THE GOVERNMENT-GENERAL OF FORMOSA
BUREAU OF COMMUNICATIONS

THE CLIMATE, TYPHOONS, AND EARTHQUAKES OF THE ISLAND OF FORMOSA (TAIWAN)

With the Compliments of

H. Kondō,

Director of the Taihoku Meteorological Observatory.

Taihoku Meteorological Observatory

Taihoku: 1914

Plate I.

Taihoku Meteorological Observatory.

TABLE OF CONTENTS.

LIST OF PLATES.

THE CLIMATE, TYPHOONS, AND EARTHQUAKES OF THE ISLAND OF FORMOSA.

I. INTRODUCTION.

The Meteorological Service of Formosa. The meteorological service of Formosa was organized, under an Imperial ordinance in the year 1896, and was placed under the control of the Bureau of Communications of the Civil Administration Department of the Government-General. In the same year, observatories were established in the following five places: Taihoku, Taichu, Tainan, Kōshun, and Hōkoto (Pescadores Islands). To the above list, the Taitō Observatory, established in 1901, may be added.

In addition to above, an observatory having the same equipment was established at Sharyō-tō (Palm Island), at the mouth of Keelung harbour. This station is maintained by the Public Works Department, for the benefit of the harbour works. Observations are also conducted at ten of the lighthouses in the island; of these, the work, similar to that of an ordinary observatory, is performed at two lighthouses viz: Agincourt Island and Karenkō; the remaining eight lighthouses, on account of incompletion of equipment, undertake only observations of temperature and rainfall.

Besides the observatories mentioned above, the service receives cooperation from 100 rainfall stations, which were established for various objects, such as investigation of irrigation works and climate, agriculture, and forestry. Excluding the savage districts,

which spread on both sides of the central mountain range, these stations are distributed throughout the island, forming a network for the service.

All of the rainfall stations, excepting one or two private undertakings, are maintained by various government departments. Thus the meteorological service of Formosa is carried on entirely at government expense.

The Central Observatory. The Taihoku Observatory, as the central station, receives all reports from local observatories, lighthouses, and rainfall stations in the island; here reports are investigated and tabulated and information derived therefrom is either announced publicly by bulletins or issued from time to time in the form of printed reports.

Observations. Hourly observations are made every day at the Taihoku observatory, and at local observatories and lighthouses, 6 times a day, at 2, 6, & 10 a.m., and at 2, 6, & 10 p.m.. Rainfall stations take records once a day, at 10 a.m.

The time used for these observations is the Imperial western standard time, i.e., the hour of the meridian of 120° east of Greenwich. The method of and instruments used in observations are similar to those adopted in Japan proper.

Weather Telegrams. The Taihoku observatory receives weather telegrams from all observatories in the island and from several stations in Kyushu, Japan, and the Riu-kyu islands, 3 times a day, at 5 a.m., 1 & 9 p.m.

It exchanges telegraphic reports with foreign observatories at Manila, Hong-Kong, and Zikawei, every day; also a daily report is received from the station of the Eastern Extension Telegraph Company at Sharp Peak, Foochow, China.

Based on these telegraphic reports, weather maps are

compiled, and weather forecasts and storm warnings covering the whole island are issued daily.

Meteorological Districts. In order to issue weather forecasts and storm warnings, the island is divided into three meteorological districts. The 1st district comprises the northern half of the island, the 2nd district the eastern coast, and the 3rd district the western coast of the southern half of the island.

Seismic Observations. All observatories in the island are provided with Gray-Milne's seismograph and Ōmori's horizontal pendulum seismograph, for the observations of earthquakes. In the district of Karenkō, the centre of seismic activity on the east coast, it is intended very shortly to install a seismograph in the compound of the lighthouse.

It is also arranged that, whenever an earthquake is felt at rainfall stations, it is immediately reported to the Taihoku observatory. By these means, any earthquake which occurs in the island can be ascertained at the central station.

Observations of Time. For observations of the Imperial western standard time, the Taihoku observatory is provided with the following instruments: $3\frac{1}{2}$ in. transit by Cooke; siderical and civil time clocks by Riefler of Munich; various chronometers by Dent, Russell, Nardine, and Leroy.

12 o'clock midday is announced in Taihoku by the lowering of the time ball on the top of the observatory and the firing of a noon-gun. The time is also telegraphed to all post-offices in the island.

The observatory also undertakes a comparison of marine chronometers, whenever there is a request from shipping agents.

II. THE CLIMATE OF FORMOSA.

Physical Formation. Geographical position and natural features are important elements, which have a close relation to the climate and weather of any given territory. In the following pages, a brief description will be given of the physical formation of the island.

The island of Formosa and the Hōko group (Pescadores Islands) lie between the parallels of 21° 45′ and 25° 38′ north latitude, and between the meridians of 119° 18′ and 122° 06′ longitude east of Greenwich. They are separated from the coast of Fukien, China, by a channel about one hundred miles in width.

Excluding the adjacent islands and islets, the main island has an area of 13,807 square miles. Its length, from north to south, is about 240 miles, and its width, from west to east, is about 90 miles in the widest part, with a circumference of 708 miles.

The island is oblong in its form, stretching from north northeast to south southwest, and it is intersected from north to south by a range of high mountains, which forms a kind of backbone to the island. The eastern side of the range forms a steep versant, its shore being washed by the rough seas of the Pacific. On the western side, the slope is more gradual than on the eastern side of the range and broken by fertile valleys which lose themselves in large plains of exuberant fertility.

In the central mountain range, there are several high peaks. The loftiest in the north is Mt. Sylvia, with an elevation of 12,600 feet. In the south, Niitaka-yama (Mt. Morrison), with a

height of 13,075 feet, is the highest mountain in the island. Dotted between these two mountains, and also to the south of Mt. Morrison, there are several peaks of more than ten thousand feet in altitude.

The central mountain range with its many high peaks has an important effect on the weather conditions of the island, causing less rain in south Formosa during the winter months than in summer, and, during the summer months, a heavier downpour on the western side than on the east coast. The influence of the central mountain range on weather conditions will be found more fully explained in later paragraphs of this report.

Nearly all of the rivers in the island are torrential, their channels making prodigious windings in many places. When typhoons accompany a heavy rainfall, during the summer and autumn months, these rivers rise to an enormous extent and are transformed into great roaring and surging torrents which become wild and uncontrollable. On such occasions, floods play great havoc to the property on both sides of the river, and communications are interrupted for a number of days. In the dry winter season, these rivers are, with a few exceptions, but tiny rivulets almost lost in great dry river beds.

The Hōko group or Pescadores islands lie in the Formosan channel, at a distance of about 25 miles from the main island. Nearly every island of this group is flat; the highest does not exceed an elevation of 150 feet; naturally, these islands are subject to the full strength of the monsoons.

During the winter, when the northeast monsoon prevails in the islands, the growth of trees is stunted and green leaves, which have spread out in luxuriance during the quiet summer months, change to gray and branches droop and have a crushed

appearance. In such seasons, the only vegetation which survives consists of such withered plants as may be found in the shelter of houses or walls.

The port of Makyu is the only natural harbour in the islands. Its deep water provides a good anchorage for large vessels, and is a harbour of refuge when severe storms are encountered in this part of the China sea.

Climate. The island of Formosa is situated just under the tropic of cancer and its southern half belongs to the tropics, therefore, it has a sub-tropical climate. The summer is long and accompanied by intense heat; while the winter is short and no severe cold is known. The transition is very sudden, the warm season coming quickly after the cold months. Although the peaks of high mountains are capped with snow, during the winter, frost, excepting on very rare occasions, is unknown on the lower levels.

Under such climatic conditions, the island is clothed, throughout the year, with verdant trees tinged with various kinds of blooming flowers. It produces two crops of rice during the year; in recent years, the cultivation of sugar cane has become more predominant. Added to these agricultural products, it abounds with the fruits of the tropics such as bananas, pineapples, sweet oranges, etc..

In respect to clothing, white linen, together with a sun or straw hat, is usually worn from the middle of April to the middle of October. The period from May to September is the hottest time of the year, when an electric fan becomes almost an indispensable article in every household. During the winter, no severe cold is known except on rainy days.

When the year in Formosa is divided into two seasons, the

seven months, from April to October, belong to summer, the remaining five months, from November to March, should be regarded as winter.

Temperature in Summer. Throughout the island, the mean monthly temperature rises to 20° C. (68° F.) in April, and this rising condition continues up to November. The period from June to September is the hottest time, when the mean monthly temperature ranges between 26° C. (79° F.) and 28° C. (82° F.), and the sun sends down her brilliant sunshine from the zenith. During this period, there is no remarkable thermic variation between the southernmost and the northern part of the island. The daily maximum will rise above 30° C. (86° F.), and this temperature will often continue for the whole month. The extreme maximum recorded is usually 35° C. (95° F.), in rare cases, it exceeds 37° C. (98° 6 F.).

The absolute maximum ever known in the island occurred in Taitō on June 16, 1903, when the mercury reached 37° 9 C. (100° 2 F.). The town of Taitō is situated near the seashore on the east coast, and this place is often visited by a dry and hot wind, similar to the föhn in Switzerland, when exceptional heat is experienced for several hours. This highest record, as mentioned above, has, for its cause, a visit of this dry and hot wind. Another high temperature, viz: 37° C. (98° 6 F.) has been recorded once in Taihoku and Taichu, respectively.

Temperature in Winter. During the hottest months, as stated in the preceding paragraph, there are no great thermic variations between the extreme south and the north of the island, but with the arrival of the cool season, the variations become more apparent.

During February, the coolest month in Formosa, the mean

monthly temperature in Kōshun, the southernmost part of the island, is 20° 1 C. (68° 2 F.). In Taihoku, the extreme north, it is 14° 4 C. (57° 9 F.), showing a wide difference of 5° 7 C. (10° 3 F.). During this month, it is often necessary to prepare a fire place in Taihoku, while the temperature of early summer prevails in southernmost Kōshun where the maximum daily temperature occasionally registers above 25° C. (77° F.). Owing to the low temperature, frost is sometimes seen on the ground in the northern part of the island, but this is only of rare occurrence.

Since the Japanese occupation of the island in 1895, ice was seen only once. It happened in Taichu, on February 13, 1901, when the temperature fell to 1° C. below the freezing point (30° 2 F.), the lowest point ever recorded in the island. Such phenomenon is seen only in this district, the north of central Formosa, and is never known in the south. In the Tainan district, the known absolute minimum is 3° C. (37° 4 F.), which happens but seldom. Generally, the minimum temperature of the north is not less than 5° C (41° F.), and that in Kōshun not less than 9° 8 C. (49° 6 F.).

Wind and Rainfall. During winter months, from October to March, the strong northeast monsoon blows steadily this, together with the existence of the high mountain range traversing the island from north to south, makes the weather of the extreme north a great contrast to that of the southern part. The northeast monsoon, laden with a large quantity of moist vapour from the sea, comes in contact witn the mountain range near Keelung, and condensation causes clouds and rain; as a result, depressing and rainy weather will continue for several months; this is the rainy season of north Formosa.

Kashōryo, which is situated on a hillside, near the small town of Dandangai, a few miles south of Keelung, has an average rainfall of 7,338 m.m. a year. Probably this is the wettest place in the Far East.

By the time the northeast monsoon reaches Taihoku, the greater portion of the humidity has been intercepted by the intervening mountains, with the result that the rainfall in Taihoku, which is situated but a short distance from Keelung, amounts to but one third of that of the latter place. During the winter, it often happens that Taihoku is bathed in brilliant sunshine while Keelung is enveloped in clouds and rain. It is also noticeable, during this season, that there is less rain as we proceed further south in the island, especially, fine weather continues in the district south of Taichu for a number of month, and people sometimes feel the want of rain.

During the summer months, from April to September, the southwest monsoon prevails in south Formosa, when, excepting during the occurrence of a typhoon, the winds are very light. There also occur frequent thunderstorms, during these months, giving abundant rainfall to the southern district. A typhoon will bring several hundred millimeters of rainfall in a single day. The rainfall in the mountain district between Kagi and the southern extreme reaches more than 3,200 m.m. a year; of this amount, 80 per cent consists of the summer rainfall.

It is also during this period that the coast in and around Keelung enjoys fine weather, showing a contrast to that of the southern part. In short, the climatic features of Formosa present a long hot season but no severe winter. During the winter, the coast of the extreme north receives a large amount of rainfall, and the same condition prevails in the south during the summer

season. Thus the island possesses two rainy seasons, each differing in period and region.

During the winter months, when the northeast monsoon prevails, the seas adjacent to the island become stormy; especially the violent winds and angry seas of the Formosan channel are dreaded by mariners. Excepting the days of prevalence of typhoons, summer finds the seas calm. Throughout the year, the most quiet time on the seas is a period of three months, from April to June, when there is no prevalence of typhoons and the monsoons assume but feeble force.

Climatic Condition according to Months. In the following paragraphs, we give an average of climatic conditions for the island for each month, which is compiled from data, based on observations extending over several years.

January: This is one of the coolest months in the island. The average temperature ranges between 15° 5 C. (59° 9 F.) in Taihoku and 20° 6 C. (69° 1 F.) in the southernmost Kōshun; a higher temperature is found as we proceed further south. The extreme maximum temperature of 32° 4 C. (90° 3 F.) was reached in Tainan, in 1897, and the extreme minimum of 1° 6 C. (34° 9 F.) in Taichu, in 1910, but such extremes of temperature are of very rare occurrences. Ordinarily, the maximum is 26° C. (79° F.) and the minimum 7° C. (45° F.). Very often, sudden climatic changes occur during the month of January, warm days are quickly followed by colder weather and vice versa.

In January the strong northeast monsoon generally prevails in the vicinity of the island, the weather of the coast district in the extreme north is gloomy and rainy, and the sun is entirely clouded for a number of days. On the contrary, fine weather prevails in the southern part, where few rainy days are recorded.

During this month, the number of rainy days at Keelung is 23, while Tainan has but six.

N.B.—During this month, it may happen that a low pressure area that originates in the continent will cross the Korean peninsula, from north China, and finally pass in the direction of the Japan Sea. In such case, the monsoon which prevails in the seas adjacent to Formosa will entirely disappear, and in place of depressing and unpleasant weather, we find, in the extreme north, brilliant sunshine and a warm temperature, as in the beginning of the summer months. But, with the disappearance of the low pressure area and a rise of the barometer, the brisk monsoon will return and unpleasant weather will again prevail in the north. Thus, the duration of clear weather depends upon the movement of areas of low pressure; generally, clear weather will not continue more than 3 days consecutively.

February: This is the coolest month of the year. The average temperature is found to be as follows: the lowest in Taihoku, 14° 4 C. (57° 9 F.), and the highest in Kōshun, 20° 1 C. (68° 2 F.). This shows a pronounced difference, of 5° 7 C. (10° 3 F.) between the two extremes of the island. The extreme maximum of 33° 5 C. (92° 3 F.) was reached in Taitō, in 1912, and the extreme minimum of 1° C. below the freezing point (30° 2 F.) in Taichu, in 1901. This is only instance of such a low temperature that has ever been recorded in the island.

The prevalence of winds is similar to the preceding month. The extreme north receives abundant rainfall and clear weather continues in the south. The aggregate hours of sunshine are 49 at Keelung and 184 in Tainan, showing a remarkable difference.

March: By this month, the coolest weather has passed, and

the temperature rises higher every day. The average temperature varies from 16° 6 C. (61° 9 F.) at Keelung to 22° 3 C. (72° 1 F.) at Kōshun. The extreme maximum of 35° 9 C. (96° 6 F.) was reached in Taitō, in 1912, and the extreme minimum of 4° 2 C. (39° 6 F.) in Taihoku, in 1906, but the latter is of very rare occurrence; generally, the minimum temperature is about 10° C. (50° F.).

The strong northeast monsoon continues during this month but its intensity is reduced to a certain degree.

Rainy days still continue in the extreme north and the south enjoys fine weather, but the difference between north and south becomes less pronounced. The amount of rainfall is reduced in the north and tends to increase in the south.

April: Seasonal changes take place this month and it gradually presents the aspect of summer. The temperature in April approaches nearer to the annual average temperature. The monthly average varies from 20° C. (68° F.) at Keelung to 24° 7 C. (76° 5 F.) at Kōshun. The extreme maximum of 34° 8 C. (94° 6 F.) was reached in Taihoku, in 1901, and the extreme minimum of 8° 1 C. (46° 6 F.) in the same place, in 1909. According to the past records, for April a temperature below 10° C. (50° F.) was found only in two places of Taihoku and Taichu; in Kōshun, it always exceeded 15° C. (59° F.).

The velocity of winds diminish notably this month and calm weather prevails in the seas adjacent to Formosa. The depressing weather of the extreme north is not so continuous as in several preceding months and tends to clear up gradually. Rainfall in the southern part slightly increases this month.

May: The hot season begins this month and a high temperature generally prevails. The monthly average varies

from 23° 3 C. (73° 9 F.) at Keelung to 26° 4 C. (79° 5 F.) at Kōshun. The extreme maximum of 36° 5 C. (97° 7 F.) was reached in Taihoku, in 1897, and the extreme minimum of 11° 4 C. (52° 5 F.) in the same place, in 1913. Such a high temperature as 36° C. occurs but very seldom, generally, it does not exceed 32° C. (90° F.).

The winds most prevalent this month are from the northeast. There is occasionally a wind from the south, but its force is greatly diminished. Thunderstorms occur frequently this month. Rainfall increases in the south where the rainy season now commences.

June: This is a month of great heat. The temperature varies from 26° 2 C. (79° 2 F.) at Keelung to 27° 2 C. (81° 0 F.) at Tainan and Kōshun; the difference of temperature between the north and the south diminishes notably this month. The extreme maximum of 37° 9 C. (100° 2 F.) was reached in Taitō, in 1903, and the extreme minimum of 16° 8 C. (62° 2 F.) in Taihoku and Taichu, respectively, in 1899. The extreme maximum of 37° 9 C. occurred in Taitō, as a result of the prevalence of the dry and hot wind, a wind characteristic of that district. This is also the absolute maximum temperature ever recorded in the island.

The direction of winds which prevail this month is not determined and their influences are scarcely felt. Also, the seas in the vicinity of Formosa remain calm. The rainfall increases greatly in the southern part. From this month, typhoons occur in the adjacent seas, but in small numbers.

N.B. When a low pressure area occurs in the seas, northeast of Formosa, the winds most prevalent are from the west, northwest, southwest; this winds has been transformed into a dry and heated

wind, by the time it reached the Taitō plain, on the east coast of the island, after crossing the central mountain range ; in its nature, this wind corresponds to that of the *föhn* in Switzerland, which descends into the valleys north of the Alps. When this wind prevails in the Taitō district, the humidity is greatly reduced and extraordinarily high temperature results.

July : This is the hottest month in the year. The average temperature is between 27° C. (80° 6 F.) and 28° C. (82° 4 F.), throughout the island. The difference between the southern and the northern extremes is 1° C. (1° 8 F.). The position of the sun is just on the zenith, casting no shadow from a person standing erect, and the sunlight is intense.

The extreme maximum of 37° 2 C. (99° 0 F.) was recorded in Taitō, in 1906, and the extreme minimum of 19° 5 C. (67° 1 F.) in Taihoku, in 1897.

The winds most prevalent in this month are those from the south ; generally, their influences, excepting in the case of typhoons, are scarcely felt. Throughout the island, thunder-storms occur frequently. In the southern part, rainy weather will occasionally continue for more than 20 days, while the weather at Keelung shows a better average of clear days. Typhoons occur this month in greater number than in the preceding month ; this condition requires great care on the part of mariners, who navigate the waters adjacent to the island.

August : Great heat, similar to that of the preceding month, still prevails. Throughout the island, the average temperature continues between 27° C. and 28° C. The extreme maximum of 37° 2 C. (99° F.) was registered in Taichu, in 1902, and the extreme minimum of 19° 5 C. (67° 1 F.) in Kōshun, in 1911.

The months of July and August are the period of greatest

heat in Formosa and the average temperature shows its highest record. Without taking into account the case of extraordinary great heat in the district of Taitō which is caused by the dry and heated wind, such high temperature as 37° C. (98° 6 F.) is but seldom seen in Taihoku and Taichu; generally, the highest limit recorded is 35° C. (95° F.), and the lowest limit not below 20° C. (68° F.); the latter happens only on rare occasion.

The winds most prevalent this month are those from the south, but they are not strong in force. Occasionally, there prevails a fierce typhoon, which results in disastrous damage both on shore and at sea.

The southern part receives abundant rainfall; especially, at the time of a typhoon, when several hundred millimeters will fall in a single day. In such cases floods occur and the traffic on land is, very often, interrupted.

September: By this month, the period of greatest heat is passed and the temperature begins gradually to fall, but still an intense heat is felt. The average temperature, approximating that of the month of June, varies between 26° C. (78° 8 F.) and 27° C. (80° 6 F.), throughout the island. The extreme maximum of 36° 6 C. (97° 9 F.) was reached in Tainan, in 1897, and the extreme minimum of 13° 5 C. (56° 3 F.) in Taihoku, in 1902; although this is a cool month, but such a low temperature, as shown in the latter case, happens but rarely.

From the middle of this month, the winds blow from the northeast; this is the beginning of the monsoon season. The frequency of typhoons remains the same as in the preceding month; and occasionally, storms of terrific violence occur. Changes take place in the weather between the extreme north and the south. Rains in the north begin to increase and in the

south to decrease. In the south more clear days are recorded, unless the ordinary weather conditions have been disturbed by the occurrence of typhoons.

October: The heat has passed by this month and coolness tends to increase. The average temperature varies from 23° 0 C. (73° 4 F.) in Taihoku to 25° 2 C. (77° 4 F.) in Kōshun, which, compared to that in July, the month of greatest heat, is lower by 5° C. (9° F.) in Taihoku and 2° 1 C. (4° 1 F.) in Kōshun. The extreme maximum of 34° 9 C. (94° 8 F.) was reached in Taichu, in 1909, and the extreme minimum of 11° 1 C. (52° 0 F.) in Taihoku, in 1911.

In October there is an increase in the prevalence of the northeast monsoon and the seas in the vicinity of the island become rough. Rains increase in the extreme north, and the dry season sets in in the south, where no rain is observed for the whole month.

November: The average temperature varies from 19° 6 C. (67° 3 F.) in Taihoku to 23° 2 C. (73° 8 F.) in Kōshun, and the difference of temperature between these two places become more apparent. In the north, winter clothes are required, whereas, in the south light white linen is still enjoyed. The extreme maximum of 35° 2 C. (95° 4 F.) was reached in Tainan, in 1897, but this is quite exceptional; generally, the temperature will not exceed 30° C. (86° F.) throughout the island. The extreme minimum of 6° 8 C. (44° 2 F.) was reached in Taihoku, in 1910; but, only in a few instances, did it fall below 10° C. (50° F.).

