	
Shillong	" 22	23 40	40	5	2		Drosh	" 17	17 30	35	4	2	
Gauhati	" 22	23 50	About 40	6	2		Akyab	" 18	16 00	3	6	3	
Do.	" 31	12 11	" 15	4	1		Naya Dumka	" 23	16 50	2	3	1	
Salona	" 31	12 00	" 25-30	5	2	With small vibrations.	Dhubri	" 23	16 41	64	7	3	Continuous.
Cherrapunji	" 31	12 03	2	3	1		Faridpur	" 23	16 37	3	5	3	
Slalkot	Feb. 2	23 35	2	6	1		Cherrapunji	" 23	16 45	30	3	1	
Do.	" 3	02 30	10-15	6	3		Shillong	" 23	16 47	120	7	2	
Lahore	" 3	02 15	3	5	1		Gauhati	" 23	16 50	About 70	6	3	
Dera Ismail Khan	" 3	02 00	2 each	6	2		Chittagong	" 23	16 50	" 5	4	2	
Cherat	" 3	02 22	2	6	2		Salona	" 23	16 48	" 45	5	...	Fairly severe shaking for about 10 secs.
Peshawar	" 3	02 10	100	7	2		Mymensingh	" 23	17 10	2	7	2	
Drosh	" 3	02 09	39	6	2		Sibsagar	" 23	16 49	About 40	5	2	
Srinagar	" 3	02 12	About 4	6	2		Do.	" 25	03 33	" 5	4	1	
Dras	" 3	02 15	15	6	2		Drosh	May 12	05 45	25	3	...	No prominent shock.
Sonamarg	" 3	02 15	15	6	2		Yatung (Tibet)	" 13	21 13	About 4	6	1	Followed by tremors.
Rawalpindi	" 18	23 52	About 7-10	6	1		Kabul	" 19	02 54	5	5	2	
Cawnpore	Mar. 5	22 15	3	5	1		Dhubri	" 26	16 53	4	7	1	
Roorkee	" 5	22 20	60	6	1		Dera Ismail Khan	" 30	21 27	2	5	2	
Muktesar	" 5	22 26	About 60	6	1		Multan	" 30	21 30	20-25	5	1	
Gauhati	" 18	03 17	12	6	1		Drosh	June 2	04 20	3	5	...	
Muktesar	" 15	10 39	About 4	5	1		Srinagar	" 2	04 30	About 3	...	2	
Salona	" 20	23 50	" 3	3	...	Only small vibrations.	Do.	" 23	05 02	" 2	6	1	
Naya Dumka	" 20	23 50	" 20	3	...	Unusual sound like motor car was heard.	Gulmarg	" 23	04 57	2	7	1	
Shillong	" 21	00 00	40	6	3		Drosh	" 25	23 50	20	6	...	
Rangpur (Bengal)	" 21	00 26	70	4	...		Peshawar	" 25	23 55	30	7	2	
Gauhati	" 21	00 15	About 15	5	1	Jerking continued till about 50 secs.	Do.	" 26	19 00	5	4	1	
Khulna	" 21	00 05	3 or 4	3	3	Separate shocks, middle shock was strongest.	Srinagar	" 26	00 05	About 2	5	2	
Dhubri	" 21	00 02	30	7	3		Do.	July 5	18 00	" 3	6	2	
Cherrapunji	" 21	00 08	10	3	1		Cooch Behar	" 12	15 36	" 10	6	1	
Faridpur	" 21	00 08	5	6	3		Dhubri	" 12	16 01	28	7	2	
Berhampore (Bengal).	" 21	00 05	13	5	1		Drosh	" 13	19 30	15	5	...	
Mymensingh	" 21	00 05	2	7	2		Jaipur	" 16	21 59	2	5	1	
Rawalpindi	" 23	11 16	30	4	2		Salona	" 18	02 26	About 10	5	1	
Dhubri	" 30	17 38	18	7	2		Kapadvanj (Dist. Kaira)	" 20	07 48	1	3	2	
Do.	" 31	17 48	10	7	2		Yatung (Tibet)	" 20	20 27	About 3	4	...	Several tremors.
Peshawar	Apr. 3	11 15	10	6	1		Bhuj	" 22	21 18	4	...	...
Kabul	" 3	10 06	10	5	1		Salona	" 27	06 40	" 7-8	5	1	
Drosh	" 8	11 10	45	6	...	Many shocks; two very heavy.	Srinagar	" 28	05 28	" 3	6	2	
							Drosh	" 28	05 25	" 40	5	1	
							Gulmarg	" 28	05	10	8	3	
							Srinagar	" 29	23 7	About 2	5	1	
							New Delhi	Aug. 22	00 57	2	7	2	
							Dhubri	Sept. 5	12 36	8	7	2	
							Cooch Behar	" 5	12 37	About 40	6	2	
							Drosh	" 7	08 30	3	5	..	

TABLE D₅—concl'd.

Station.	Date.	Time (G.M.T.) of earth- quake.	Dura- tion.	Inten- sity (Rossi- Forel scale).	Number of shocks.	Remarks.	Station.	Date.	Time (G.M.T.) of earth- quake.	Dura- tion.	Inten- sity (Rossi- Forel scale).	Number of shocks.	Remarks.
	1935.	H. M.	Sec.					1935.	H. M.	Sec.			
Peshawar	Oct. 11	04 25	5	5	1		Salona	Nov. 28	19 47	4-5	5	1	
Kabul	" 11	03 40	2	5	2		Dhubri	" 30	16 19	9	7	2	
Drosh	" 11	04 15	30	5	1		"	" 30	16 32	8	7	2	
Bushire	" 15	17 10	about 30	...	1		Gauhati	" 30	16 33	10	6	1	
Gauhati	" 19	20 25	" 15	6	1		"	" 30	16 40	55	6	2	
Salona	" 19	20 25	" 30	5	...	Severe vibration 3 or 4 being in the nature of shocks.	Shillong	" 30	16 55	30	6	2	
Shillong	" 19	20 25	30	6	1		Dhubri	Dec. 3	03 32	8	7	2	
Salona	" 20	04 38	2-3	4	...	Few severe vib- ration.	Drosh	" 15	21 40	10	5	1	
Drosh	" 20	19 00	40	5	1		"	" 17	21 40	5	3	1	
Bushire	" 24	12 30 16 00	...	...	...		Kabul	" 19	22 25	2	5	1	
Drosh	" 24	14 30	5	5	1		Drosh	" 19	23 00	7	3	1	
Bushire	" 26	12 30 18 30	...	...	...		Srinagar	" 23	14 44	3	6	1	
"	" 27	04 00 08 00 11 45	...	...	...		" . . . . .	" 24	16 43	2	8	1	
Salona	Nov. 18	05 23	3-4	4	...	Only vibrations.	Shillong	" 26	00 22	5	5	1	
Hazaribagh.	" 25	23 30	4	3	1		Drosh	" 28	20 00	10	5	1	
							"	" 29	21 00	5	3	1	
							"	" 30	16 35	5	5	1	

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GOVERNMENT OF INDIA
METEOROLOGICAL DEPARTMENT

INDIA WEATHER REVIEW, 1935.

ANNUAL SUMMARY

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METEOROLOGICAL DEPARTMENT

INDIA WEATHER REVIEW, 1935

ANNUAL SUMMARY

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