During November the northeast monsoon attains its greatest strength, and heavy and tempestuous seas of almost typhoon force are found in the Formosan channel. Very often, coasting steamers which are bound to Keelung from the Pescadores, can not

proceed against this monsoon, and only reach Keelung after rounding the South Cape and sailing northward along the east coast.

Rainy days and depressing weather continue on the coast of the extreme north, while only light rains occur in the south. During this month, the average number of rainy days at Keelung is 22, at Tainan only 4.

Typhoons have visited the island of Luzon in the Philippines and the Riu-kiu islands, in Japan, in November, but none have occurred in Formosa.

December: The weather becomes cooler this month and shows the aspect of winter. The average temperature varies from 16° 7 C. (62° 1 F.) at Taihoku to 21° 4 C. (70° 5 F.) at Kōshun, the south being much warmer than the north. The extreme maximum of 30° 6 C. (87° 1 F.) was reached in Tainan, in 1910, and the extreme minimum of 4° 3 C. (39° 7 F.) in Taichu, in 1906.

The prevailing winds and the condition of the weather remain the same as in the preceding month and the northeast monsoon continues strong. Depressing and unpleasant weather continues in the extreme north while the south enjoys clear days.

For three months, from December to February, the high peaks on the central mountain range are capped with snow; occasionally frost is seen in the north, but this only happens on rare occasions.

N.B. *Snow and Hoar-Frost.* There are several high peaks, with an altitude of more than 10,000 feet, in the central mountain range of the island; these are crested with snow for three months, from December to February every year. Also snow falls occasionally on the summit of Shichiseiton-zan—3,650 feet—the highest peak in

the Daiton range, the hills to the north of Taihoku, but this does not happen regularly every year but is sometimes observed once in every two or three years. According to our records, the earliest date when snow was found on the summit of Shichisei-ton-zan was December 1st, in 1897, and the latest February 22nd, in 1907. The earliest known date when frost was found in Taihoku was December 13th and the latest February 13th; this also happens very seldom.

METEOROLOGICAL TABLES.

In the following tables, we give the annual and the monthly results of meteorological observations, taken at the Taihoku and seven other observatories in the islands of Formosa and Pescadores, since they were established.

Positions of each observatory and years of observations are as follows :

Observatories.	Positions.	Height in meters.	Years of Observations.
Taihoku.	25° 2′ N 121° 31′ E	9.3	17 years (1897–1913)
Keelung (Sharyōtō).	25° 9′ N 121° 45′ E	3.4	14 „ (1900–1913)
Taichu.	24° 9′ N 120° 41′ E	78.4	17 „ (1897–1913)
Karenkō (L. H.).	23° 58′ N 121° 37′ E	19.2	3 „ (1911–1913)
Tainan.	23° 0′ N 120° 12′ E	14.3	17 „ (1897–1913)
Taitō.	22° 45′ N 121° 9′ E	9.9	13 „ (1901–1913)
Kōshun.	22° 0′ N 120° 44′ E	23.3	17 „ (1897–1913)
Hōkotō (Pescadores)	22° 32′ N 119° 33′ E	11.0	17 „ (1897–1913)

The observations are made every hour at the Taihoku observatory, and every 4 hours a day, at 2, 6, and 10 o'clock in the morning and afternoon at other observatories, the time used for these observations being the 120th meridian mean time.

The air pressures in millimeters are reduced to sea level

and the standard gravity; the corrections to be applied are as follows:

Observatories.	To mean sea level.	To standard gravity.
Taihoku.	+ 0·82	−1.26
Keelung.	+ 0.30	−1.26
Taichu.	+ 6.86	−1.32
Karenkō (L.H.)	+ 1.69	−1.32
Tainan.	+ 1.25	−1.37
Taitō.	+ 0.86	−1.38
Kōshun.	+ 2.03	−1.41
Hōkotō.	+ 0.97	−1.37

The degrees of air temperature are given in centigrade; reading being made from the dry bulb thermometer, which is suspended inside the Stevenson's double louvre-boarded box, placed 1.2 meter above the ground.

The surface temperature of the soil is read from the thermometer; its bulb being inserted in the ground. This is hourly made at Taihoku, and every four hours a day at other observatories. Also the soil temperature is read from three thermometers, each placed inside an iron tube and inserted in the ground to the depth of 0.5 meter, 1 meter, and 3 meters. Readings of these thermometers are made twice a day, at 10 a.m. and 10 p.m., at Taihoku and local observatories.

The tension of vapour is shown in millimeters and the relative humidity in per-centage; these were calculated from readings of dry and wet thermometers, in accordance to Angot's formula.

The velocity of winds is shown in meters per second, and the directions were observed in accordance to the sixteen points of the compass.

Gale, strong gale, and typhoon days are recorded, when the maximum velocity reaches or exceeds 10 meters per second for the first-named occurrences, 15 meters per second for the second-named, and 29 meters per second for the last-named.

The precipitation is shown in millimeters. The raingauge, two decimeters in diameter, is used at all the observatories.

Rainy days are recorded, when the amount of rainfall reaches 0.1 meter or more a day.

The amount of cloud is estimated by the scale 0–10. Clear days are recorded when the mean amount of cloud (scale 0–10) is less than 2. Cloudy days are recorded when the mean amount of cloud is gaeater than 8.

Hours of sunshine are measured, at all the observatories, with Jordan's recorders. Sunlees days are those when there is no trace of sunshine on the recording paper.

The evaporation is shown in millimeters; the diameter of the gauge used for this observation being similar to that of the raingauge. It is measured once a day at all the observatories.

CONTENTS OF TABLE.

(15). Mean at the depth of 1.0 meter.

(16). Mean at the depth of 3 meters.

IV. *Tension of Vapour.*

(17). Monthly mean.

(18). Absolute maximum.

(19). Absolute minimum.

V. *Relative Humidity.*

(20). Monthly mean.

(21). Absolute minimum.

VI. *Wind.*

(22). Monthly mean velocity.

(23). Maximum velocity.

(24). Monthly per-centage of wind directions.

(25). Average number of days with gales (10–15 meters per second).

(26). Average number of days with strong gales (15–29 meters per second).

(27). Average number of days with typhoons (29 meters or more per second).

VII. *Precipitation.*

(28). Monthly mean: total.

(29). Maximum in a day.

(30). Average number of rainy days (0.1 mm. or more).

(31). Average number of days with more than 100 mm. in a day.

VIII. *Clouds.*

(32). Monthly mean amount.

(33). Average number of clear days.

(34). Average number of cloudy days.

IX. *Sunshine.*

(35). Mean actual duration.

(36). Per-centage of possible duration.

(37). Average number of sunless days.

X. *Evaporation.*

(38). Monthly mean: total.

(39). Daily mean.

(40). Maximum in a day.

XI. *Thunderstorms.*

(41). Average number of days with thunderstorms.

XII. *Fogs.*

(42). Average number of days with fogs.

XIII. *Hoar-Frost.*

(43). Average number of days with hoar frost.

Air Pressure : Air Temperature.

Stations. \ Month.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
(1) Monthly Mean of Air Pressure. (+700 mm.)													
Taihoku	65.5	65.3	63.1	60.6	57.8	55.2	54.4	54.0	57.1	61.2	64.1	65.7	60.3
Keelung	65.6	65.4	63.5	60.9	58.1	55.3	54.6	54.1	57.2	61.3	64.3	65.9	60.5
Taichu	64.0	63.9	62.0	60.0	57.6	55.6	54.8	54.1	56.4	59.6	62.0	63.8	59.5
Karenkō	65.1	64.8	62.4	60.7	57.9	55.2	54.6	53.6	56.0	61.6	64.3	65.5	60.1
Tainan.....	63.7	63.5	61.7	59.7	57.4	55.5	54.7	54.1	56.2	59.3	61.7	63.4	59.2
Taitō	64.2	64.2	62.1	60.0	57.6	55.2	54.5	54.1	56.6	60.2	63.0	64.4	59.7
Kōshun	63.1	63.0	61.4	59.6	57.6	55.7	54.9	54.3	56.4	59.3	61.4	62.9	59.1
Hōkotō.....	64.3	64.1	62.2	60.0	57.5	55.3	54.5	53.9	56.4	59.8	62.3	64.2	59.5
(2) Absolute Maximum of Air Pressure. (+700 mm.)													
Taihoku	76.6	76.2	75.0	71.6	65.0	61.0	61.1	61.0	64.7	68.7	73.1	77.1	77.1
Keelung	76.8	76.7	75.3	71.9	66.2	61.2	61.1	60.8	65.1	68.7	73.4	77.2	77.2
Taichu	73.2	72.5	71.2	68.2	63.7	61.7	61.6	61.3	63.2	65.9	68.9	73.0	73.2
Karenkō	74.7	71.7	70.3	70.6	64.0	61.0	60.0	61.7	63.3	68.2	69.5	74.7	74.7
Tainan.....	72.8	72.6	71.1	68.3	63.3	60.9	61.0	60.7	62.5	66.1	68.4	72.6	72.8
Taitō	73.8	73.3	73.0	69.6	64.6	61.2	61.3	61.6	63.9	66.7	70.3	73.8	73.8
Kōshun	72.0	71.0	70.8	67.6	63.2	61.3	62.6	60.8	62.7	65.9	68.1	71.6	72.0
Hōkotō.....	73.5	73.1	71.8	68.6	63.8	60.8	61.3	60.7	62.9	65.9	69.2	73.6	73.6
(3) Absolute Minimum of Air Pressure. (+700 mm.)													
Taihoku	54.9	50.7	52.0	49.6	47.5	44.3	38.6	23.2	29.3	40.5	51.4	57.4	23.2
Keelung	55.5	51.9	52.6	49.9	49.1	45.3	39.3	12.8	26.9	42.6	52.2	57.8	12.8
Taichu	55.3	50.9	52.2	51.1	46.0	41.0	42.4	23.0	23.2	40.0	48.2	57.2	23.0
Karenkō	54.8	54.4	55.2	54.1	49.1	48.3	31.8	27.0	22.0	52.8	57.1	58.7	22.0
Tainan.....	55.1	49.7	53.0	52.4	45.7	28.0	42.1	26.2	26.7	39.4	47.8	56.5	26.2
Taitō	54.4	52.0	50.6	49.8	45.9	38.1	36.8	34.5	12.4	26.4	51.0	55.9	12.4
Kōshun	55.6	50.8	52.7	52.5	44.9	26.9	38.4	02.9	30.0	43.0	47.6	56.5	02.9
Hōkotō.....	54.4	50.4	52.8	52.0	47.0	34.9	42.7	25.8	28.3	37.2	48.7	57.2	25.8
(4) Monthly Mean of Air Temperature. °C.													
Taihoku	15.5	14.4	16.9	20.6	24.0	26.6	28.0	27.7	26.2	23.0	19.6	16.7	21.6
Keelung	16.1	14.9	16.6	20.0	23.3	26.2	27.7	27.5	26.3	23.2	20.0	17.0	21.6
Taichu	16.0	15.2	18.2	21.9	25.0	26.6	27.5	27.2	26.3	23.7	20.3	17.2	22.1
Karenkō	17.3	17.7	19.1	22.1	23.9	26.4	27.0	26.6	25.8	22.6	20.8	18.9	22.3
Tainan.....	17.2	16.5	19.7	23.4	26.0	27.2	27.7	27.4	27.1	24.8	21.4	18.3	23.1
Taitō	19.2	18.6	20.8	23.4	25.1	26.8	27.4	27.1	26.3	24.3	22.0	19.9	23.4
Kōshun	20.6	20.1	22.3	24.7	26.4	27.2	27.5	27.1	26.7	25.2	23.2	21.4	24.4
Hōkotō.....	16.4	15.3	18.2	21.9	24.8	26.8	27.8	27.7	26.9	24.5	21.3	18.1	22.5

Air Temperature.

Stations. \ Month.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
(5) Mean Maximum of Air Temperature. °C.													
Taihoku	19.2	17.9	20.7	24.8	28.3	31.3	32.9	32.4	30.7	27.1	23.2	20.4	25.8
Keelung	18.6	17.4	19.3	23.0	26.3	30.0	31.4	31.1	29.4	25.8	22.3	19.5	24.5
Taichu	21.8	20.6	23.3	26.8	29.6	31.1	32.0	31.8	31.3	29.4	26.1	22.9	27.2
Karenkō	20.6	21.3	22.4	25.7	27.4	30.1	30.9	30.6	29.5	26.5	24.5	22.0	26.0
Tainan.....	23.6	23.1	25.8	29.0	30.8	31.4	32.0	31.6	32.0	30.4	27.5	24.6	28.5
Taitō	23.5	22.8	24.9	27.6	29.1	30.9	31.3	31.1	30.4	28.4	26.0	23.9	27.5
Kōshun	24.2	24.1	26.5	28.9	30.3	30.5	30.8	30.4	30.4	28.6	26.3	24.5	28.0
Hōkotō.....	18.7	17.8	20.8	24.5	27.5	29.5	30.4	30.4	29.7	27.2	23.6	20.3	25.0
(6) Mean Minimum of Air Temperature. °C.													
Taihoku	12.8	11.8	14.2	17.5	20.5	23.0	24.1	24.1	22.8	19.9	16.9	13.9	18.5
Keelung	13.6	12.6	14.4	17.6	20.6	23.3	24.6	24.6	23.5	20.9	17.9	14.8	19.0
Taichu.....	12.1	11.4	14.7	18.3	21.4	23.2	23.8	23.7	22.7	19.8	16.3	13.1	18.4
Karenkō	14.4	14.5	16.2	18.8	20.9	22.9	23.3	23.1	22.6	19.4	17.6	16.0	19.1
Tainan.....	13.2	12.3	15.5	19.1	22.2	23.9	24.4	24.2	23.5	20.7	17.3	14.3	19.2
Taitō	16.1	15.4	17.6	19.9	21.9	23.3	23.9	23.7	23.2	21.3	19.0	17.0	20.2
Kōshun	17.9	17.2	19.5	21.8	23.6	24.8	24.8	24.6	24.1	22.9	21.1	19.1	21.8
Hōkotō.....	14.9	13.6	16.3	20.0	22.9	24.9	25.8	25.7	25.2	23.0	19.9	16.7	20.7
(7) Mean Daily Range of Air Temperature. °C.													
Taihoku	6.4	6.2	6.6	7.3	7.8	8.3	8.8	8.3	8.0	7.2	6.3	6.5	7.3
Keelung	5.0	4.8	5.0	5.5	5.7	6.6	6.8	6.5	5.9	4.8	4.4	4.6	5.5
Taichu.....	9.7	9.2	8.6	8.5	8.1	8.0	8.2	8.0	8.6	9.6	9.8	9.9	8.8
Karenkō	6.2	6.8	6.2	7.0	6.5	7.2	7.6	7.5	6.9	7.2	6.9	6.0	6.8
Tainan.....	10.4	10.7	10.3	9.9	8.6	7.5	7.7	7.3	8.5	9.7	10.2	10.4	9.3
Taitō	7.4	7.4	7.3	7.7	7.2	7.5	7.5	7.4	7.2	7.1	7.0	6.9	7.3
Kōshun	6.3	6.8	7.0	7.1	6.7	5.7	5.9	5.8	6.3	5.7	5.3	5.4	6.2
Hōkotō.....	3.8	4.1	4.5	4.6	4.6	4.6	4.6	4.7	4.6	4.2	3.7	3.5	4.3
(8) Absolute Maximum of Air Temperature. °C.													
Taihoku	29.2	29.4	32.6	34.8	36.5	37.1	36.5	37.0	35.1	33.7	[illegible]	29.6	37.1
Keelung	28.1	27.0	29.1	32.6	33.4	35.9	35.7	35.3	35.2	32.3	29.4	27.6	35.9
Taichu.....	29.8	31.1	32.3	33.5	34.6	35.9	36.5	37.2	35.0	34.9	32.1	30.0	37.2
Karenkō	26.3	27.0	28.4	29.7	31.7	34.4	33.3	32.8	31.9	30.1	28.3	26.1	34.4
Tainan.....	32.4	31.3	32.0	34.3	35.1	34.6	36.9	36.6	36.6	34.7	35.2	30.6	36.9
Taitō	31.8	33.5	35.9	33.9	35.2	37.9	37.2	35.8	34.4	31.8	31.3	30.5	37.9
Kōshun	29.8	31.1	31.7	32.5	34.4	33.5	33.4	33.0	32.7	32.0	31.4	30.3	34.4
Hōkotō.....	27.8	27.9	30.8	30.8	32.0	33.3	33.0	33.3	33.5	33.1	31.0	27.5	33.5

Air Temperature.

Month. / Stations.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
(9) Absolute Minimum of Air Temperature. °C.													
Taihoku	4.6	-0.2	4.2	8.1	11.4	16.8	19.5	19.7	13.5	11.1	6.8	5.1	-0.2
Keelung	7.6	3.0	7.9	10.3	14.5	17.8	20.9	21.5	15.8	14.4	9.4	8.1	3.0
Taichu.....	1.6	-1.0	5.1	9.9	15.0	16.8	21.1	21.0	14.4	11.5	6.9	4.3	-1.0
Karenkō	10.4	10.6	10.6	13.6	17.2	19.1	21.2	21.1	19.2	14.8	12.5	9.5	9.5
Tainan.....	4.3	3.0	5.7	11.7	15.2	19.6	21.4	21.8	15.4	14.6	8.6	6.1	3.0
Taitō	10.1	8.2	10.2	13.5	16.7	18.9	20.5	20.9	18.5	16.3	13.0	11.4	8.2
Kōshun	10.2	9.8	11.5	15.4	18.7	18.6	20.9	19.5	18.7	18.3	12.7	13.0	9.8
Hōkotō.....	9.7	7.3	9.8	13.6	16.8	19.8	21.8	22.0	19.2	19.3	13.0	9.5	7.3
(10) Absolute Maximum Range of Air Temperature. °C.													
Taihoku	16.6	16.5	16.8	16.9	15.8	14.0	13.6	13.0	14.6	14.4	16.6	17.3	17.3
Keelung	13.4	14.4	13.2	13.2	12.7	13.1	10.9	12.0	10.8	11.5	10.0	11.8	14.4
Taichu	20.3	19.7	19.7	14.2	13.6	12.9	12.6	11.8	14.6	16.0	19.1	20.4	20.4
Karenkō	10.5	11.8	11.7	10.6	10.0	11.4	9.8	10.4	9.3	11.7	12.9	11.2	12.9
Tainan.....	17.9	17.7	16.4	17.0	15.0	11.6	14.2	12.0	15.5	15.5	16.5	16.7	17.9
Taitō	14.8	13.9	16.5	13.2	12.4	16.4	11.7	11.4	10.8	11.3	11.1	11.3	16.5
Kōshun	15.2	15.1	13.6	12.5	11.6	9.2	9.7	9.5	11.4	12.1	10.9	13.8	15.2
Hōkotō.....	9.7	11.6	12.8	9.8	8.7	7.5	7.2	8.0	7.9	9.2	9.1	8.7	12.8
(11) Average Number of Days with Maximum Temperature above 90° F.													
Taihoku	—	—	0.1	0.6	3.9	15.5	24.2	20.7	10.7	1.2	—	—	76.9
Keelung	—	—	—	0.1	0.3	6.4	11.1	8.8	2.2	0.1	—	—	29.0
Taichu.....	—	—	0.1	1.1	3.4	11.5	17.0	14.5	8.8	2.6	—	—	59.0
Karenkō	—	—	—	—	—	1.0	4.3	2.0	—	—	—	—	7.3
Tainan.....	0.1	—	—	1.9	8.1	11.5	17.0	12.5	15.6	4.8	0.6	—	72.1
Taitō	—	0.1	0.2	0.8	1.9	7.2	8.4	7.7	2.8	—	—	—	29.1
Kōshun	—	—	—	0.5	4.1	4.5	3.5	2.0	1.3	—	—	—	16.5
Hōkotō.....	—	—	—	—	—	1.0	1.5	2.3	1.4	0.1	—	—	6.3
(12) Average Number of Days with Minimum Temperature below 10° C.													
Taihoku	3.8	6.8	2.1	0.1	—	—	—	—	—	—	0.7	2.8	16.3
Keelung	1.6	4.1	1.0	—	—	—	—	—	—	—	0.1	0.9	7.7
Taichu.....	6.6	7.9	1.4	0.1	—	—	—	—	—	—	0.7	4.9	21.6
Karenkō	—	—	—	—	—	—	—	—	—	—	—	0.3	0.3
Tainan.....	3.1	5.1	0.9	—	—	—	—	—	—	—	0.1	2.1	11.3
Taitō	0.3	—	—	—	—	—	—	—	—	—	—	—	0.3
Kōshun	—	0.1	—	—	—	—	—	—	—	—	—	—	0.1
Hōkotō.....	0.1	1.5	0.1	—	—	—	—	—	—	—	—	0.1	1.8

Earth Temperature.

Month. / Stations.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
(13) Monthly Mean of Earth Temperature at Surface. °C.													
Taihoku	17.1	16.2	18.7	22.6	26.3	29.1	30.7	30.2	28.7	24.9	21.1	18.1	23.7
Keelung	—	—	—	—	—	—	—	—	—	—	—	—	—
Taichu.....	18.4	18.8	21.1	25.2	28.4	30.0	31.0	30.8	30.1	27.1	22.8	19.5	25.3
Karenkō	—	—	—	—	—	—	—	—	—	—	—	—	—
Tainan.....	21.1	21.5	25.1	29.3	31.4	32.0	32.5	31.8	31.7	29.9	26.2	22.6	27.9
Taitō	21.4	21.2	24.2	27.6	29.4	32.7	33.2	32.1	30.0	26.9	23.9	22.0	27.0
Kōshun	22.1	22.7	26.1	29.7	30.7	30.5	30.3	29.7	29.0	26.8	24.5	22.7	27.1
Hōkotō.....	17.8	17.4	20.3	24.4	28.4	30.8	31.9	31.6	30.4	26.8	22.7	19.0	25.1
(14) Monthly Mean of Earth Temperature at the depth of 0.5 meter. °C.													
Taihoku	18.4	17.2	18.7	21.5	24.8	27.3	29.1	29.2	28.4	25.7	22.8	19.9	23.6
Keelung	—	—	—	—	—	—	—	—	—	—	—	—	—
Taichu.....	20.0	19.3	21.0	24.0	27.0	28.3	29.6	29.8	29.4	27.4	24.4	21.4	25.1
Karenkō	—	—	—	—	—	—	—	—	—	—	—	—	—
Tainan.....	21.7	21.4	23.7	27.0	29.2	29.8	30.5	30.3	30.4	29.1	26.4	23.3	26.9
Taitō	22.5	22.1	23.7	25.8	27.8	29.6	30.6	30.4	29.3	27.1	24.9	23.4	26.4
Kōshun	22.4	22.4	24.6	27.2	28.9	29.1	29.3	28.8	28.4	26.6	24.8	23.0	26.3
Hōkotō.....	—	—	—	—	—	—	—	—	—	—	—	—	—
(15) Monthly Mean of Earth Temperature at the depth of 1.0 meter. °C.													
Taihoku	19.6	18.4	19.0	21.0	23.6	25.8	27.7	28.3	28.0	26.1	23.9	21.3	23.6
Keelung	—	—	—	—	—	—	—	—	—	—	—	—	—
Taichu.....	21.3	20.3	21.2	23.4	25.9	27.4	28.7	29.1	29.1	27.9	25.6	22.9	25.2
Karenkō	—	—	—	—	—	—	—	—	—	—	—	—	—
Tainan.....	23.8	23 0	23.9	26.0	28.0	29.0	29.8	29.9	30.1	29.4	27.9	25.6	27.2
Taitō	23.4	23.2	23.6	25.0	26.8	28.2	29.5	29.6	29.1	27.5	25.8	24.4	26.3
Kōshun	23.5	23.3	24.5	26.6	28.3	28.5	28.8	28.5	28.2	27.0	25.6	24.2	26.4
Hōkotō.....	—	—	—	—	—	—	—	—	—	—	—	—	—
(16) Monthly Mean of Earth Temperature at the depth of 3.0 meters. °C.													
Taihoku	23.1	22.2	21.5	21.3	21.7	22.5	23.5	24.5	25.1	25.3	25.0	24.2	23.3
Keelung	—	—	—	—	—	—	—	—	—	—	—	—	—
Taichu.....	24.2	23.3	22.8	22.9	23.7	24.6	25.4	26.1	26.5	26.6	26.2	25.3	24.8
Karenkō	—	—	—	—	—	—	—	—	—	—	—	—	—
Tainan	26.5	25.6	25.0	25.0	25.7	26.6	27.5	28.1	28 3	28.4	28.2	27.5	26.9
Taitō	24.8	24.1	23.8	24.1	24.9	25.7	26.8	27.5	27.7	27.4	26.6	25.6	25.7
Kōshun	26.1	25.6	25.4	25.6	26.2	26.6	27.0	27.2	27.3	27.3	27.1	26.6	26.5
Hōkotō.....	—	—	—	—	—	—	—	—	—	—	—	—	—

Tension of Vapour: Relative Humidity:

Month. / Stations.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
(17) Monthly Mean of Tension of Vapour. (mm.)													
Taihoku	11.2	10.4	12.3	15.1	17.9	20.5	21.4	21.3	19.9	16.8	14.0	11.9	16.1
Keelung	11.6	10.6	12.4	15.4	18.2	21.2	22.5	22.7	21.1	17.4	14.3	12.2	16.6
Taichu.....	11.1	10.5	13.0	16.1	19.2	21.0	21.7	21.6	20.4	17.0	13.9	11.7	16.4
Karenkō	11.8	12.1	13.8	16.4	18.8	21.4	21.5	21.3	20.5	15.7	14.2	13.0	16.7
Tainan.....	11.6	11.0	13.4	16.4	19.7	22.0	22.3	22.4	21.1	17.9	14.6	12.3	17.1
Taitō	12.3	11.8	14.2	16.9	19.1	21.0	21.6	21.4	20.4	17.5	14.7	12.8	17.0
Kōshun	13.6	13.2	15.3	17.9	20.2	22.3	22.9	22.7	21.3	18.6	15.9	14.0	18.2
Hōkotō.....	11.7	10.8	13.3	16.6	19.9	22.9	23 7	23.5	21.9	17.9	14.9	12.5	17.5
(18) Absolute Maximum of Tension of Vapour. (mm.)													
Taihoku	19.9	18.3	22.0	22.1	24.5	26.2	28.9	29.5	26.5	24.9	23.0	20.3	29.5
Keelung	18.5	17.4	19.2	22.8	24.8	30.5	29.7	28.7	30.0	26.3	22.7	20.5	30.5
Taichu.....	19.3	19.2	23.8	22.5	26.4	28.3	26.3	26.2	26.7	24.5	21.9	22.2	28.3
Karenkō	18.2	20.8	21.1	22.6	25.5	25.3	25.1	25.6	25.0	22.7	20.8	19.4	25.6
Tainan.....	23.9	21.0	28.9	23.7	27.2	27.5	28.2	26.6	28.6	24.7	24.1	23.2	28.9
Taitō	20.2	21.7	21.7	23.2	25.5	25.6	26.1	26.9	26.1	26.1	22.9	22.8	26.9
Kōshun	22.5	22.9	25.1	26.9	28.8	27.7	29.1	30.1	32.1	26.8	27.1	23.3	32.1
Hōkotō.....	19.6	21.1	23.8	24.2	26.6	28.6	29.7	27.9	29.2	25.1	23.4	19.1	29.7
(19) Absolute Minimum of Tension of Vapour. (mm.)													
Taihoku	5.0	3.3	4.5	6.1	7.7	10.1	13.3	13.4	9.3	8.4	6.0	4.9	3.3
Keelung	5.6	3.4	4.8	5.4	8.3	13.3	17.0	14.5	10.9	8.7	5.9	4.6	3.4
Taichu.....	4.5	2.5	4.7	6.6	10.0	13.4	16.1	13.6	9.0	7.3	5.9	4.4	2.5
Karenkō	6.4	6.6	5.9	8.9	10.1	14.3	15.9	16.1	13.2	8.8	7.9	5.7	5.7
Tainan.....	4.9	2.5	4.0	6.1	8.7	14.5	17.2	17.5	9.8	8.2	5.6	4 3	2.5
Taitō	5.2	6.1	5.6	8.3	10.3	13.3	13.4	12.3	11.0	9.7	7.2	5.8	5.2
Kōshun	7.4	6.0	7.3	9.0	11.1	12.5	16.0	16.0	13.0	10.3	7.6	6.5	6.0
Hōkotō.....	5.2	3.2	4.7	6.5	11.0	14.4	16.5	17.5	10.6	8.2	6.2	6.1	3.2
(20) Monthly Mean of Relative Humidity. (%)													
Taihoku	85	84	85	83	81	80	77	78	80	81	82	83	82
Keelung	86	84	88	87	86	84	82	83	83	82	82	84	84
Taichu.....	82	81	83	82	82	82	81	82	81	79	79	80	81
Karenkō	80	79	83	83	86	84	82	83	84	78	77	80	82
Tainan.....	9	78	79	77	80	83	83	83	81	78	77	78	80
Taitō	73	73	77	79	81	81	80	81	80	78	74	73	77
Kōshun	75	75	76	78	79	84	84	86	82	78	75	75	79
Hōkotō.....	83	82	84	84	86	87	86	86	83	78	78	80	83

Relative Humidity: Wind.

Stations. \ Month.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
(21) Absolute Minimum of Relative Humidity. (%)													
Taihoku	35	34	35	34	32	29	31	40	39	41	37	33	29
Keelung	40	33	47	37	33	33	47	46	46	47	47	43	33
Taichu.....	31	29	33	41	35	41	37	36	31	36	32	26	26
Karenkō	50	50	50	48	51	48	45	45	52	40	38	42	38
Tainan.....	32	32	34	36	26	43	42	49	32	30	30	30	26
Taitō	35	33	25	26	31	27	37	33	43	38	36	40	25
Kōshun	38	43	44	38	40	49	54	49	50	44	42	40	38
Hōkotō.....	47	40	42	44	47	56	53	56	45	41	43	44	40
(22) Monthly Mean Velocity of Wind. (m.p.s.)													
Taihoku	4.9	4.8	5.2	4.8	4.3	3.4	3.5	4.3	4.5	5.6	5.9	5.4	4.7
Keelung	6.1	6.1	5.3	4.4	3.9	3.7	4.1	4.6	5.2	5.6	6.4	6.2	5.1
Taichu.....	3.6	3.6	3.2	2.7	2.3	2.7	2.5	2.5	2.5	2.9	3.3	3.5	2.9
Karenkō	4.9	4.9	4.2	4.0	3.2	3.5	3.7	3.5	4.4	4.5	5.2	5.6	4.3
Tainan.....	5.4	5.7	5.2	4.3	3.7	3.9	3.8	3.9	3.7	3.8	4.7	5.3	4.4
Taitō	5.8	6.0	5.3	4.5	4.1	3.7	3.7	3.8	4.3	5.4	6.0	6.0	4.9
Kōshun	7.5	7.2	6.5	5.5	5.1	4.7	4.7	4.6	4.7	6.8	9.0	9.2	6.3
Hōkotō.....	13.1	12.9	10.7	8.6	7.0	6.6	5.8	6.4	8.4	13.0	14.9	14.5	10.2
(23) Maximum Velocity of Wind. (m.p.s.)													
Taihoku ..	E 15.5	ENE 15.5	ENE 16.4	E 16.0	W 18.8	ESE 19.8	ESE 21.1	E 44.7	ESE 43.7	ESE 32.1	ESE 16.2	ENE 14.7	E 44.7
Keelung....	N 23.9	S, NNW 20.6	NNW 22.4	NNW 22.9	NNW 21.4	NNW 31.8	N 29.6	NW 50.7	N 48.1	N 34.7	NNW 29.0	NNW 31.1	NW 50.7
Taichu	N 15.0	NNW 23.2	N 16.9	N 12.7	N 16.3	NW 18.3	N 18.5	NNE 23.3	N 38.0	N 26.8	N 20.1	N 20.0	N 38.0
Karenkō ..	N 19.6	NE 18.3	NNE 16.1	NNE 15.1	N 14.4	SE 13.6	NNE 17.6	S 15.1	N 40.8	N 19.2	N 19.4	NE 25.7	N 40.8
Tainan	N 18.6	N 18.2	NE 20.0	N 17.9	SSE 16.4	NW 35.0	W 19.9	SSE 54.5	NNW 38.2	SSW 26.5	N 20.0	N 24.3	SSE 54.5
Taitō.....	NE 19.0	NE 23.7	S 19.7	NE 19.0	SSW 22.8	SSW 21.6	SSW 24.9	S 38.4	SSW 28.9	SSE 46.3	NE 23.0	NE 23.7	SSE 46.3
Kōshun	NE 28.3	NE 27.3	NE 25.4	NE 24.4	S 38.3	E 40.3	E 23.7	WNW 56.8	WNW 42.4	NNE 31.2	NE 32.1	NE 31.3	WNW 56.8
Hōkotō	NE 29.2	NE 31.8	N 31.5	NE 26.2	SE 25.5	SW 39.2	SSE 33.0	N 48.2	N 56.4	NE 49.0	NE 32.7	NE 35.1	N 56.4

Wind:

Month. / Direction.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann.
(24) Monthly Percentages of Winds from 8 points of the Compass at Taihoku.													
N	3	3	4	5	5	5	6	5	4	2	2	2	4
NE	16	15	16	17	16	9	9	12	22	22	21	20	16
E	53	50	45	43	40	23	20	25	38	56	61	57	43
SE	4	5	4	5	9	12	15	16	11	7	4	4	8
S	3	4	3	3	5	8	10	10	7	3	2	2	5
SW	4	4	4	3	4	9	11	8	4	2	2	2	5
W	5	5	6	6	7	15	13	10	4	2	2	3	6
NW	8	10	12	12	9	10	10	10	7	3	3	5	8
Calm	5	5	5	5	6	7	5	4	4	3	3	4	5
Monthly Percentages of Winds from 8 points of the Compass at Keelung.													
N	26	28	25	22	13	10	8	9	15	15	19	21	17
NE	29	28	25	22	20	12	8	10	20	33	37	35	23
E	16	13	14	16	20	16	16	19	22	23	23	19	18
SE	4	5	5	6	8	9	13	13	11	6	6	5	8
S	7	6	8	10	13	17	19	17	11	6	5	6	10
SW	8	9	9	9	12	23	23	19	9	4	4	6	11
W	2	2	3	3	3	4	4	3	2	1	1	1	2
NW	6	8	11	8	6	6	5	6	5	3	3	5	6
Calm	1	2	2	4	4	4	4	4	4	3	2	2	3
Monthly Percentages of Winds from 8 points of the Compass at Taichu.													
N	56	58	50	39	24	11	11	11	30	49	54	60	37
NE	9	7	6	6	5	3	4	6	8	9	12	10	7
E	3	2	2	3	4	4	6	7	7	3	2	2	4
SE	1	1	1	2	5	9	9	10	5	1	1	1	4
S	1	1	3	6	10	24	20	17	7	2	1	1	8
SW	2	2	3	6	9	17	13	12	5	3	1	1	6
W	3	3	6	9	10	9	10	9	7	5	3	2	6
NW	8	10	13	13	13	7	10	11	13	10	9	6	10
Calm	17	16	16	17	19	16	16	16	18	17	17	15	17
Monthly Percentages of Winds from 8 points of the Compass at Karenkō.													
N	21	22	31	22	24	14	8	8	19	26	26	21	20
NE	29	27	22	18	21	13	6	9	17	27	26	33	20
E	4	4	5	6	7	10	14	11	8	5	4	2	7
SE	1	4	5	11	6	15	16	13	6	2	3	2	7
S	2	4	4	8	4	6	9	8	12	3	3	3	5
SW	10	11	9	11	8	14	17	20	13	10	16	18	13
W	21	16	14	19	16	18	17	19	15	15	13	11	16
NW	9	11	10	5	12	10	10	12	10	11	9	9	10
Calm	2	1	0	1	3	2	2	1	1	0	0	1	1

Wind:

Month. / Direction.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann.
Monthly Percentages of Winds from 8 points of the Compass at Tainan.													
N	68	68	57	44	27	8	8	10	23	43	61	73	41
NE	14	11	11	11	9	5	7	6	11	13	12	10	10
E	2	1	3	4	7	12	14	14	14	5	2	1	6
SE	1	2	3	4	10	25	19	21	11	4	1	1	8
S	1	1	3	5	7	20	15	12	6	2	1	0	6
SW	1	1	4	6	10	15	13	12	6	3	1	0	6
W	2	2	5	9	13	9	11	11	11	8	3	2	7
NW	12	13	14	14	12	5	9	10	13	18	16	12	12
Calm	1	1	1	3	4	2	3	4	4	5	3	1	3
Monthly Percentages of Winds from 8 points of the Compass at Taitō.													
N	36	33	29	23	22	13	12	14	21	32	39	35	26
NE	26	26	25	23	23	15	16	16	24	31	32	31	24
E	4	4	5	7	9	8	10	9	9	7	3	6	7
SE	1	2	4	6	5	7	8	8	5	2	1	1	4
S	1	2	5	7	8	15	14	12	5	2	0	1	6
SW	1	1	2	3	3	10	9	7	4	1	0	1	3
W	1	2	3	4	5	8	9	7	4	2	1	0	4
NW	29	30	26	26	25	23	22	25	27	23	23	26	25
Calm	0	0	0	1	1	1	1	1	1	0	0	0	1
Monthly Percentages of Winds from 8 points of the Compass at Kōshun.													
N	16	16	12	10	12	8	8	9	12	13	12	12	12
NE	55	51	41	31	22	7	9	13	29	56	68	70	38
E	17	17	22	27	21	17	23	18	27	20	13	11	19
SE	2	3	6	8	7	10	13	10	7	3	1	1	6
S	1	1	3	3	4	6	6	7	4	1	0	0	3
SW	1	1	2	2	3	5	6	7	2	1	0	0	3
W	1	2	3	4	9	21	13	14	4	1	1	1	6
NW	5	7	8	10	16	20	17	16	7	3	2	3	10
Calm	2	2	3	4	7	6	6	6	7	3	2	2	4
Monthly Percentages of Winds from 8 points of the Compass at Hōkotō.													
N	28	30	24	24	24	9	12	14	30	31	34	31	24
NE	67	65	60	49	35	15	7	9	37	61	64	67	44
E	1	2	2	3	3	2	2	2	2	1	0	0	2
SE	0	1	1	3	2	7	7	8	3	1	0	0	3
S	1	1	4	8	15	37	31	23	8	2	0	0	11
SW	1	1	4	6	12	22	25	24	6	1	0	0	9
W	0	0	2	3	5	4	8	11	6	1	0	0	4
NW	1	1	2	3	4	2	7	8	6	2	1	1	3
Calm	0	0	1	1	1	1	1	1	1	0	0	0	1

Wind: Precipitation.

Stations. \ Month.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
(25) Average Number of Days with Gales. (10–15. m.p.s.)													
Taihoku	9.9	8.9	12.2	9.2	6.9	5.1	5.5	5.9	7.2	13.1	12.9	10.8	107.6
Keelung	9.2	8.3	8.5	5.5	4.1	3.5	3.6	3.4	3.3	6.9	9.0	10.1	75.4
Taichu	5.4	4.6	2.8	1.2	0.8	1.0	1.2	1.4	2.2	2.4	3.8	4.9	31.7
Karenkō	8.3	6.0	8.0	6.0	2.7	4.0	1.0	2.7	5.7	7.7	7.7	10.3	70.1
Tainan.....	7.1	8.2	7.5	4.0	2.2	2.6	2.8	2.4	2.3	2.1	3.9	5.5	50.6
Taitō	11.2	9.8	8.8	6.4	4.7	4.3	3.1	2.8	4.9	10.3	11.5	14.0	91.8
Kōshun	9.4	9.2	8.0	7.9	7.8	5.1	5.0	4.0	4.2	8.2	8.9	8.9	86.6
Hōkotō.....	7.0	6.9	9.1	9.9	10.6	9.1	6.4	6.1	9.0	8.2	6.1	6.6	95.0
(26) Average Number of Days with Strong Gales. (15–29. m.p.s.)													
Taihoku	0.2	0.2	0.6	0.6	0.2	0.4	0.9	1.6	1.0	0.9	0.4	—	7.0
Keelung	3.6	3.7	3.1	1.6	1.1	1.5	1.1	1.9	2.9	2.1	2.6	3.0	28.2
Taichu	0.1	0.4	0.3	—	0.1	0.1	0.2	0.8	0.4	0.3	0.3	0.3	3.3
Karenkō	3.0	1.7	1.0	0.3	—	—	0.3	0.3	1.7	1.3	3.3	5.0	17.9
Tainan.....	0.4	0.5	0.4	0.1	0.1	0.5	0.8	1.5	0.5	0.7	0.5	0.3	6.3
Taitō	1.9	2.2	2.0	1.2	1.1	1.9	1.7	2.1	1.5	2.8	3.5	1.8	23.7
Kōshun	8.5	7.1	6.4	3.0	1.7	0.8	1.5	2.0	2.7	6.2	10.9	12.9	63.7
Hōkotō.....	19.6	17.6	14.1	8.6	4.0	2.0	2.4	3.5	7.7	17.4	20.6	21.5	139.0
(27) Average Number of Days with Typhoons. (29 m.p.s. or more.)													
Taihoku	—	—	—	—	—	—	—	0.6	0.2	0.1	—	—	0.9
Keelung	—	—	—	—	—	1 0	—	0.5	0.4	0.1	0.1	0.1	1.3
Taichu	—	—	—	—	—	—	—	—	0.1	—	—	—	0.1
Karenkō	—	—	—	—	—	—	—	—	0.3	—	—	—	0.3
Tainan.....	—	—	—	—	—	0.1	—	0.1	0.1	—	—	—	0.3
Taitō	—	—	—	—	—	—	—	0.3	—	0.2	—	—	0.5
Kōshun	—	—	—	—	0.1	0.1	—	0.2	0.1	0.1	0.3	0.4	1.3
Hōkotō.....	0.1	0.1	0.1	—	—	0.1	0.1	0.8	0.4	0.1	0.8	0.5	4.1
(28) Monthly Mean Amount of the Precipitation. (mm.)													
Taihoku	102.2	126.4	177.6	128.4	213.4	258.8	205.8	321.6	263.6	103.3	75.0	85.9	2067.0
Keelung	384.0	289.7	344.2	200.3	273.2	247.1	123.4	227.8	302.3	311.4	393.7	391.4	3493.5
Taichu	45.6	63.1	92.1	107.7	240.3	330.8	294.7	352.3	164.8	15.6	14.6	22.0	1803.6
Karenkō*....	70.4	70.5	85.8	111.9	164.9	174.3	182.1	207.2	283.8	250.8	81.4	79.9	1769.0
Tainan.....	33.2	37.9	37.3	51.1	156.0	397.0	362.7	426.6	133.6	35.0	18.4	11.8	1700.6
Taitō	40.5	32.0	58.7	63.6	183.5	244.9	247.9	341.9	235.5	181.0	46.7	38.5	1769.7
Kōshun	22.8	28.9	25.1	48.4	179.3	425.9	417.0	560.0	263.9	156.6	44.6	17.4	2189.9
Hōkotō.....	26.6	33.8	63.9	70.2	112.9	175.7	160.3	194.0	101.9	32.4	21.8	19.9	1013.4

* for 13 years.

Precipitation : Cloud.

Month. / Stations.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
(29) Maximum Precipitation in a Day. (mm.)													
Taihoku	50.0	55.5	70.0	110.7	157.8	199.2	156.4	287.3	209.0	99.5	57.2	79.3	287.3
Keelung	96.4	69.1	95.3	111.9	265.4	160.3	173.4	171.8	340.0	179.3	173.1	180.0	340.0
Taichu	89.0	55.7	61.4	121.2	143.0	284.9	305.3	411.6	293.0	31.2	38.7	31.8	411.6
Karenkō	64.5	61.8	59.6	134.2	123.5	138.9	140.0	131.5	230.9	343.4	129.0	98.2	343.4
Tainan.....	101.1	100.0	86.9	102.8	167.0	238.1	246.4	384.9	220.3	52.6	37.3	31.1	384.9
Taitō	29.1	26.9	54.3	87.5	166.9	273.1	248.6	414.4	213.6	171.7	112.1	99.2	414.4
Kōshun	25.0	94.8	111.6	111.8	389.2	270.9	355.7	395.5	212.3	228.3	85.2	34.1	395.5
Hōkotō.....	44.0	53.2	56.5	55.7	174.2	157.7	288.0	303.6	343.8	109.8	29.3	38.2	343.8
(30) Average Number of Rainy Days. (0.1 mm. or more.)													
Taihoku	17.5	16.2	17.9	15.0	15.6	14.8	13.5	15.7	14.1	11.5	16.3	16.5	187.6
Keelung	23.6	20.8	23.1	18.8	18.6	15.0	9.9	14.4	15.6	19.7	22.2	23.0	224.7
Taichu	8.9	9.2	12.2	9.9	12.4	16.9	15.2	18.1	8.6	3.5	4.9	6.2	126.0
Karenkō	11.8	12.8	14.9	14.8	18.2	11.6	9.9	10.0	12.1	12.5	11.8	10.8	151.2
Tainan.....	6.1	4.8	6.0	7.4	10.0	16.1	16.5	18.5	10.2	4.5	3.6	4.1	107.7
Taitō	12.5	9.3	12.8	14.7	19.3	12.7	13.2	14.8	15.3	13.7	9.6	9.2	157.1
Kōshun	9.0	7.1	7.4	7.8	12.4	17.8	21.7	22.2	17.9	13.5	9.8	8.2	154.8
Hōkotō.....	6.6	7.1	9.6	8.4	9.8	11.8	9.4	10.4	6.5	4.1	4.8	5.5	94.0
(31) Average Number of Days with more than 100 mm. in a Day.													
Taihoku	—	—	—	0.1	0.2	0.4	0.2	0.7	0.6	—	—	—	2.2
Keelung	—	—	—	0.1	0.2	0.3	0.1	0.2	0.4	0.3	0.5	0.4	2.5
Taichu.....	—	—	—	0.1	0.5	0.7	0.4	0.9	0.4	—	—	—	3.0
Karenkō	—	—	—	0.1	—	0.3	0.6	0.4	1.1	0.1	—	—	2.6
Tainan.....	0.1	0.1	—	0.1	0.1	1.0	1.2	0.9	0.2	—	—	—	3.7
Taitō	—	—	—	—	0.3	0.4	0.5	1.0	0.6	0.4	0.1	—	3.3
Kōshun	—	—	0.1	0.1	0.2	1.0	0.8	1.5	0.4	0.4	—	—	4.5
Hōkotō.....	—	—	—	—	0.1	0.1	0.4	0.4	0.1	0.1	—	—	1.2
(32) Monthly Mean Amount of Clouds. (0–10 scale.)													
Taihoku	7.9	8.2	8.2	7.8	7.3	7.2	5.7	5.8	5.5	6.7	7.5	7.6	7.1
Keelung	8.4	8.7	8.7	8.1	7.6	6.9	5.4	5.5	6.1	7.7	8.4	8.5	7.5
Taichu.....	5.7	6.2	6.7	6.6	6.5	6.9	6.1	6.4	4.9	4.4	4.9	5.0	5.9
Karenkō	8.7	8.3	8.5	8.0	8.3	6.8	5.9	6.1	6.8	7.6	8.0	8.8	7.6
Tainan.....	5.4	5.4	5.7	5.4	5.7	6.4	6.0	6.4	5.2	4.6	4.9	5.1	5.5
Taitō	7.6	8.1	8.0	7.4	7.4	6.1	5.6	5.8	6.2	6.9	7.3	7.7	7.0
Kōshun	5.4	5.4	5.5	5.1	5.9	6.7	6.2	6.5	5.9	5.6	5.9	5.8	5.8
Hōkotō.....	7.9	7.4	7.7	6.8	6.2	6.3	5.3	5.6	5.0	5.5	6.7	7.3	6.5

Cloud : Sunshine.

Stations \ Month.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
(33) Average Number of Clear Days (less than 2 of mean amount).													
Taihoku	1.5	1.3	1.2	0.8	1.6	1.4	3.2	2.8	5.8	4.2	2.4	2.2	28.4
Keelung	1.1	1.1	0.8	0.6	1.6	1.9	5.2	4.6	4.1	1.8	1.4	1.2	25.4
Taichu.....	5.1	4.4	2.5	1.7	2.7	1.6	1.3	1.4	4.6	8.8	7.8	7.4	49.3
Karenkō	—	0.3	0.3	—	0.3	1.7	2.0	3.0	0.7	0.7	0.7	0.3	10.0
Tainan.....	4.9	4.8	4.0	4.1	4.5	2.2	1.3	1.6	3.1	7.0	7.0	7.1	51.6
Taitō	0.7	0.2	0.8	0.5	0.8	3.2	4.4	3.2	2.9	1.7	0.9	0.8	20.1
Kōshun	4.1	3.5	2.8	3.5	1.6	2.1	1.6	1.9	2.5	3.5	3.4	3.3	33.8
Hōkotō.....	2.1	2.3	1.9	2.1	3.6	3.2	4.1	3.9	5.4	5.8	2.9	1.9	39.2
(34) Average Number of Cloudy Days (more than 8 of mean amount).													
Taihoku	19.7	19.4	20.5	17.6	15.5	14.6	7.5	8.9	8.9	14.2	17.9	19.0	183.7
Keelung	22.6	22.6	23.9	19.8	17.9	14.4	8.6	9.1	11.6	18.6	22.9	23.4	215.4
Taichu.....	9.9	11.4	13.9	12.1	12.6	13.0	8.8	10.5	5.0	6.2	7.6	7.9	118.9
Karenkō	23.3	18.7	22.0	17.7	21.3	13.3	8.0	10.0	13.0	17.0	18.3	25.0	207.6
Tainan.....	7.9	7.5	8.8	7.1	9.2	11.5	7.6	10.2	6.2	5.9	6.8	7.8	96.5
Taitō	17.0	17.5	20.1	15.3	16.2	10.0	8.7	9.6	10.3	13.5	14.8	18.4	171.4
Kōshun	7.5	6.4	6.8	6.4	9.3	11.3	10.4	12.5	8.1	8.0	8.9	9.3	104.9
Hōkotō.....	20.3	16.8	19.5	13.5	12.3	11.9	6.7	7.9	6.8	9.4	13.9	17.2	156.2
(35) Mean Actual Duration of Sunshine (hours).													
Taihoku	87.3	71.5	86.6	105.4	141.0	170.0	229.5	209.6	192.6	144.6	94.9	89.9	1622.9
Keelung	66.5	49.4	65.9	99.5	137.6	199.3	268.0	249.5	203.1	120.4	66.1	61.0	1586.3
Taichu.....	176.7	157.2	163.7	179.2	202.1	202.5	247.2	224.2	246.4	244.4	198.5	186.7	2428.8
Karenkō	71.9	72.7	82.3	132.7	119.9	204.6	247.7	211.6	178.6	121.2	98.7	62.2	1604.1
Tainan.....	191.8	184.0	200.8	215.0	228.1	225.1	245.5	222.6	243.0	244.7	207.3	197.1	2605.0
Taitō	120.9	102.1	112.1	148.9	156.9	234.1	254.2	224.5	196.5	167.7	131.7	116.9	1966.5
Kōshun	170.8	163.6	193.1	215.0	211.7	213.9	229.0	191.3	199.2	198.5	164.9	155.7	2306.7
Hōkotō.....	106.1	113.2	119.2	165.7	199.1	237.0	294.6	270.0	244.2	231.7	160.6	131.0	2272.4
(36) Percentage of the Possible Duration of Sunshine.													
Taihoku	26	22	23	28	34	42	55	52	52	40	29	27	37
Keelung	20	16	18	26	33	49	63	62	55	34	20	19	36
Taichu.....	53	49	44	47	49	50	59	57	67	68	61	57	55
Karenkō	21	23	22	35	29	50	59	53	49	34	30	19	36
Tainan.....	57	57	54	57	56	56	59	56	66	68	63	59	59
Taitō	36	32	30	39	38	58	61	57	53	47	40	35	44
Kōshun	50	51	52	57	52	53	56	48	54	55	50	47	52
Hōkotō.....	32	35	32	44	48	58	71	68	67	65	49	40	51

Sunshine : Evaporation.

Month. / Stations.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
(37) Average Number of Sunless Days.													
Taihoku	11.1	11.4	12.1	8.1	6.6	3.7	1.6	2.9	3.6	5.6	9.6	10.7	87.0
Keelung	17.8	19.1	18.5	12.8	10.2	5.3	3.1	2.8	4.5	10.9	16.8	18.8	140.6
Taichu	2.7	3.6	3.6	2.8	3.4	3.4	1.4	2.2	0.9	1.1	1.8	1.9	28.8
Karenkō	11.7	10.0	13.3	6.3	8.3	2.3	2.3	2.3	3.0	6.0	8.3	13.0	86.8
Tainan.....	1.4	1.6	1.9	1.9	2.4	2.9	2.2	3.2	1.0	1.1	1.8	1.5	22.9
Taitō	4.1	5.6	6.7	4.5	5.6	2.7	2.3	3.5	2.6	2.7	3.7	5.8	49.8
Kōshun	1.4	1.4	1.4	0.7	1.8	3.3	3.1	4.2	1.8	2.2	2.6	2.8	26.7
Hōkotō.....	7.9	8.1	7.6	4.9	3.8	2.9	2.2	1.1	1.6	1.8	3.6	6.6	52.1
(38) Monthly Mean Amount of Evaporation. (mm.)													
Taihoku	67.3	63.0	82.4	107.4	140.4	161.4	201.7	182.4	156.0	125.2	86.2	71.3	1444.8
Keelung	65.5	60.0	65.8	95.9	130.4	182.2	233.7	218.3	181.7	131.1	86.9	69.0	1520.5
Taichu	88.8	87.4	97.7	121.3	140.1	152.9	169.3	156.4	140.1	137.9	109.2	93.2	1494.3
Karenkō	—	—	—	—	—	—	—	—	—	—	—	—	—
Tainan.....	104.4	111.4	138.4	165.8	171.7	164.9	170.3	156.7	157.1	152.7	120.7	104.2	1718.3
Taitō	128.2	120.8	135.7	148.5	149.8	172.5	184.7	173.4	160.4	154.1	139.9	130.8	1798.8
Kōshun	149.6	146.9	180.9	196.2	194.9	173.7	168.8	148.6	156.2	175.6	168.4	160.3	2020.1
Hōkotō	107.0	104.5	118.1	142.3	166.6	176.1	193.0	192.2	184.6	206.4	160.1	126.8	1877.7
(39) Daily Mean Amount of Evaporation. (mm.)													
Taihoku	2.2	2.2	2.7	3.6	4.6	5.4	6.5	5.9	5.2	4.0	2.9	2.3	3.9
Keelung	2.1	2.1	2.1	3.2	4.2	6.1	7.5	7.1	6.1	4.2	2.9	2.2	4.1
Taichu	2.9	3.1	3.2	4.0	4.6	5.1	5.5	5.0	4.7	4.4	3.6	3.0	4.1
Karenkō	—	—	—	—	—	—	—	—	—	—	—	—	—
Tainan.....	3.4	3.9	4.5	5.5	5.5	5.5	5.5	5.1	5.2	4.9	4.0	3.4	4.7
Taitō	4.1	4.3	4.4	4.9	4.8	5.7	5.9	5.6	5.3	5.0	4.7	4.2	4.9
Kōshun	4.8	5.2	5.8	6.6	6.3	5.8	5.4	4.8	5.2	5.7	5.6	5.2	5.5
Hōkotō.....	3.4	3.7	3.8	4.7	5.4	5.9	6.2	6.2	6.1	6.7	5.3	4.1	5.1
(40) Maximum Evaporation in a Day. (mm.)													
Taihoku	6.3	8.5	7.8	9.0	10.9	14.2	16.2	13.8	10.9	8.2	7.9	6.4	16.2
Keelung	6.0	9.7	10.3	11.5	11.6	13.6	17.1	14.9	15.5	11.0	10.0	6.3	17.1
Taichu	6.0	7.6	7.0	7.7	8.3	9.0	9.3	8.5	9.1	7.4	7.0	5.8	9.3
Karenkō	—	—	—	—	—	—	—	—	—	—	—	—	—
Tainan.....	6.0	6.8	7.9	9.5	9.2	11.5	9.6	8.5	8.2	8.8	6.3	5.5	11.5
Taitō	8.0	8.0	10.4	15.3	9.4	11.6	9.6	11.5	10.4	10.0	11.4	7.2	15.3
Kōshun	8.9	9.1	11.7	10.8	12.1	10.0	9.9	9.2	9.5	11.1	11.2	9.8	12.1
Hōkotō.....	8.0	7.8	8.4	9.0	9.5	11.2	10.4	9.2	11.2	12.8	11.0	8.0	12.8

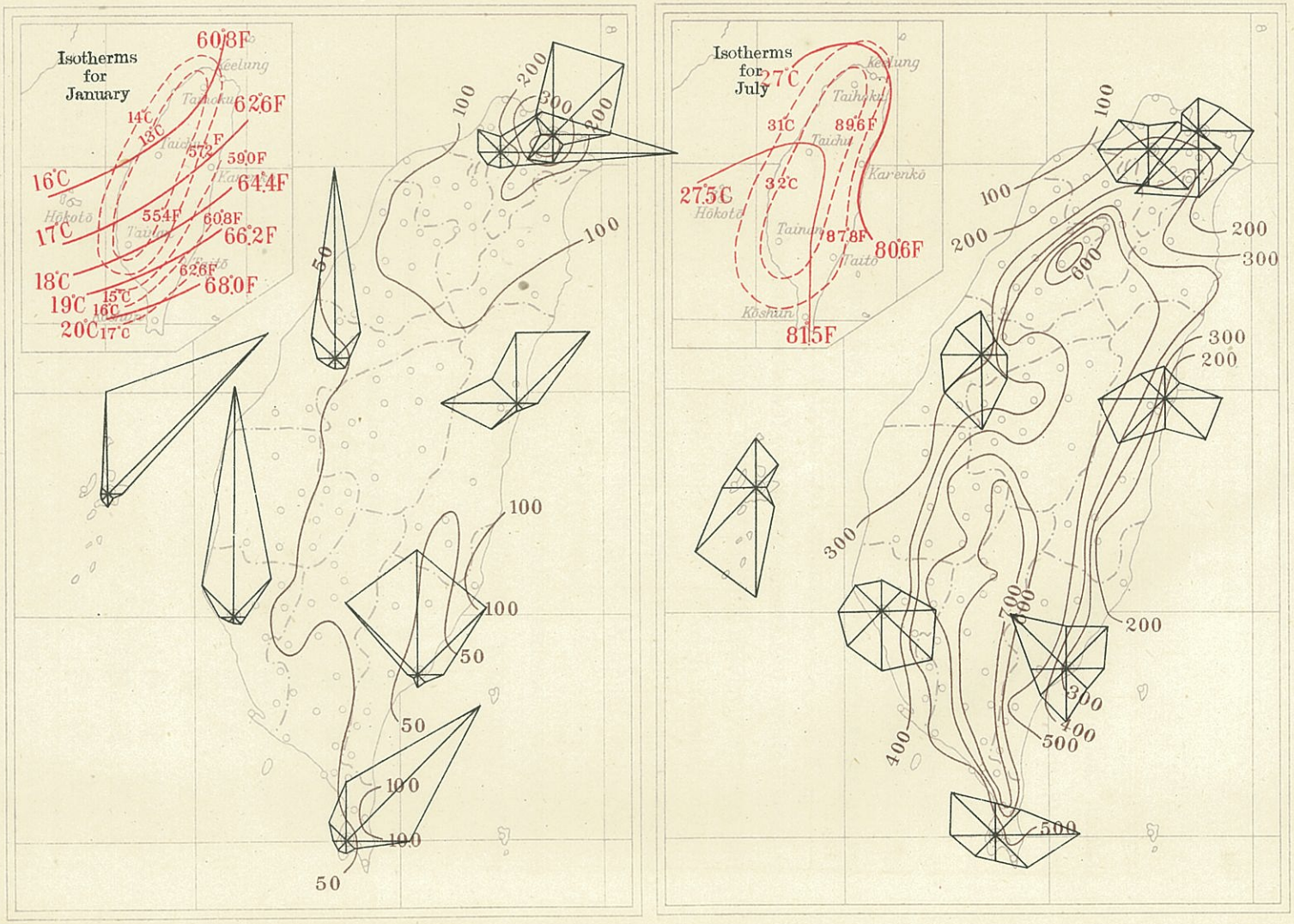
Thunderstorms: Fogs: Hoar-Frost.

Month. / Stations.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
(41) Average Number of Days with Thunderstorms.													
Taihoku	0.9	0.8	2.7	2.8	4.4	7.5	10.8	9.4	5.6	0.9	0.1	0.3	46.3
Keelung	0.8	0.6	2.0	2.7	2.6	5.5	5.4	4.0	2.9	0.7	—	0.1	27.3
Taichu.....	0.8	0.7	2.4	2.9	4.4	9.4	12.8	12.2	5.2	1.0	—	0.1	51.9
Karenkō	—	0.7	0.7	2.3	3.0	4.0	3.3	5.3	3.3	0.3	—	—	22.9
Tainan.....	0.5	0.5	1.4	2.0	3.8	6.6	10.5	10.1	7.6	1.0	0.1	0.2	44.3
Taitō	0.5	—	0.8	2.2	5.3	3.1	4.2	5.2	3.8	1.1	0.2	0.1	26.5
Kōshun	0.5	0.1	0.5	1.8	4.5	3.9	5.5	6.1	3.6	1.6	0.2	0.1	28.4
Hōkotō.....	0.6	0.3	1.5	2.1	2.0	2.6	2.7	2.5	1.4	0.4	—	0.1	16.2
(42) Average Number of Days with Fogs.													
Taihoku	1.7	1.5	2.1	0.8	0.6	0.7	0.5	0.5	0.2	0.6	1.2	1.2	11.6
Keelung	0.9	0.6	1.8	1.6	0.4	0.1	—	—	—	0.2	0.4	0.4	6.4
Taichu.....	2.6	1.9	1.4	0.8	0.4	—	0.1	—	—	0.9	0.6	1.4	10.1
Karenkō	—	—	—	—	—	—	—	—	—	—	—	—	—
Tainan.....	2.2	1.1	1.1	0.4	0.1	0 1	0.1	—	0.1	0.6	0.4	0.7	6.9
Taitō	—	—	—	—	—	—	—	—	—	—	—	—	—
Kōshun	—	—	—	—	—	—	—	—	—	—	—	—	—
Hōkotō.....	0.4	0.2	0.6	0.9	0.2	0.2	0.1	0.1	—	—	—	0.1	2.8
(43) Average Number of Days with Hoar-Frost.													
Taihoku	0.1	0.6	0.1	—	—	—	—	—	—	—	—	0.3	1.1
Keelung	—	—	—	—	—	—	—	—	—	—	—	—	—
Taichu.....	0.1	0.5	—	—	—	—	—	—	—	—	—	—	0.6
Karenkō	—	—	—	—	—	—	—	—	—	—	—	—	—
Tainan.....	0.1	—	—	—	—	—	—	—	—	—	—	—	0.1
Taitō	—	—	—	—	—	—	—	—	—	—	—	—	—
Kōshun	—	—	—	—	—	—	—	—	—	—	—	—	—
Hōkotō.....	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Rainfall and Wind Directions
for January

Average Rainfall and Wind Directions
for July

Plate II.



In the two maps which are inset in the corner of this map, the full lines indicate the mean temperature and dotted lines the mean maximum and minimum temperature, the left one shows the maximum for July and that on the right the minimum for January

RAINFALL TABLES.

The following tables contain the monthly and the annual amount of rainfall, number of rainy days, and the maximum amount in a day for each month, which were registered at 100 rainfall stations, including lighthouses but excluding observatories, in Formosa and its adjacent islands. At these stations the gauges are read once a day, at 10 a.m.; the amount being registered as that for the previous day. At lighthouses, readings of the gauges are made twice a day, at noon and midnight.

Rainy days are recorded when the amount of rainfall reaches 0.1 millimeter or more in a day. At the Kashōryo station, the gauge is read on the 1st, 10th and 20th of each month; accordingly, rainy days are not recorded. The altitude of each station is approximately stated, for the most part, by rough calculations or by observation of an aneroid barometer.

The following is a list of rainfall stations, which were arranged in order of prefectures, beginning with north of the island:

I. *Taihoku Prefecture.*	臺北廳	
*(1). Hōkashō (Agincourt I. Lighthouse)	彭佳嶼	
(2). Fukikaku (Foki Point L.H.)	富基角	
(3). Kimpōri	金包里	
(4). Tamsui (L. H.)	淡水	
(5). Sōshuntō.	雙峻頭	
(6). Keelung (L. H.)	基隆	
(7). Bitōkaku (L. H.)	鼻頭角	
(8). Dandangai.	暖暖街	
(9). Kashōryo.	火燒寮	

* Figures in parenthesis correspond to those given at the beginning of each of the following tables.

(10). Chōnaiho.		頂内埔
(11). Sekiteishō.		石底庄
(12). Sekiteigai.		石碇街
(13). Kizan.		龜山
(14). Rimogan.		リモガン
II. *Gilan Prefecture.*	宜	蘭廳
(15). Heirinbi.		坪林尾
(16). Gilan.		宜蘭
(17). Tensōpi.		天送埤
(18). Bonbonzan.		梵梵山
(19). Dainanō.		大南澳
III. *Tōyen Prefecture.*	桃	園廳
(20). Hakusakō (Hakusa Point L. H.)		白沙岬
(21). Sankakuyu.		三角湧
(22). Hakketsu.		八結
(23). Anpinchin.		安平鎮
(24). Kappanzan.		角板山
(25). Kansaiho.		咸菜硼
(26). Baronzan.		バロン山
IV. *Shinchiku Prefecture.*	新	竹廳
(27). Taikokō.		大湖口
(28). Shinchiku.		新竹
(29). Jukirin.		樹杞林
(30). Naiōheizan.		內橫屏山
(31). Yurasan.		油羅山
(32). Nanshō.		南庄
(33). Byōritsu.		苗栗
(34). Daibō.		大窩
(35). Taiko.		大湖
(36) Tanran.		罩蘭
V. *Taichu Prefecture.*	臺	北廳
(37). Kōrishō.		后里庄
(38). Suiteiryo.		水底寮

(39). Hakurei. 白　冷
(40). Shatō. 社　頭
(41). Rochikutō. 蘆　竹　塘

VI. *Nanto Prefecture.* 南　投　廳

(42). Sakuragamine. 櫻　ヶ　峯
(43). Hokkōkei. 北　港　溪
(44). Horisha. 埔　里　社
(45). Nanto. 南　投
(46). Shushugai. 集　集　街
(47). Gyuonroku. 牛　轀　轆
(48). Shōhanten. 小　半　天
(49). Tandai. 丹　大
(50). Namakaban. 楠　仔　脚　萬

VII. *Kagi Prefecture.* 嘉　義　廳

(51). Rinnai. 林　內
(52). Doko. 土　庫
(53). Yōyōrin. 幼　葉　林
(54). Chikutōki. 竹　頭　崎
(55). Arisan. 阿　里　山
(56). Kagi. 嘉　義
(57). Tappansha. 達　邦　社
(58). Kōdenshō. 公　田　庄
(59). Ensuikō. 鹽　水　港
(60). Kōdaiho. 後　大　埔
(61). Zendaiho. 前　大　埔

VIII. *Tainan Prefecture.* 臺　南　廳

(62). Tapanii. 噠　**熙**　哖
(63). Daimokukō. 大　目　降
(64). Nansho. 南　庄
(65). Kidōshō. 龜　洞　庄
(66). Shinsui. 深　水
(67). Takao (L. H.) 打　狗
(68). Hōzan. 鳳　山

IX. *Akō Prefecture.*	阿緱廳
(69). Magatsun.	マガツン
(70). Ganii.	雁爾
(71). Kōsenpo.	甲仙埔
(72). Rōnō.	荖濃
(73). Shini.	新威
(74). Banshoryo.	蕃薯寮
(75). Tokubun.	トクブン
(76). Akō.	阿緱
(77). Sekizan.	赤山
(78). Tōkō.	東港
(79). Bongarii.	ボンガリー
(80). Naishitō.	內獅頭
(81). Bōzan.	枋山
(82). Naibun.	內文
(83). Botansha.	牡丹社
(84). Kaupan.	九棚
(85). Kuraru.	龜仔角
(86). Garanbi (South Cape L. H.)	鵝鑾鼻
X. *Taitō Prefecture.*	臺東廳
(87). Seikōo.	曳廣溝
(88). Shinkaien.	新開園
(89). Dainansha.	大南社
(90). Aradaran.	アラダラン
(91). Kinkō.	キンコウ
(92). Parōei.	巴塱衛
(93). Shinsuiei.	浸水營
(94). Kashōtō (Samasana I.)	火燒島
(95). Kōtōshō (Botel Tobago I.)	紅頭嶼
XI. *Karenkō Prefecture.*	花蓮港廳
(96). Kotobukiyama.	壽山
(97). Gozenjō.	吳全城
(98). Basshisho.	稜仔庄
(99). Bokusekikaku.	璞石閣
XII. *Hōko Prefecture.* (Pescadores Islands)	澎湖廳
(100). Gyōoto (Fisher I. L.H.)	漁翁島

Rainfall Tables.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
(1) 彭佳嶼 Hōkasho (Agincourt Is.) (light house). lat. 25° 38′ N. long. 122° 04′ E. alt. 126.5 meters. Mean for 5 years (1909–1913).													
Mean	143.9	111.2	184.7	74.2	213.3	83.5	32.8	158.2	160.3	88.3	126.4	133.2	1510.1
Percentage ..	10	7	12	5	14	6	2	10	11	6	9	9	100
Max. in a day	32.7	92.5	61.4	41.1	142.0	69.3	41.4	303.7	64.1	131.2	101.7	55.7	303.7
Rainy days..	21.8	16.8	21.0	13.6	15.8	9.2	7.4	11.4	13.2	11.8	16.0	21.8	179.8
(2) 富基角 Fukikaku (light house). Lat. 25° 18′ N. long. 121° 32′ E. alt. 19 meters. Mean for 13 years (1901–1913).													
Mean	146.1	157.8	203.2	125.1	234.1	178.8	104.7	139.5	157.8	88.7	115.9	165.3	1817.0
Percentage ..	8	9	11	7	13	10	6	8	9	5	6	9	100
Max. in a day	49.0	77.7	68.3	131.7	145.4	138.4	120.2	112.0	116.0	43.0	67.6	108.8	145.4
Rainy days..	20.3	18.2	21.7	16.0	15.3	11.1	8.3	11.2	12.8	13.3	16.5	19.4	184.1
(3) 金包里 Kimpōri. Lat. 25° 13′ N. long. 121° 38′ E. alt. 10 meters. Mean for 10 years (1904–1913).													
Mean	394.7	358.7	395.2	219.4	333.6	219.9	122.7	180.1	293.5	273.1	272.2	380.5	3443.6
Percentage ..	11	10	11	6	10	6	4	5	9	8	8	11	100
Max. in a day	120.0	127.3	100.0	101.4	135.5	111.5	139.0	108.0	183.9	175.8	130.0	156.5	183.9
Rainy days..	21.1	21.9	22.5	17.6	18.2	12.7	9.2	12.8	16.2	17.8	18.7	21.3	210.0
(4) 淡水 Tamsui (light house). Lat. 25° 10′ N. long. 121° 25′ E. alt. 3 meters. Mean for 14 years (1900–1913).													
Mean	180.3	173.8	224.3	113.9	199.6	220.1	121.7	188.5	233.0	135.9	169.9	131.1	2092.2
Percentage ..	9	8	11	5	10	10	6	9	11	7	8	6	100
Max. in a day	64.8	75.2	83.0	128.4	251.7	185.9	147.3	188.7	240.0	131.2	80.0	42.3	251.7
Rainy days..	17.6	16.3	18.5	12.9	12.8	10.8	7.5	10.4	10.6	11.9	14.2	15.9	159.4
(5) 雙峻頭 Sōshuntō. Lat. 25° 10′ N. long. 121° 28′ E. alt. 76 meters. Mean for 10 years (1904–1913).													
Mean	200.1	187.0	237.1	118.9	218.2	154.1	150.4	172.8	365.9	151.9	180.9	192.8	2330.1
Percentage ..	9	8	10	5	9	7	6	7	16	7	8	8	100
Max. in a day	88.1	99.8	77.3	132.2	99.4	93.4	124.0	145.5	249.8	245.5	125.7	62.3	249.8
Rainy days..	18.6	17.4	18.1	12.7	13.1	10.6	8.4	10.9	11.0	10.4	13.2	17.9	162.3

Rainfall Tables.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
(6) 基　　隆 Keelung (light house). Lat. 25° 09′ N. long. 121° 45′ E. alt. 32 meters. Mean for 10 years (1904–1913).													
Mean	356.3	308.5	390.4	187.7	276.5	172.7	130.9	144.8	275.7	266.2	284.9	334.0	3128.7
Percentage ..	11	10	12	6	9	6	4	5	9	9	9	11	100
Max. in a day	76.0	60.0	92.0	117.2	215.6	66.8	149.5	82.9	234.9	168.3	137.5	152.3	234.9
Rainy days..	22.7	21.5	23.2	18.1	18.5	12.9	10.0	12.8	16.3	18.3	19.2	22.8	216.3
(7) 鼻 頭 角 Bitōkaku (light house). Lat. 25° 08′ N. long. 121° 55′ E. alt. 52 meters. Mean for 12 years (1902–1913).													
Mean	210.3	189.0	235.5	133.8	196.1	179.1	86.6	122.6	165.1	164.7	179.0	182.2	2044.3
Percentage ..	10	9	12	7	10	9	4	6	8	8	8	9	100
Max. in a day	87.5	83.7	81.6	71.6	109.3	113.5	93.9	88.3	89.9	115.0	113.0	80.6	115.0
Rainy days..	22.7	19.7	22.6	16.5	17.8	13.2	9.2	12.1	14.9	15.6	18.3	21.8	204.5
(8) 暖 暖 街 Dandangai. Lat. 25° 05′ N. long. 121° 44′ E. alt. 44 meters. Mean for 14 years (1900–1913).													
Mean	611.0	452.9	487.3	244.0	326.3	285.0	181.0	287.1	518.7	536.9	661.8	668.1	5260.0
Percetage....	12	9	9	5	6	5	3	5	10	10	13	13	100
Max. in a day	105.0	121.2	10.56	127.0	169.3	141.5	144.2	272.7	351.2	272.0	230.5	150.4	351.2
Rainy days..	22.4	19.9	21.8	16.8	16.4	12.6	8.8	12.6	14.4	18.1	21.8	21.2	206.8
(9) 火 燒 寮 Kashōryo. Lat. 25° 05′ N. long. 121° 44′ E. alt. 150 meters. Mean for 7 years (1907–1913).													
Mean	888.9	659.0	688.1	319.0	439.6	296.7	237.4	293.8	813.8	832.4	808.5	1061.0	7338.0
Percentage ..	12	9	9	4	6	4	3	4	11	11	11	14	100
Max. in a day	—	—	—	—	—	—	—	—	—	—	—	—	—
Rainy days..	—	—	—	—	—	—	—	—	—	—	—	—	—
(10) 頂 內 埔 Chōnaiho. Lat. 25° 01′ N. long 121° 32′ E. alt. 15 meters. Mean for 10 years (1904–1913).													
Mean	120.3	114.4	206.9	113.9	228.9	278.1	203.5	235.9	350.5	127.9	81.1	93.3	2154.7
Percentage ..	6	5	10	5	11	13	9	11	16	6	4	4	100
Max. in a day	61.0	72.0	77.7	107.0	107.9	111.5	131.9	218.5	211.5	162.5	42.4	59.8	218.5
Rainy days..	17.9	16.1	18.6	14.6	15.6	14.8	12.1	13.8	12.8	12.6	13.7	16.4	179.0

Rainfall Tables.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
(11) 石底庄 Sekiteishō. Lat. 25° 01′ N. long. 121° 44′ E. alt. 102 meters. Mean for 10 years (1904–1913).													
Mean	356.2	273.1	336.0	167.5	265.8	278.0	275.3	339.4	631.8	509.3	435.5	375.3	4243.2
Percentage ..	8	6	8	4	6	7	6	8	15	12	10	9	100
Max. in a day	78.0	107.0	109.2	94.5	115.4	150.0	209.8	270.0	261.7	294.0	224.0	129.9	294.0
Rainy days..	22.7	21.6	23.3	18.3	19.4	14.6	8.9	15.2	15.7	19.8	20.4	23.4	223.3
(12) 石碇街 Sekiteigan. Lat. 24° 59′ N. long. 121° 33′ E. alt. 98 meters. Mean for 10 years (1904–1913).													
Mean	213.5	170.5	245.7	152.2	286.6	297.6	222.8	323.4	532.8	273.4	239.4	205.9	3163.9
Percentage ..	7	5	8	5	9	9	7	10	17	9	8	7	100
Max. in a day	79.5	54.8	83.2	97.2	113.0	117.9	165.7	234.3	405.6	171.3	146.0	85.2	405.6
Rainy days..	19.1	18.1	18.9	14.0	16.1	14.3	11.1	15.0	14.5	15.4	17.0	18.4	191.9
(13) 龜山 Kizan. Lat. 24° 54′ N. long. 121° 33′ E. alt. 57 meters. Mean for 10 years (1904–1913).													
Mean	208.6	179.9	254.3	146.7	308.7	369.7	291.8	458.2	481.8	233.6	200.3	208.4	3342.0
Percentage ..	6	5	8	4	9	11	9	14	14	7	6	6	100
Max. in a day	82.0	99.7	80.6	84.8	103.3	199.7	210.4	353.4	460.1	171.5	102.6	143.0	460.1
Rainy days..	18.0	16.0	19.6	14.7	17.9	15.8	13.4	16.9	14.4	14.9	15.9	18.0	195.5
(14) リモガン Rimogan. Lat. 24° 46′ N. long. 121° 30′ E. alt. 545 meters. Mean for 2 years (1912–1913).													
Mean	197.9	118.1	209.5	122.1	279.3	331.0	383.3	611.9	825.5	276.7	179.1	203.0	3737.8
Percentage ..	5	3	6	3	7	9	10	16	22	7	5	5	100
Max. in a day	50.0	49.0	53.0	41.2	60.1	69.0	202.7	480.5	402.5	85.0	52.0	33.0	480.5
Rainy days..	22.0	13.5	15.5	11.5	19.5	16.0	16.5	20.5	20.0	14.0	12.0	16.0	197.0
(15) 坪林尾 Heirinbi. Lat. 24° 56′ N. long. 121° 42′ E. alt. 174 meters. Mean for 10 years (1904–1913).													
Mean	180.1	124.6	211.2	140.3	262.2	350.5	325.2	376.5	534.7	339.7	222.8	159.4	3227.3
Percentage ..	6	4	6	4	8	11	10	12	17	10	7	5	100
Max. in a day	76.9	58.0	85.0	66.2	173.2	204.8	239.2	377.0	411.8	245.0	125.0	55.0	411.8
Rainy days..	18.6	18.1	17.3	13.5	15.7	13.0	10.2	15.4	13.5	16.1	16.2	19.9	187.5

Rainfall Tables.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
(16) 宜　蘭 Gilan.													
Lat. 24° 45′ N. long. 121° 45′ E. alt. 9 meters. Mean for 14 years (1900–1913).													
Mean	159.6	96.6	185.5	105.5	193.5	173.0	112.9	199.3	278.3	404.1	348.3	255.3	2511.8
Percentage ..	6	4	7	4	8	7	5	8	11	16	14	10	100
Max. in a day	85.0	90.4	73.2	60.9	85.6	101.0	130.0	200.0	184.5	230.9	186.0	198.5	230.9
Rainy days..	18.7	15.9	18.7	14.9	18.0	13.4	8.1	12.0	14.3	17.5	19.6	18.9	189.8
(17) 天 送 埤 Tensōpi.													
Lat. 24° 39′ N. long. 121° 37′ E. alt. 129 meters. Mean for 10 years (1904–1913).													
Mean	151.7	109.9	183.7	114.3	240.1	249.5	231.5	288.2	471.2	498.6	262.5	218.4	3019.6
Percentage ..	5	4	6	4	8	8	8	9	16	16	9	7	100
Max. in a day	62.5	60.0	64.2	34.3	143.2	171.7	131.0	186.8	425.2	305.0	110.2	101.7	425.2
Rainy days..	17.2	16.7	18.9	15.0	19.1	12.8	9.4	14.6	14.6	18.3	18.3	19.0	193.9
(18) 梵 々 山 Bonbonzan.													
Lat. 24° 37′ N. long. 121° 28′ E. alt. 1636 meters. Mean for 2 years (1912–1913).													
Mean	276.2	133.4	204.8	108.3	285.0	381.1	352.3	415.5	1030.3	624.6	394.1	396.2	4602.0
Percentage ..	6	3	4	2	6	8	8	9	22	14	9	9	100
Max. in a day	45.0	63.5	36.3	28.2	56.5	64.9	94.6	252.0	442.9	132.5	61.8	56.8	442.9
Rainy days..	27.0	17.5	23.5	18.5	25.5	19.0	20.0	21.0	25.0	21.5	25.0	28.5	272.0
(19) 大 南 澳 Dainanō.													
Lat. 24° 28′ N. long. 121° 48′ E. alt. 30 meters. Mean for 2 years (1912–1913).													
Mean	55.9	39.4	139.5	78.1	208.5	243.4	404.1	377.0	1282.1	780.5	236.2	158.5	4003.6
Percentage ..	1	1	3	2	5	6	10	9	32	19	6	4	100
Max. in a day	17.9	24.0	76.0	22.6	87.7	97.4	433.0	223.8	353.5	191.5	155.8	45.2	433.0
Rainy days..	17.5	12.5	17.0	11.5	18.0	15.5	9.0	13.0	18.0	11.0	18.0	18.5	179.5
(20) 白 沙 岬 Hakusakō. (light house).													
Lat. 25° 02′ N. long. 121° 04′ E. alt. 15 meters. Mean for 12 years (1902–1913).													
Mean	77.4	102.8	179.5	100.5	270.8	188.0	79.7	139.1	126.3	50.7	57.0	75.4	1447.4
Percentage ..	5	7	12	7	19	13	6	10	9	4	4	5	100
Max. in a day	38.0	60.8	100.1	99.5	203.4	185.6	82.3	222.3	201.3	59.1	47.7	44.8	222.3
Rainy days..	13.5	12.9	16.5	11.3	11.2	9.1	6.5	7.7	7.8	7.7	9.7	13.4	127.3

Rainfall Tables.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
(21) 三角湧 Sankakuyu.													
Lat. 24° 56′ N. long. 121° 22′ E. alt. 140 meters. Mean for 10 years (1904–1913).													
Mean	138.9	156.8	219.1	119.6	236.5	270.4	243.8	284.6	320.8	118.2	82.4	106.5	2297.6
Percentage ..	6	7	10	5	10	12	11	12	14	5	4	5	100
Max. in a day	58.2	102.2	65.9	118.4	119.3	113.0	118.8	201.1	191.4	205.5	64.5	89.2	205.5
Rainy days..	17.7	15.5	19.0	13.4	15.2	14.8	13.4	14.4	12.1	11.0	11.0	15.6	173.1
(22) 八結 Hakketsu.													
Lat. 24° 50′ N. long. 121° 18′ E. alt. 242 meters. Mean for 2 years (1912–1913).													
Mean	177.6	125.3	294.0	95.7	334.5	411.8	423.2	772.5	671.8	29.0	30.5	138.1	3504.3
Percentage ..	5	4	8	3	10	12	12	22	19	1	1	4	100
Max. in a day	33.5	63.8	71.5	64.0	114.0	105.5	420.0	406.1	387.7	11.4	13.3	37.2	406.1
Rainy days..	20.0	14.5	19.5	14.0	20.0	20.0	14.0	20.5	15.0	9.5	10.0	19.5	196.5
(23) 安平鎮 Anpinchin.													
Lat. 24° 56′ N. long. 121° 11′ E. alt. 180 meters. Mean for 5 years (1909–1913).													
Mean	166.7	109.8	233.7	117.4	288.0	191.9	167.2	304.6	340.1	71.6	62.2	108.5	2161.6
Percentage ..	8	5	11	6	13	9	8	14	16	3	3	5	100
Max. in a day	48.1	51.3	76.0	64.1	129.6	147.4	122.1	258.1	210.2	58.0	49.8	26.3	258.1
Rainy days..	20.4	17.0	18.6	12.8	16.2	9.0	9.2	13.6	12.0	10.0	9.4	17.4	165.6
(24) 角板山 Kappanzan.													
Lat. 24° 49′ N. long. 121° 21′ E. alt. 438 meters. Mean for 2 years (1912–1913).													
Mean	146.9	120.8	299.0	81.3	289.3	484.9	396.2	904.9	618.3	70.3	20.6	121.4	3554.3
Percentage ..	4	3	8	2	8	14	11	25	17	2	1	3	100
Max. in a day	34.4	40.5	67.2	26.2	69.0	98.2	217.5	520.6	292.0	93.0	11.0	37.7	520.6
Rainy days..	13.5	9.5	11.0	8.5	15.5	14.5	15.0	18.5	14.0	5.5	3.0	11.0	139.5
(25) 咸菜硼 Kansaiho.													
Lat. 24° 47′ N. long. 121° 10′ E. alt. 136 meters. Mean for 10 years (1904–1913).													
Mean	132.3	132.5	230.5	134.7	235.2	201.7	248.3	287.3	310.6	64.9	54.4	68.2	2100.8
Percentage ..	6	6	11	6	11	10	12	14	15	3	3	3	100
Max. in a day	76.8	92.0	106.0	99.8	110.3	123.0	184.7	223.8	381.3	186.2	91.5	38.5	381.3
Rainy days..	11.9	11.7	16.6	11.6	11.8	10.5	11.3	11.3	9.9	5.0	5.5	9.9	127.0

Rainfall Tables.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
(26) バロン山 Baronzan.													
Lat. 24° 42′ N. long. 121° 23′ E. alt. 1182 meters. Mean for 2 years (1912–1913).													
Mean	133.2	66.3	195.2	71.7	253.4	263.5	340.7	675.4	521.5	28.0	11.5	59.8	2620.4
Percentage ..	5	3	7	3	10	10	13	26	20	1	0	2	100
Max. in a day	22.0	30.0	39.0	38.0	69.6	60.1	251.5	646.0	428.0	13.0	14.2	24.7	646.0
Rainy days..	16.5	10.0	11.0	10.0	16.5	16.5	11.5	14.0	15.5	6.5	3.5	9.0	140.5
(27) 大湖口 Taikokō.													
Lat. 24° 53′ N. long. 121° 04′ E. alt. 106 meters. Mean for 10 years (1904–1013).													
Mean	114.9	139.3	213.9	122.1	240.9	131.8	133.7	167.2	188.2	51.3	53.2	75.6	1632.1
Percentage ..	7	9	13	8	15	8	8	10	12	3	3	5	100
Max. in a day	52.7	105.3	85.5	79.8	138.2	98.2	123.7	221.5	243.5	172.0	47.3	40.9	243.5
Rainy days..	14.0	15.4	16.7	11.7	11.4	8.6	7.8	9.4	8.1	5.2	7.1	11.9	127.3
(28) 新竹 Shinchiku.													
Lat. 24° 48′ N. long. 120° 58′ E. alt. 20 meters. Mean for 12 years (1901, 1902, and 1904–1913).													
Mean	97.3	128.5	152.4	113.9	209.6	137.0	133.7	163.9	119.1	29.5	31.3	44.3	1360.7
Percentage ..	7	9	11	8	16	10	10	12	9	2	2	3	100
Max. in a day	152.2	93.0	81.5	114.6	135.2	205.2	100.6	290.0	110.6	53.5	40.0	45.2	290.0
Rainy days..	10.0	9.7	13.2	10.1	10.0	8.3	6.8	9.7	6.4	2.7	3.8	7.8	98.5
(29) 樹杞林 Jukirin.													
Lat. 24° 44′ N. long. 121° 05′ E. alt. 114 meters. Mean for 10 years (1904–1913).													
Mean	115.9	125.2	231.5	125.1	239.4	227.2	265.6	291.1	210.0	56.5	41.2	59.1	1987.8
Percentage ..	6	6	12	6	12	11	13	15	11	3	2	3	100
Max. in a day	72.2	89.8	96.5	78.6	104.6	110.0	185.0	225.7	149.0	163.7	62.6	35.2	225.7
Rainy days..	12.2	13.0	16.5	11.7	12.2	11.1	10.6	12.5	10.1	4.0	6.1	10.8	130.8
(30) 內橫屏山 Naiōheizan.													
Mat. 24° 38′ N. long. 121° 03′ E. alt. 973 meters. Mean for 3 years (1911–1913).													
Mean	149.5	104.6	250.4	114.2	379.7	250.7	336.7	878.9	376.5	121.2	31.9	101.7	3096.1
Percentage ..	5	3	8	4	12	8	11	28	12	4	1	3	100
Max. in a day	89.4	72.6	103.8	81.3	125.0	189.5	250.0	659.0	468.0	222.5	82.7	53.8	659.0
Rainy days..	15.3	9.0	14.7	10.7	18.3	15.0	17.0	23.3	13.3	5.0	5.7	9.0	156.3

Rainfall Tables.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
(31) 油羅山 Yurasan. Lat. 24° 38′ N. long. 121° 11′ E. alt. 1454 meters. Mean for 2 years (1912–1913).													
Mean	153.6	125.0	298.1	127.6	276.3	331.1	632.7	693.2	599.2	35.0	28.7	115.2	3416.1
Percentage ..	4	4	9	4	8	10	18	20	18	1	1	3	100
Max. in a day	32.8	60.4	60.1	60.4	61.5	92.6	359.7	349.5	307.4	18.5	18.3	33.5	359.7
Rainy days..	16.5	12.5	16.5	16.0	18.5	18.5	22.5	23.0	21.0	7.0	7.5	16.0	195.5
(32) 南庄 Nanshō. Lat. 24° 36′ N. long. 120° 59′ E. alt. 205 meters. Mean for 11 years (1901, 1904–1913).													
Mean	107.5	123.4	248.5	158.6	305.1	252.4	352.3	400.0	294.3	71.8	33.5	77.1	2424.7
Percentage ..	4	5	10	7	13	10	15	17	12	3	1	3	100
Max. in a day	84.6	96.2	103.3	97.0	189.0	154.0	181.0	380.1	274.6	302.5	92.5	42.0	380.1
Rainy days..	10.1	9.3	14.0	10.9	11.5	10.4	13.0	12.5	8.9	2.9	3.9	8.9	116.3
(33) 苗栗 Byōritsu. Lat. 24° 33′ N. long. 120° 49′ E. alt. 46 meters. Mean for 10 years (1904–1913).													
Mean	90.6	110.0	200.6	124.0	313.7	212.0	227.7	239.0	170.0	51.5	21.4	44.7	1805.3
Percentage ..	5	6	11	7	17	12	13	13	9	3	1	2	100
Max. in a day	61.4	77.9	139.0	82.0	226.0	115.0	219.4	279.0	251.0	175.9	31.0	40.9	279.0
Rainy days..	9.6	10.5	14.1	9.4	10.0	11.3	10.8	10.9	7.0	2.3	3.7	7.7	107.3
(34) 大窩 Taibō. Lat. 24° 32′ N. long. 121° 04′ E. alt. 1606 meters. Mean for 2 years (1912–1913).													
Mean	165.8	144.5	350.2	130.3	248.3	298.9	784.2	616.7	373.8	25.8	47.6	149.7	3336.1
Percentage ..	5	4	10	4	7	9	24	18	11	1	1	4	100
Max. in a day	40.4	90.7	65.3	75.7	113.4	85.0	467.7	225.0	170.0	29.8	22.0	33.0	467.7
Rainy days..	16.0	12.5	14.5	8.0	19.5	17.5	21.5	21.0	18.5	6.0	7.0	12.0	174.0
(35) 大湖 Taiko. Lat. 24° 25′ N. long. 120° 52′ E. alt. 273 meters. Mean for 10 years (1904–1913).													
Mean	68.8	87.5	181.2	125.4	303.6	320.4	413.0	376.1	226.4	32.7	11.4	35.7	2182.1
Percentage ..	3	4	8	6	14	15	19	17	10	2	1	2	100
Max. in a day	51.6	74.2	109.8	71.3	225.2	218.5	666.0	513.6	485.8	83.2	20.6	37.4	513.6
Rainy days..	7.7	8.3	12.7	8.9	10.3	12.3	13.2	13.4	7.5	2.6	2.9	6.3	106.1

Rainfall Tables.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
(36) 罩蘭 Tanran. Lat. 24° 19′ N. long. 120° 49′ E. alt. 241 meters. Mean for 10 years (1904–1913).													
Mean	58.4	73.0	159.6	127.5	281.2	358.8	396.2	367.0	213.4	36.0	9.9	31.9	2113.1
Percentage ..	3	3	8	6	13	17	19	17	10	2	1	2	100
Max. in a day	49.9	56.5	91.0	77.2	202.5	296.5	447.0	314.5	276.5	84.4	18.6	25.4	447.0
Rainy days..	8.6	7.5	12.8	9.9	10.9	14.1	15.0	16.2	9.5	3.0	3.0	6.7	117.2
(37) 後里庄 Kōrishō. Lat. 24° 19′ N. long. 120° 43′ E. alt. 234 meters. Mean for 10 years (1904–1913).													
Mean	53.9	61.4	143.4	118.0	254.9	263.8	291.2	284.2	196.5	23.6	10.3	28.1	1729.3
Percentage ..	3	4	8	7	15	15	17	16	11	1	1	2	100
Max. in a day	48.3	57.4	69.4	74.2	195.5	204.6	354.3	370.0	376.1	63.1	29.9	18.0	376.1
Rainy days..	9.6	8.5	13.2	10.0	11.3	13.6	13.6	15.0	8.2	2.8	2.8	6.9	115.5
(38) 水底寮 Suiteiryō. Lat. 24° 12′ N. long. 120° 49′ E. alt. 485 meters. Mean for 10 years (1904–1913).													
Mean	77.0	56.1	137.6	135.5	284.3	469.2	511.2	467.5	217.7	33.8	13.7	38.7	2442.4
Percentage ..	3	2	6	6	12	19	21	19	9	1	1	2	100
Max. in a day	113.0	59.2	54.4	85.0	200.6	341.2	363.2	360.5	285.8	67.7	19.3	44.0	363.2
Rainy days..	8.4	7.3	13.4	10.2	11.2	17.8	18.3	19.1	10.8	3.2	3.2	5.4	128.3
(39) 白冷 Hakurei. Lat. 24° 11′ N. long 120° 56′ E. alt. 606 meters. Mean for 2 years (1912–1913).													
Mean	75.8	121.9	223.9	104.3	547.4	1013.8	413.0	306.0	79.4	19.9	0.0	33.9	2942.6
Percentage ..	3	4	8	4	19	34	14	10	3	1	0	1	100
Max. in a day	23.5	50.5	59.5	96.0	264.5	300.0	175.0	100.3	53.0	24.8	0.0	20.9	300.0
Rainy days..	9.5	9.5	12.0	4.5	16.5	21.5	16.5	18.0	7.	2.0	—	8.0	125.0
(40) 社頭 Shatō. Lat. 23° 54′ N. long. 120° 35′ E. alt. 40 meters. Mean for 10 years (1904–1913).													
Mean	47.8	52.1	92.0	87.1	178.1	275.7	342.0	251.3	161.3	21.5	10.2	15.9	1535.1
Percentage ..	3	3	6	6	12	18	22	16	11	1	1	1	100
Max. in a day	62.9	58.6	77.3	59.9	199.5	164.3	235.0	251.0	247.2	38.0	13.3	33.0	251.0
Rainy days..	8.1	6.7	10.4	9.1	10.5	14.2	16.3	15.3	9.9	3.4	3.1	5.2	112.2

Rainfall Tables.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
(41) 蘆竹塘 Rochikutō. Lat. 23° 52′ N. long. 120° 25′ E. alt. 20 meters. Mean for 10 years (1904–1913).													
Mean	31.2	33.5	75.0	73.8	143.9	200.5	257.1	169.2	92.2	10.1	9.6	10.1	1106.3
Bercentage ..	3	3	7	7	13	18	23	15	8	1	1	1	100
Max. in a day	44.6	51.2	61.4	63.5	192.6	178.5	298.8	180.5	182.5	22.6	20.5	17.6	298.8
Rainy days..	5.1	4.8	8.6	7.3	8.4	11.9	10.9	10.7	7.1	1.5	1.9	3.1	81.3
(42) 櫻ヶ峯 Sakuragamine. Lat. 24° 07′ N. long. 121° 12′ E. alt. 2464 meters. Mean for 2 years (1912–1913).													
Mean	99.5	140.9	356.2	146.2	765.3	943.8	504.9	527.9	252.7	67.3	47.0	107.7	3959.6
Percentage ..	3	4	9	4	19	24	13	13	6	2	1	3	100
Max. in a day	38.0	51.4	65.5	50.4	224.8	312.7	227.6	269.7	218.4	25.9	32.5	42.5	312.7
Rainy days..	13.5	11.0	16.0	10.0	24.0	20.5	20.5	21.0	19.5	12.0	7.0	17.5	192.5
(43) 北港溪 Hokkōkei. Lat. 24° 03′ N. long 120° 54′ E. alt. 379 meters. Mean for 10 years (1904–1913).													
Mean	75.9	65.1	143.1	135.4	296.4	422.1	414.8	354.3	180.0	46.0	14.0	32.7	2179.8
Percentage ..	3	3	7	6	14	19	19	16	8	2	1	2	100
Max. in a day	98.5	46.0	93.5	73.4	198.5	368.8	263.6	318.8	235.8	105.5	11.5	33.5	368.8
Rainy days..	9.2	7.9	10.9	9.8	12.8	18.0	16.0	16.8	9.2	3.6	3.7	6.7	124.6
(44) 埔里社 Horisha. Lat. 23° 58′ N. long. 120° 58′ E. alt. 447 meters. Mean for 10 years (1904–1913).													
Mean	80.3	74.1	144.2	151.4	306.1	413.6	397.0	346.3	209.3	53.1	18.3	40.5	2234.3
Percentage ..	4	3	6	7	14	19	18	16	9	2	1	2	100
Max. in a day	126.6	51.0	87.5	57.1	208.3	280.3	210.1	306.0	251.0	55.5	15.8	45.2	306.0
Rainy days..	9.9	9.7	13.4	12.1	16.7	19.0	18.1	19.5	14.1	6.1	5.8	8.0	152.4
(45) 南投 Nanto. Lat. 23° 55′ N. long. 120° 41′ E. alt. 100 meters. Mean for 10 years (1904–1913).													
Mean	53.3	51.9	100.5	99.1	193.1	307.7	397.0	305.5	194.3	38.3	11.2	22.0	1773.9
Percentage ..	3	3	6	6	11	17	22	17	11	2	1	1	100
Max. in a day	64.4	49.4	96.7	51.0	190.8	197.4	335.0	416.8	262.3	74.0	14.8	52.0	416.8
Rainy days..	8.1	7.5	11.6	10.3	11.8	14.2	16.1	17.7	9.7	4.5	3.4	4.9	119.8

Rainfall Tables.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
(46) 集々街 Shushugai.													
Lat. 23° 50′ N. long. 120° 47′ E. alt. 197 meters. Mean for 10 years (1904–1913).													
Mean	65.0	60.0	108.1	125.3	269.6	453.2	457.9	426.3	259.3	43.8	16.2	23.5	2308.3
Percentage ..	3	3	5	5	12	20	20	18	11	2	1	1	100
Max. in a day	73.5	47.5	68.7	52.4	124.3	305.2	403.0	280.9	253.8	59.2	32.7	32.7	403.0
Rainy days..	8.7	7.0	10.4	10.2	14.3	16.5	17.4	18.2	12.9	5.3	4.5	5.3	130.7
(47) 牛轣轆 Giuonroku.													
Lat. 23° 47′ N. long. 120° 52′ E. alt. 302 meters. Mean for 10 years (1904–1913).													
Mean	55.4	50.7	100.8	159.6	265.6	456.5	410.0	278.1	190.9	35.8	27.2	24.6	2055.1
Percentage ..	3	2	5	8	13	22	20	14	9	2	1	1	100
Max. in a day	120.4	41.3	50.0	74.5	86.2	249.8	445.6	428.2	201.5	39.3	86.4	27.3	445.6
Rainy days..	6.9	6.1	9.9	11.3	16.1	18.5	17.6	18.2	11.4	4.7	3.1	5.7	129.5
(48) 小半天 Shōhanten.													
Lat. 23° 44′ N. long. 120° 45′ E. alt. 477 meters. Mean for 10 years (1904–1913).													
Mean	67.6	66.0	111.0	164.9	324.9	475.7	544.8	557.7	277.5	55.0	23.2	30.8	2699.3
Percentage ..	2	2	4	6	12	18	20	21	10	2	1	1	100
Max. in a day	90.6	48.0	84.4	86.5	147.1	210.2	391.0	428.1	184.6	39.5	24.1	36.0	428.1
Rainy days..	8.1	8.3	12.4	12.7	19.1	18.2	21.3	21.7	15.8	6.9	5.3	6.8	156.6
(49) 丹大 Tandai.													
Lat. 23° 43′ N. long. 121° 08′ E. alt. 1606 meters. Mean for 2 years (1912–1913).													
Mean	60.1	68.9	153.9	97.2	211.0	299.2	547.2	534.3	364.9	11.9	13.4	38.5	2400.8
Percentage ..	2	3	6	4	9	12	23	22	15	0	1	2	100
Max. in a day	28.4	33.5	78.5	52.7	35.6	89.1	280.5	307.1	365.1	5.6	7.1	35.5	365.1
Rainy days..	8.5	7.5	12.0	8.5	25.0	21.0	18.5	20.5	14.0	3.5	3.5	7.0	149.5
(50) 楠仔脚萬 Namakaban.													
Lat. 23° 36′ N. long. 120° 53′ E. alt. 348 meters. Mean for 2 years (1912–1913).													
Mean	80.4	68.9	96.7	58.7	334.0	665.6	582.2	308.1	196.4	14.4	7.8	44.7	2458.3
Percentage ..	3	3	4	2	14	27	24	13	8	1	0	2	100
Max. in a day	51.9	73.7	59.0	24.5	83.2	207.0	502.9	270.5	201.9	8.7	5.8	16.3	502.9
Rainy days..	12.0	5.5	10.0	9.0	21.5	22.5	20.0	21.5	15.0	6.0	2.0	12.5	157.5

Rainfall Tables.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
(51) 林 內 Rinnai.													
Lat. 23° 46′ N. long. 120° 38′ E. alt. 100 meters. Mean for 10 years (1904–1913).													
Mean	45.4	59.6	93.1	96.3	181.1	420.9	455.9	422.8	249.8	42.1	16.1	20.0	2103.3
Percentage ..	2	3	4	5	9	20	22	20	12	2	1	1	100
Max. in a day	36.3	73.2	63.0	54.1	104.3	341.1	320.0	430.6	220.0	107.8	27.0	29.0	430.6
Rainy days..	6.7	5.9	10.4	9.6	11.2	12.9	17.8	18.2	12.8	2.7	2.3	5.8	116.3
(52) 土 庫 Doko.													
Lat. 23° 41′ N. long. 120° 23′ E. alt. 14 meters. Mean for 10 years (1904–1913).													
Mean	35.5	40.9	60.7	69.1	142.9	259.5	275.2	195.3	126.8	18.5	13.2	12.8	1250.4
Percentage ..	3	3	5	6	11	21	22	16	10	1	1	1	100
Max. in a day	46.5	44.0	56.5	36.0	91.8	151.0	165.5	88.6	185.0	115.2	44.1	24.9	185.0
Rainy days..	6.4	4.7	6.8	5.8	8.5	11.2	12.6	9.7	7.0	2.2	1.8	3.3	80.0
(53) 幼 葉 林 Yōyōrin.													
Lat. 23° 33′ N. long. 120° 40′ E. alt. 1060 meters. Mean for 10 years (1904–1913)													
Mean	69.0	68.0	99.8	124.1	273.7	485.0	669.6	551.5	374.1	84.7	33.2	38.7	2871.4
Percentage ..	2	2	4	4	10	17	23	19	13	3	1	1	100
Max. in a day	111.5	85.1	52.1	139.6	114.5	232.0	950.0	890.0	300.0	224.5	40.5	50.2	950.0
Rainy days..	8.0	7.1	10.4	10.4	16.0	18.9	21.3	20.8	16.0	7.3	4.3	5.8	146.3
(54) 竹 頭 崎 Chikutōki.													
Lat. 23° 32′ N. long. 120° 34′ E. alt. 90 meters. Mean for 10 years (1904–1913).													
Mean	43.5	46.2	83.3	69.6	221.1	412.2	674.7	517.9	353.6	40.7	17.6	19.4	2499.9
Percentage ..	2	2	3	3	9	16	27	21	14	2	1	1	100
Max. in a day	73.6	59.0	72.4	68.5	108.4	167.5	541.5	389.6	183.7	34.1	38.2	33.0	541.5
Rainy days..	7.2	5.5	9.8	8.6	12.2	15.8	19.6	19.2	15.3	4.6	2.9	4.1	124.8
(55) 阿 里 山 Arisan.													
Lat. 23° 31′ N. long. 120° 48′ E. alt. 700 meters. Mean for 6 years (1908–1913).													
Mean	84.6	63.5	111.5	166.0	523.0	681.9	732.6	718.9	530.7	95.2	69.0	43.7	3820.8
Percentage ..	2	2	3	4	14	18	19	19	14	2	2	1	100
Max. in a day	84.7	65.8	47.0	78.0	148.0	837.5	768.8	718.2	206.0	72.8	25.8	48.5	837.5
Rainy days..	10.4	6.0	9.4	10.6	20.0	16.8	21.6	26.2	20.0	10.0	9.8	7.2	168.0

Rainfall Tables.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
(56) 嘉 義 Kagi.													
Lat. 23° 29′ N. long. 120° 27′ E. alt. 31 meters. Mean for 13 years (1901–1913).													
Mean	37.4	29.6	56.6	74.0	161.4	411.4	425.0	458.2	257.6	24.3	16.0	16.8	1968.4
Percentage ..	2	2	3	4	8	21	22	23	13	1	1	1	100
Max. in a day	64.0	39.0	61.2	121.0	117.8	500.5	491.8	275.0	223.3	55.0	71.3	48.0	500.5
Rainy days..	6.3	4.3	7.3	6.8	10.1	14.2	16.5	17.1	11.5	3.8	2.1	3.3	103.3
(57) 達 邦 社 Tappansha.													
Lat. 23° 28′ N. long. 120° 45′ E. alt. 939 meters. Mean for 12 years (1901, 1903–1913).													
Mean	60.5	69.6	118.9	152.1	353.3	464.1	544.9	614.9	318.7	76.7	29.9	21.1	2824.7
Percentage ..	2	2	4	5	13	16	19	22	11	3	1	1	100
Max. in a day	117.0	50.0	192.0	100.7	153.0	252.3	689.0	852.1	258.5	96.0	48.0	26.3	852.1
Rainy days..	6.2	5.4	8.7	9.1	16.4	16.2	18.2	20.6	15.5	7.7	3.6	3.9	131.5
(58) 公 田 庄 Kōdenshō.													
Lat. 23° 26′ N. long. 120° 38′ E. alt. 792 meters. Mean for 10 years (1904–1913).													
Mean	67.6	48.9	100.8	116.8	390.6	541.2	678.1	685.1	372.0	78.7	31.7	27.5	3139.1
Percentage ..	2	2	3	4	12	17	22	22	12	3	1	1	100
Max. in a day	115.2	45.0	95.5	58.1	121.0	218.5	637.8	777.0	230.8	92.1	43.0	25.2	777.0
Rainy days..	7.7	7.6	10.5	11.0	17.8	18.3	21.7	22.5	9.1	7.1	4.4	4.7	152.4
(59) 鹽 水 港 Ensuikō.													
Lat. 23° 19′ N. long. 120° 16′ E. alt. 15 meters. Mean for 10 years (1904–1913).													
Mean	42.4	30.0	68.1	43.9	147.4	254.2	338.7	227.5	166.9	22.0	13.2	12.3	1366.5
Percentage ..	3	2	5	3	11	19	25	17	12	2	1	1	100
Max. in a day	58.2	42.8	140.0	56.2	99.0	146.6	207.0	182.5	186.7	52.2	18.0	24.1	207.0
Rainy days..	4.4	3.9	6.1	5.1	7.6	11.7	12.8	12.4	8.7	1.9	1.5	3.0	79.1
(60) 後 大 埔 Kōdaiho.													
Lat. 23° 18′ N. long. 120° 36′ E. alt. 287 meters. Mean for 10 years (1904–1913).													
Mean	55.1	42.6	81.1	66.5	279.5	479.3	561.8	580.5	479.5	53.8	9.9	18.4	2708.0
Percentage ..	2	2	3	2	10	18	21	21	18	2	1	1	100
Max. in a day	105.4	42.3	76.2	55.4	151.0	341.3	361.9	969.3	469.8	70.0	19.0	31.0	969.3
Rainy days..	4.8	4.1	6.8	6.1	11.8	15.2	17.5	19.1	12.9	3.6	1.3	1.8	105.0

Rainfall Tables.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
(61) 前大埔 Jendaiho.													
Lat. 23° 17′ N. long. 120° 26′ E. alt. 45 meters. Mean for 10 years (1904–1913).													
Mean	40.9	34.7	66.3	52.4	190.4	374.7	598.0	463.1	307.3	63.0	18.1	15.4	2224.4
Percentage ..	2	2	3	2	9	17	27	21	14	3	1	1	100
Max. in a day	87.0	68.6	60.7	60.1	92.1	181.2	232.5	425.4	136.2	108.2	40.1	24.0	425.4
Rainy days..	5.5	4.1	7.4	6.8	12.1	14.7	18.7	19.2	16.6	4.4	2.7	3.2	115.4
(62) 唯吧哗 Tapanii.													
Lat. 23° 08′ N. long. 120° 28′ E. alt. 61 meters. Mean for 10 years (1904–1913).													
Mean	37.8	30.7	56.6	42.0	199.3	421.5	676.6	478.5	290.2	52.4	16.2	15.8	2317.7
Percentage ..	2	1	2	2	9	18	29	21	13	2	1	1	100
Max. in a day	104.8	43.0	68.0	51.4	93.8	308.0	406.0	465.0	146.0	93.4	32.3	20.0	465.0
Rainy days..	4.4	3.8	6.3	4.7	10.3	13.1	18.1	19.7	14.1	4.1	1.7	3.6	103.9
(63) 大目降 Daimokukō.													
Lat. 23° 02′ N. long. 120° 18′ E. alt. 15 meters. Mean for 7 years (1907–1913).													
Mean	38.0	23.5	25.4	36.6	162.4	320.2	367.9	482.1	238.5	28.7	16.4	11.3	1751.0
Percentage ..	2	1	1	2	9	18	21	28	14	2	1	1	100
Max. in a day	68.3	34.7	17.4	37.3	129.6	136.3	276.0	499.1	223.2	19.9	21.9	27.4	499.1
Rainy days..	6.1	3.4	4.9	5.4	9.7	12.7	16.7	18.0	14.1	4.7	3.3	2.6	101.6
(64) 南庄 Nanshō.													
Lat. 23° 02′ N. long. 120° 28′ E. alt. 114 meters. Mean for 10 years (1904–1913).													
Mean	56.0	23.5	54.3	49.3	233.2	403.0	669.6	554.8	410.2	74.2	18.9	17.8	2564.8
Percentage ..	2	1	2	2	9	16	26	22	16	3	1	1	100
Max. in a day	190.6	34.3	74.0	50.1	157.8	148.6	254.0	199.2	149.6	73.5	35.0	25.0	397.9
Rainy days..	5.8	4.7	8.0	7.7	12.1	16.0	19.7	21.5	18.2	7.9	2.6	4.3	128.5
(65) 龜洞庄 Kidōshō.													
Lat. 22° 54′ N. long. 120° 21′ E. alt. 30 meters. Mean for 10 years (1904–1913).													
Mean	39.6	16.9	30.3	34.5	171.0	384.8	528.5	452.4	212.7	30.1	21.9	15.0	1937.7
Percentage ..	2	1	2	2	9	20	27	23	11	2	1	1	100
Max. in a day	122.6	31.0	48.2	59.4	109.2	166.6	509.8	310.0	128.0	38.9	76.0	33.2	509.8
Rainy days..	4.1	3.0	5.4	4.6	8.4	11.6	14.6	14.1	12.9	3.6	1.6	3.3	87.2

Rainfall Tables.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
(66) 深水 Shinsui. Lat. 22° 47′ N. long. 120° 24′ E. alt. 61 meters. Mean for 10 years (1904–1913).													
Mean	34.8	22.0	42.5	46.2	192.6	440.1	531.9	438.2	305.0	52.9	26.3	10.7	2143.2
Percentage ..	2	1	2	2	9	21	25	20	14	2	1	1	100
Max. in a day	63.7	32.2	52.5	88.0	164.2	328.5	505.2	280.3	280.4	44.6	101.4	25.8	505.2
Rainy days..	4.0	3.3	5.2	5.1	8.1	12.6	14.5	15.2	12.6	4.7	2.3	2.3	89.9
(67) 打狗 Takao (light house). Lat. 22° 37′ N. long. 120° 16′ E. alt. 44 meters. Mean for 15 years (1899–1913).													
Mean	20.2	15.0	31.9	36.8	164.1	340.1	318.1	384.9	151.4	35.4	16.6	8.8	1523.2
Percentage ..	1	1	2	2	11	22	21	25	10	2	1	1	100
Max. in a day	42.1	34.5	96.7	46.9	112.8	182.4	240.8	334.0	115.9	71.5	44.6	23.1	334.0
Rainy days..	3.9	3.4	4.3	5.0	9.4	13.5	14.5	17.2	10.3	3.5	1.8	3.1	89.9
(68) 鳳山 Hōzan. Lat. 22° 37′ N. long 120° 22′ E. alt. 15 meters. Mean for 12 years (1902–1913).													
Mean	18.0	15.6	35.7	39.0	159.5	348.2	415.1	402.4	190.5	35.6	11.6	9.3	1680.3
Percentage ..	1	1	2	2	9	21	25	24	11	2	1	1	100
Max. in a day	36.5	38.5	71.7	72.0	145.4	172.2	276.5	276.9	204.1	72.4	59.2	20.7	276.9
Rainy days..	2.6	2.9	3.9	3.0	8.0	12.8	12.5	15.0	9.7	3.0	1.2	1.8	76.4
(69) マガツン Magatsun. Lat. 23° 15′ N. long. 120° 42′ E. alt. 939 meters. Mean for 2 years (1912–1913).													
Mean	60.6	61.6	58.5	47.0	379.5	935.2	715.1	424.2	429.7	87.3	12.5	30.2	3241.6
Percentage ..	2	2	2	1	12	29	22	13	13	3	0	1	100
Max. in a day	54.0	34.0	34.2	24.5	104.3	203.0	375.0	95.0	154.0	46.0	8.0	24.8	375.0
Rainy days..	6.0	5.5	7.0	4.5	16.5	21.0	18.5	23.5	20.0	6.0	4.0	3.0	135.5
(70) 雁爾 Ganii. Lat. 23° 10′ N. long. 120° 46′ E. alt. 636 meters. Mean for 3 years (1911–1913).													
Mean	46.2	35.4	71.5	68.8	528.5	412.4	343.6	674.4	437.6	89.2	3.6	23.3	2734.3
Percentage ..	2	1	3	3	19	15	13	25	16	3	0	1	100
Max. in a day	55.3	25.0	28.0	53.3	156.3	215.2	367.4	425.5	252.7	124.1	8.1	23.8	425.5
Rainy days..	6.0	4.7	7.7	5.3	16.0	17.0	14.7	21.0	13.0	7.7	1.0	2.3	116.4

Rainfall Tables.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
(71) 甲仙埔 Kōsenpo. Lat. 23° 05′ N. long. 120° 36′ E. alt. 273 meters. Mean for 9 years (1905–1913).													
Mean	51.9	30.6	59.5	75.7	312.5	533.3	647.0	540.1	469.7	78.0	17.3	15.4	2831.1
Percentage ..	2	1	2	3	11	19	23	19	17	3	1	1	100
Max. in a day	167.8	27.2	74.1	60.7	151.8	304.8	595.0	241.2	235.0	103.6	22.8	27.0	595.0
Rainy day ..	4.7	4.2	6.1	7.7	14.2	16.9	20.6	22.8	18.2	7.2	3.1	2.4	128.1
(72) 荖濃 Rōnō. Lat. 23° 05′ N. long. 120° 41′ E. alt. 439 meters. Mean for 10 years (1904–1913).													
Mean	57.3	33.5	78.7	80.1	367.2	542.8	709.7	510.2	340.6	105.6	23.2	23.8	2872.7
Percentage ..	2	1	3	3	13	19	25	18	12	4	1	1	100
Max. in a day	169.2	28.9	111.9	69.2	169.3	225.0	398.9	320.0	210.0	144.5	29.0	27.2	398.7
Rainy day ..	5.7	6.0	11.2	8.8	15.8	17.3	20.1	22.4	18.0	9.0	5.0	5.5	144.8
(73) 新威 Shini. Lat. 22° 54′ N. long. 120° 38′ E. alt. 150 meters. Mean for 10 years (1904–1913).													
Mean	45.7	28.3	58.5	94.8	330.4	537.9	744.6	706.4	479.8	146.0	23.1	18.5	3214.0
Percentage ..	1	1	2	3	10	17	23	22	15	5	1	1	100
Max. in a day	86.8	38.9	97.8	106.7	182.1	256.4	383.6	335.0	329.6	131.0	34.7	37.3	395.0
Rainy day ..	3.7	3.6	6.0	6.3	14.5	14.5	19.3	23.0	17.6	9.0	3.3	3.9	124.7
(74) 蕃薯藔 Banshoryō. Lat. 22° 53′ N. long. 120° 29′ E. alt. 46 meters. Mean for 10 years (1904–1913).													
Mean	52.5	26.1	37.1	46.4	198.3	482.0	536.7	541.9	340.0	52.5	20.5	12.0	2346.2
Percentage ..	2	1	2	2	8	21	23	23	14	2	1	1	100
Max. in a day	98.2	38.6	66.8	56.5	115.8	207.6	295.0	283.0	169.8	56.5	23.0	27.6	295.0
Rainy day ..	3.3	2.0	4.6	4.6	9.6	12.2	16.8	15.8	13.6	4.6	1.6	1.5	90.2
(75) トクブン Tokubun. Lat. 22° 45′ N. long. 120° 43′ E. alt. 970 meters. Mean for 2 years (1912–1913).													
Mean	36.6	34.2	26.9	78.7	412.5	1232.4	698.1	556.0	605.0	106.6	8.5	45.3	3841.2
Percentage ..	1	1	1	2	11	32	18	14	16	3	0	1	100
Max. in a day	35.1	36.0	19.2	50.2	92.0	415.0	424.0	209.5	444.5	23.5	6.5	32.0	444.5
Rainy day ..	3.5	2.5	2.0	4.5	16.0	24.0	15.0	22.5	24.0	9.5	3.0	6.0	132.5

Rainfall Tables.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
(76) 阿 緱 Akō.													
Lat. 22° 40′ N. long. 120° 29′ E. alt. 43 meters. Mean for 10 years (1904–1913).													
Mean	24.5	18.0	48.0	46.2	199.8	428.6	566.0	475.9	321.1	64.9	16.6	13.5	2223.1
Percentage ..	1	1	2	2	9	19	25	21	14	3	1	1	100
Max. in a day	39.1	32.0	118.7	61.5	132.5	205.8	358.5	255.0	181.1	53.5	50.7	37.0	358.5
Rainy day ..	2.8	3.1	5.4	5.0	9.5	12.5	16.1	18.7	16.3	4.9	2.0	2.3	98.6
(77) 赤 山 Sekizan.													
Lat. 22° 35′ N. long. 120° 37′ E. alt. 24 meters. Mean for 10 years (1904–1913).													
Mean	23.0	27.7	48.3	63.4	277.3	462.9	699.6	717.3	453.4	147.4	26.8	10.2	2957.3
Percentage ..	1	1	2	2	9	16	24	24	15	5	1	0	100
Max. in a day	21.5	46.5	92.3	53.2	174.0	216.8	280.8	369.7	199.9	152.3	47.0	30.0	369.7
Rainy day ..	4.3	2.5	5.5	7.5	12.3	13.4	19.6	22.0	19.3	10.5	3.5	2.4	122.8
(78) 東 港 Tōkō.													
Lat. 22° 28′ N. long. 120° 27′ E. alt. 5 meters. Mean for 10 years (1904–1913).													
Mean	31.8	30.8	73.1	59.4	178.8	375.9	589.4	428.7	220.1	49.9	19.1	13.5	2070.7
Percentage ..	2	1	4	3	9	18	28	21	11	2	1	1	100
Max. in a day	34.9	52.8	63.1	66.2	116.1	152.1	278.6	271.9	192.5	59.8	44.4	27.0	278.6
Rainy day ..	4.5	3.1	5.1	4.7	9.4	13.9	17.4	18.4	15.8	6.8	3.0	3.4	105.5
(79) ボンガリー Bongarii.													
Lat. 22° 27′ N. long. 120° 40′ E. alt. 788 meters. Mean for 2 years (1912–1913).													
Mean	37.4	16.0	7.7	6.9	278.6	788.9	932.1	538.2	614.5	131.1	15.0	49.3	3416.0
Percentage ..	1	0	0	0	8	23	27	16	18	4	0	1	100
Max. in a day	37.0	30.0	11.0	28.0	75.0	128.3	297.0	215.5	365.0	92.0	12.1	60.0	365.0
Rainy day ..	5.0	2.5	1.0	3.5	14.5	23.0	16.0	18.0	24.0	7.5	6.0	5.0	126.0
(80) 內 獅 頭 Naishitō.													
Lat. 22° 18′ N. long. 120° 41′ E. alt. 545 meters. Mean for 10 years (1904–1913)													
Mean	46.9	24.6	50.4	73.4	256.9	509.8	799.8	684.9	556.4	158.4	26.9	23.7	3212.1
Percentage ..	1	1	2	2	8	16	25	21	17	5	1	1	100
Max. in a day	93.0	52.0	178.0	196.2	231.3	192.3	407.8	378.5	327.2	162.8	47.8	45.3	407.8
Rainy days..	6.2	4.9	6.1	6.0	10.0	13.4	17.4	18.4	15.5	8.9	5.3	4.3	116.4

Rainfall Tables.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
(81) 枋 山 Bōzan.													
Lat. 22° 16′ N. long. 120° 39′ E. alt. 5 meters. Mean for 10 years (1904–1913).													
Mean	28.7	16.1	39.4	40.6	169.7	374.5	493.0	463.0	290.2	85.7	16.4	16.3	2033.7
Percentage ..	1	1	2	2	8	18	24	23	14	4	1	1	100
Max. in a day	40.3	46.0	165.3	101.0	181.5	457.0	380.0	308.4	150.5	102.5	55.2	29.0	457.0
Rainy days..	2.6	1.9	4.0	3.6	8.5	11.3	12.3	12.8	10.9	4.5	1.9	2.5	76.8
(82) 內 文 Naibun.													
Lat. 22° 19′ N. long. 120° 44′ E. alt. 788 meters. Mean for 2 years (1912–1913).													
Mean	44.9	8.6	22.1	33.0	372.2	1154.1	781.8	576.9	542.8	245.1	18.9	69.6	3870.4
Percentage ..	1	0	1	1	10	30	20	15	14	6	0	2	100
Max. in a day	41.0	7.1	11.5	30.5	95.0	305.3	431.0	265.0	127.3	168.0	7.7	28.0	431.0
Rainy days..	7.5	3.0	5.0	6.0	16.5	21.0	16.0	18.5	19.0	7.5	6.5	7.0	133.5
(83) 牡 丹 社 Botansha.													
Lat. 22° 08′ N. long. 120° 47′ E. alt. 515 meters. Mean for 10 years (1904–1913).													
Mean	56.1	44.9	48.9	95.6	235.8	454.0	740.3	668.8	436.5	152.5	73.5	66.0	3072.9
Percentage ..	2	1	2	3	8	15	24	22	14	5	2	2	100
Max. in a day	36.5	29.0	56.0	135.9	180.5	300.0	285.2	460.4	285.4	208.0	120.0	70.0	460.4
Rainy days..	10.9	8.3	8.7	9.4	12.2	13.1	17.4	17.2	17.4	12.5	11.3	13.1	151.5
(84) 九 棚 Kaupan.													
Lat. 22° 06′ N. long. 120° 52′ E. alt. 15 meters. Mean for 10 years (1904–1913).													
Mean	112.3	104.0	98.6	113.1	257.0	354.2	516.8	455.5	423.5	177.6	110.0	97.0	2819.8
Percentage ..	4	4	4	4	9	13	18	16	15	6	4	3	100
Max. in a day	42.3	43.7	114.8	190.0	125.3	320.7	302.3	300.0	235.5	157.2	101.4	64.3	320.7
Rainy days..	13.5	11.2	13.0	13.9	13.8	14.1	16.1	13.9	16.1	12.5	12.2	13.1	163.4
(85) 龜 仔 角 Kuraru.													
Lat. 21° 57′ N. long. 120° 48′ E. alt. 242 meters. Mean for 2 years (1910, 1913).													
Mean	20.8	16.6	14.4	108.4	183.1	191.7	595.9	577.0	385.8	60.9	26.2	49.1	2230.2
Percentage ..	1	1	1	5	8	9	27	26	17	3	1	2	100
Max. in a day	6.7	4.4	5.4	82.6	101.0	67.0	350.0	422.6	148.1	20.5	9.1	25.0	422.6
Rainy days..	14.5	11.5	8.0	17.5	21.0	18.5	18.0	18.0	21.0	16.5	12.0	14.5	191.0

Rainfall Tables.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
(86) 鵝鑾鼻 Garanbi (South Cape light House). Lat. 21° 55′ N. long. 120° 51′ E. alt. 37 meters. Mean for 13 years (1901–1913).													
Mean	87.6	59.5	54.0	65.2	253.1	268.7	443.4	436.7	338.4	166.3	63.6	67.9	2304.6
Percentage ..	4	3	2	3	11	12	19	19	15	7	3	3	100
Max. in a day	61.5	56.2	124.3	125.0	311.0	294.6	304.0	278.6	165.0	318.7	69.3	43.0	318.7
Rainy days..	13.2	12.6	10.3	9.5	11.7	14.0	17.5	16.0	16.2	14.2	12.8	13.8	161.8
(87) 成廣澳 Seikō-ō. Lat. 23° 09′ N. long. 121° 24′ E. alt. 10 meters. Mean for 9 years (1904–1910 and 1912–1913.)													
Mean	119.3	93.5	107.9	94.6	207.8	177.2	168.3	171.3	354.5	208.1	129.5	92.7	1924.7
Percentage ..	6	5	6	5	11	9	9	9	18	11	7	5	100
Max. in a day	87.6	39.0	60.0	68.0	94.8	163.5	128.6	180.0	230.6	180.0	155.0	42.0	230.6
Rainy days..	11.0	9.7	10.6	9.7	11.9	7.6	6.3	5.4	12.3	10.9	9.9	9.3	114.6
(88) 新開園 Shinkaien. Lat. 23° 06′ N. long. 121° 13′ E. alt. 282 meters. Mean for 3 years (1911–1913).													
Mean	34.6	14.3	29.9	29.5	130.6	74.9	469.2	710.7	597.4	71.7	18.7	51.6	2233.0
Percentage ..	2	1	1	1	6	3	21	32	27	3	1	2	100
Max. in a day	46.5	12.6	13.0	11.8	42.3	34.7	414.0	495.8	286.0	70.0	13.2	39.5	495.8
Rainy days..	7.7	3.7	6.3	8.7	18.0	10.3	12.0	17.0	14.0	6.3	6.3	7.3	117.6
(89) 大南社 Dainansha. Lat. 22° 45′ N. long. 121° 00′ E. alt. 606 meters. Mean for 2 years (1912–1913).													
Mean	92.0	43.6	69.6	70.4	229.1	318.6	591.9	801.9	730.2	223.7	69.2	133.3	3373.9
Percentage ..	3	1	2	2	7	9	18	24	22	7	2	4	100
Max. in a day	26.4	19.0	21.1	19.8	87.3	93.6	322.9	638.7	190.0	177.0	23.1	61.8	638.7
Rainy days..	15.0	13.5	17.5	16.0	21.5	18.0	19.5	15.5	19.5	16.0	14.5	15.0	201.5
(90) アラダラン Aradaran. Lat. 22° 35′ N. long. 120° 52′ E. alt. 758 meters. Mean for 2 years (1912–1913).													
Mean	66.4	32.8	57.9	77.5	209.3	399.7	404.2	473.2	559.5	188.1	60.6	155.3	2684.7
Percentage ..	2	1	2	3	8	15	15	18	21	7	2	6	100
Max. in a day	27.7	10.2	24.2	54.0	97.5	116.3	172.3	303.0	124.4	110.7	22.7	75.4	309.0
Rainy day ..	12.5	11.5	13.5	10.5	21.0	15.5	15.5	14.5	20.5	15.5	15.5	16.5	182.5

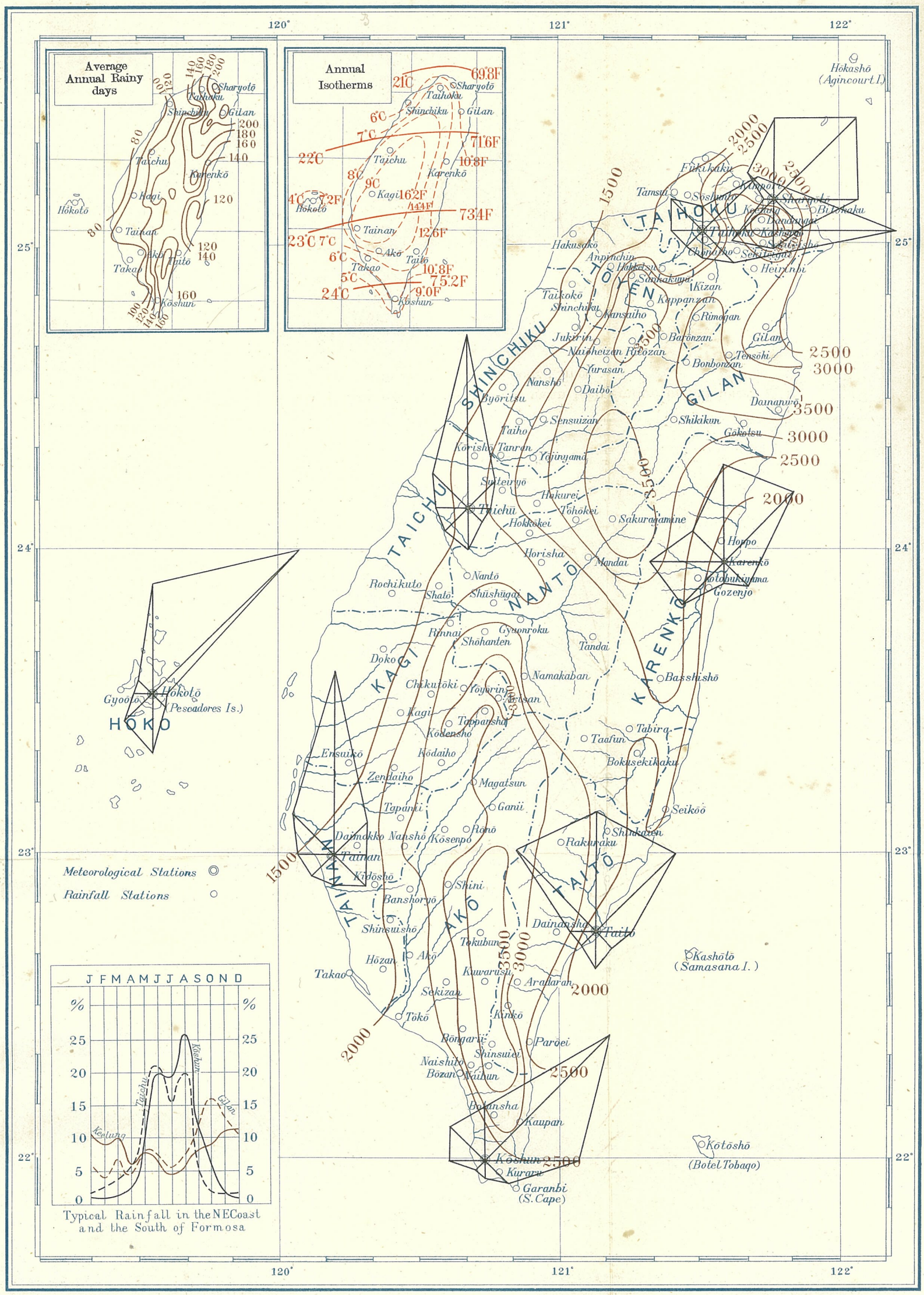
Rainfall Tables.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
(91) キンコー — Kinkō. Lat. 22° 31′ N. long. 120° 50′ E. alt. 364 meters. Mean for 2 years (1912–1913).													
Mean	59.4	35.5	56.3	113.7	258.7	460.5	506.3	447.1	567.4	156.0	45.7	106.8	2813.6
Percentage ..	2	1	2	4	9	16	18	16	20	6	2	4	100
Max. in a day	34.5	16.2	26.0	48.0	60.0	120.0	284.9	320.0	162.0	58.9	24.4	70.0	320.0
Rainy days..	11.5	10.0	10.0	12.5	19.5	16.0	14.0	10.0	18.5	13.0	9.0	15.0	159.0
(92) 巴塱衛 — Parōei. Lat. 22° 22′ N. long. 120° 54′ E. alt. 6 meters. Mean for 10 years (1904–1913).													
Mean	58.4	45.1	60.4	74.2	240.2	303.0	522.8	383.3	373.1	112.2	52.7	50.7	2276.1
Percentage ..	3	2	3	3	11	13	23	17	16	5	2	2	100
Max. in a day	68.8	50.0	72.5	133.5	272.0	311.0	680.0	350.0	161.5	163.0	59.2	75.0	680.0
Rainy days..	9.5	7.4	10.6	10.5	14.7	11.4	14.0	11.2	16.8	11.5	9.7	8.2	135.5
(93) 浸水營 — Shinsuiei. Lat. 22° 23′ N. long 120′ 46′ E. alt. 1364 meters. Mean for 2 years (1912–1913).													
Mean	66.2	38.5	70.0	104.3	498.0	1360.4	1126.1	712.4	900.9	366.6	108.3	170.2	5522.2
Percentage ..	1	1	1	2	9	25	20	13	16	7	2	3	100
Max. in a day	65.1	7.9	21.7	40.4	240.9	363.8	400.2	312.0	366.2	198.8	30.4	82.3	400.2
Rainy days..	14.5	17.5	15.0	18.0	21.5	26.5	22.5	20.5	23.0	18.0	19.5	18.5	235.0
(94) 火燒島 — Kashōtō (Samasana Is.) Lat. 22° 40′ N. long. 121° 28′ E. alt. 6 meters. Mean for 6 years (1908–1913).													
Mean	178.8	129.1	230.0	161.4	175.9	80.7	236.1	276.8	372.8	251.0	192.4	179.2	2464.3
Percentage ..	7	5	9	7	7	3	10	11	15	10	8	7	100
Max. in a day	80.7	68.6	306.2	256.7	100.6	61.2	93.5	212.5	222.0	106.8	142.5	86.8	306.2
Rainy days..	22.5	20.3	18.1	17.3	17.8	8.0	15.8	10.7	17.1	13.2	19.5	23.5	208.8
(95) 紅頭嶼 — Kōtōsho (Botel Tobago Is.) Lat. 22° 03′ N. long. 121° 34′ E. alt. 7 meters. Mean for 6 years (1908–1913)													
Mean	408.9	225.8	251.5	226.6	411.8	158.5	239.7	306.8	412.5	412.0	375.5	403.3	3882.9
Percentage ..	11	6	6	6	11	4	7	8	11	11	10	10	100
Max. in a day	115.3	47.7	63.5	85.7	320.0	197.5	85.3	335.8	222.3	368.0	173.4	198.5	368.0
Rainy days..	26.1	20.2	20.3	19.0	17.7	10.3	16.7	15.2	19.8	19.2	21.7	26.7	232.9

Rainfall Tables.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
(96) 壽 山 Kotobukiyama. Lat. 23° 53′ N. long. 121° 31′ E. alt. 1424 meters. Mean for 2 years (1912–1913).													
Mean	75.7	70.5	108.0	91.6	199.6	219.9	390.4	342.4	429.4	195.8	101.9	122.5	2348.0
Percentage ..	3	3	5	4	8	9	17	15	18	8	4	5	100
Max. in a day	13.8	22.3	27.1	39.3	50.8	78.2	265.0	200.3	270.9	58.0	34.5	50.4	270.9
Rainy days..	16.5	11.5	18.5	14.0	20.0	12.5	8.0	11.0	15.5	9.5	12.5	12.0	161.5
(97) 吳 全 城 Gozenjō. Lat. 23° 53′ N. long. 121° 33′ E. alt. 25 meters. Mean for 8 years (1906–1913).													
Mean	48.8	54.8	64.8	131.9	154.4	141.5	156.8	205.0	403.2	210.1	97.9	68.3	1737.4
Percentage ..	3	3	4	7	9	8	9	12	23	12	6	4	100
Max. in a day	31.4	25.0	38.7	166.5	71.9	133.8	213.4	168.8	226.0	195.0	120.0	134.4	226.0
Rainy days..	9.7	11.1	13.0	15.5	18.0	8.6	8.1	8.1	12.6	9.0	7.6	7.9	129.2
(98) 拔 仔 庄 Basshishō. Lat. 23° 35′ N. long. 121° 22′ E. alt. 170 meters. Mean for 10 years (1904–1913).													
Mean	85.8	72.8	88.4	137.6	248.0	235.5	222.9	322.9	538.7	288.8	160.0	107.5	2508.9
Percentage ..	3	3	4	5	10	9	9	13	21	11	6	4	100
Max. in a day	53.0	120.0	34.8	59.3	92.8	241.4	249.1	337.2	582.6	201.3	130.2	92.4	582.6
Rainy days..	14.2	14.2	16.8	18.0	22.4	12.5	11.4	14.5	15.1	15.9	16.9	14.0	185.9
(99) 璞 石 閣 Bokusekikaku. Lat. 23° 20′ N. long. 121° 18′ E. alt. 129 meters. Mean for 10 years (1904–1913).													
Mean	44.4	37.9	44.6	55.0	160.0	218.4	181.8	336.0	383.2	196.4	59.3	62.9	1780.0
Percentage ..	2	2	3	3	9	12	10	19	22	11	3	4	100
Max. in a day	62.8	30.8	31.0	56.0	94.4	360.8	260.5	423.0	356.5	220.5	65.0	136.0	423.0
Rainy days..	9.7	8.0	9.9	9.5	14.1	8.5	8.1	10.5	13.5	9.9	8.5	8.9	119.1
(100) 漁 翁 島 Gyoōtō (Fisher Is. light house). Lat. 23° 32′ N. long. 119° 27′ E. alt. 57 meters. Mean for 13 years (1901–1913).													
Mean	24.2	25.4	62.1	81.2	98.7	169.9	179.0	124.7	108.4	39.0	19.1	21.6	953.4
Percentage ..	3	3	7	9	10	18	19	13	11	4	2	2	100
Max. in a day	21.5	42.5	61.2	77.2	88.0	102.6	338.9	250.6	321.0	82.6	48.9	26.0	338.9
Rainy days..	6.5	5.5	9.4	7.4	9.4	10.8	7.1	8.0	5.5	2.7	3.2	6.1	81.6

Average Annual Rainfall and Wind Directions



The inset map of the Annual Isotherms shows the mean temperature in full lines, and mean daily range in dotted lines

III. REMARKABLE TYPHOONS OF FORMOSA.

Monthly Distribution of the Typhoons. The island of Formosa lies in the high way of the great storms known as "typhoons" in this part of the Far East, and is very often visited by these violent storms. These are the most destructive of the natural calamities that occur in the island; a severe typhoon will cause casualties of hundreds of human lives and enormous destruction of property.

The typhoons that visit Formosa originate within the sea surrounded by the Philippines, the Western Carolines, and the Mariana Islands, or within the China Sea. The typhoons appearing in these seas visit not only Formosa but all the south eastern coast of Asia. Other typhoons that occur in the sea further east of the groups of islands, mentioned above, sometimes reach these shores, but only in a few cases; many of them pass away to the Pacific, recurving themselves before they reach the coast.

In a period of seventeen years, from 1897 to 1913 inclusive, excluding those storms which were comparatively light and weak, there occurred 30 remarkable typhoons, which caused more or less disaster and damage. The distribution of these typhoons, according to months, is as follows:

	June.	*July.*	*Aug.*	*Sept.*	*Oct.*	*Total.*
Number.	2	5	15	6	2	30
per cent.	7	16	50	20	7	100

In speaking of the typhoons of the Far East, as a whole, it may be stated that they occur throughout the year. But, those which appear during the winter months are weak in their influence and few in number. The earliest typhoons that visit Formosa and the Japan Sea occur in May and the latest in

November. For five months, from December to April, there is no prevalence of typhoons.

The Typhoon Tracks. The greater number of typhoons, which pass the vicinity of Formosa, as shown in the Plate IV, move toward the northwest or west northwest. The typhoons which follow this direction, after crossing the island or the neighbouring seas, reach the Chinese continent, where they usually disappear. Some of them, however, which still maintain their force, recurve on the continent in a northeasterly direction, traversing the North China Seas and the Korean peninsula. But this occurs in a few cases only; generally, the force of the storm is greatly reduced, by the time it reaches the continent.

In general, the track of typhoons forms a parabolic curve, with its vertex in the neighbourhood of the parallel of 30° N. The typhoons that visit Formosa lie in the first branch in the northwest, and proceeds towards its vertex. In the beginning of the typhoon season that is in June and July, and also at the close of the season, in October and November, the centre of the curve falls further south of the parallel of 30° than during the months of August and September. It also recurves in the parallels close to the island and moves to the northeast. The tracks are by no means identical on each occasion. It seems that the great variation that is found in the tracks of typhoons is due to the distribution of atmospheric pressure which prevails at the time, but we are not now in a position to dwell at length on this question.

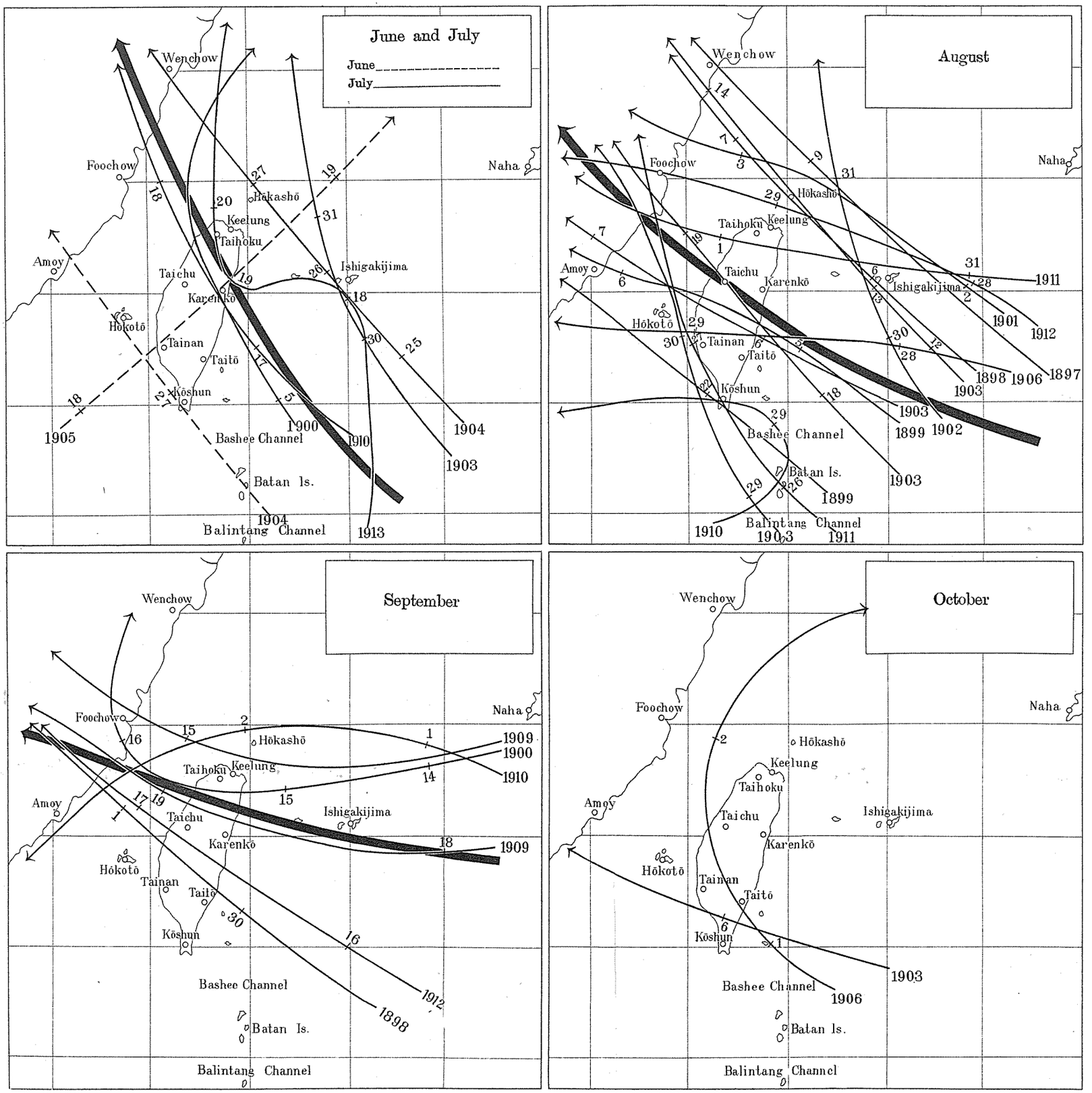
The average track of the typhoons that visit Formosa is directed towards the northwest, as shown in Plate IV.

Progressive Movement of Typhoons. When the centre of a typhoon is in course of progress, its velocity is in no way uniform on each occasion, and more or less difference is found in its speed,

Tracks of Remarkable Typhoons of Formosa,

for 17 years from 1897 to 1913, inclusive.

Plate IV.



The mark on each track shows the day of month and the center, situating at 5 a.m. on each day; heavy black lines show the mean track in each month.

according to the variation in the direction of its track. Its mean average speed, as shown in the List of Remarkable Typhoons of Formosa, is 18 kilometers (11 miles) per hour. A velocity of more than 25 km. (16 m.) occurred only three times; while the slowest speed record does not fall below 12 km. (7 m.) per hour.

It is a notable feature of the typhoons that, whenever they move towards the northwest, the velocity is rather slow, and by recurving, there occurs another decrease in speed; but, when the direction is northeast, a greater velocity is developed.

The typhoons that visit the southern coast of Japan progress towards the northeast, and, as noted, have greater velocity than storms moving in a northwesterly direction. For the sake of reference, we have calculated the velocity of 12 typhoons, which moved to the northeast and reached the southern coast of Japan, namely, between the parallels of 28° and 36°. As a result, an average of 48 km. (30 m.) per hour was obtained; the maximum exceeding 100 km. (62 m.) per hour.

From the above, it will be seen that the average velocity of the typhoons which prevail in the southern part of Japan is two and one half times greater than the average velocity of the typhoons in Formosa.

Intensity of the Typhoons. The intensity of typhoons may be judged by the falling of the pressure. We have given in the list, attached at the end of this chapter, the lowest pressure and the maximum velocity, which were recorded at the observatories situated in proximity to the typhoon tracks.

Although, the force of winds is largely influenced by local features of the configuration of the country, it does not agree with the pressure. But, it is quite beyond dispute that whenever the pressure in the centre of a typhoon fells, the wind assumes more terrific force.

The tpphoon that visited the southernmost part of Formosa on August 26 and 27, 1911 see—Plate V.—was most violent and destructive, and the barometer at Kōshun fell to 702.9 mm., the lowest record ever registered. On this occasion, the greatest velocity recorded reached 49.2 meters per second, at this point, the cups of the anemometer were blown away and further observations were impossible; still, the terrific force of the wind which prevailed at that time may be judged from the extent, to which broken pieces of tiles penetrated wooden boards or trunks of trees, in the same manner as shrapnel discharged from a gun (see Plate VI.). It is believed that the velocity reached nearly 70 meters per second or equivalent to 156 miles per hour. During the progress of this typhoon, velocity of 54.5 meters per second or 122 miles per hour was reached at Tainan. As a result of this great storm, terrible damage were inflicted in the southern part of the island; the total loss was returned as 305 dead, 378 wounded, 190 missing, and more than 30,000 houses destroyed.

When typhoons of small area cross the central mountain range which traverses the island from south to north the force of the wind is considerably decreased before it reaches the west coast. As an example, the typhoon of October 1, 1906, may be cited. This typhoon reached the district of Taitō from the sea, and the lowest pressure fell to 726.3 mm. and the velocity of wind was registered at 46.3 meters per second or 104 miles per hour, causing considerable damage to that district, but, when the storm appeared on the west coast, after crossing the central mountain range, its strength had greatly decreased, its influence being scarcely felt in that part of the island. In Tainan, the barometer fell to 745.6 mm., but the velocity reached only 18.5 meters per second or 41 miles per hour.

The greater and more violent typhoons, even in case their force is more or less decreased, still continue their course, and after crossing the Formosan channel, reach the continent, where they disappear.

On the Plates V. & VII. are given the forms of isobar, in which the courses of typhoons, both in the southern and the northern extremities of the island, are shown. When the typhoon passes the northern extremity, the pressure on the east coast fells notably, while the contrary influence is felt when it passes the southern end of the island. These phenomena are due to the existence of the central mountain range, which also causes more or less decrease in the intensity of typhoons.

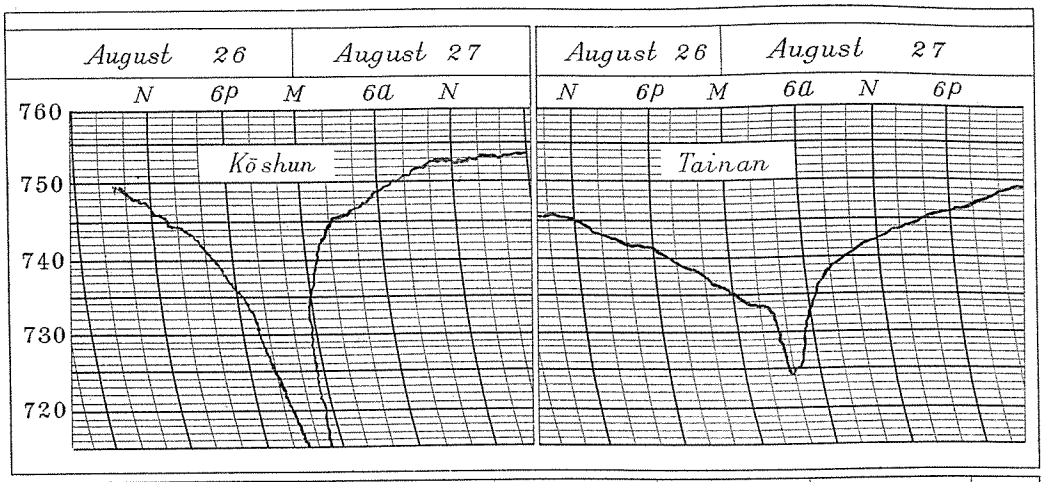
Ocean Swells on the Southwest Coast. The fishing villages, which are scattered along the low and sandy beaches, on the southwest coast of the island, stretching from Anping to Tōkō, are often visited by ocean swells. These occur at a time when a typhoon, on its way from the Baschi channel in the direction of Hong-Kong, encounters a high tide. The combined force of these two elements will raise the sea between 4 and 5 feet above the normal level, with the result that certain damage is inflicted on the nearest shore

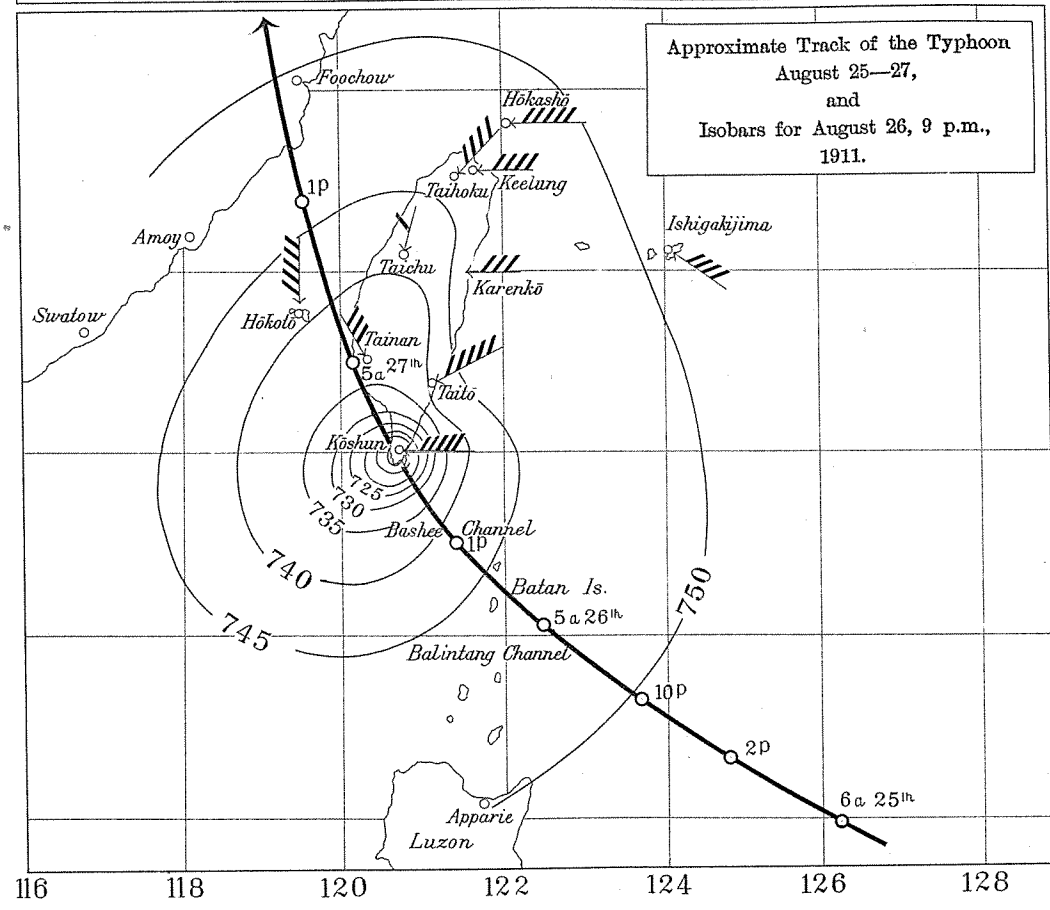
Fortunately, these great swells but seldom occur. During the past seventeen years, there were only five occasions on which houses on shore were inundated and damage caused. These swells visit the coast of Formosa, when the centre of a typhoon lies to the south of the Formosan channel, or between the parallels of 20° and 22° N. and the meridians of 116° and 120° east of Greenwich.

The List of Remarkable Typhoons in Formosa. In the following list, we describe the remarkable typhoons which occurred in the island during the past seventeen years. The list contains

the records of lowest pressure and maximum velocity which were observed in the observatories near the tracks of typhoons. Following these, we give the progressive movement of typhoons in kilometers per hour, when the centre of typhoons cross the island, or pass the sea in its vicinity. The last two columns show the loss of life and the damage inflicted on houses. The former includes those reported as missing on each occasion. The latter contains those houses which were totally destroyed, badly damaged, or swept away, and does not count damage of minor nature.

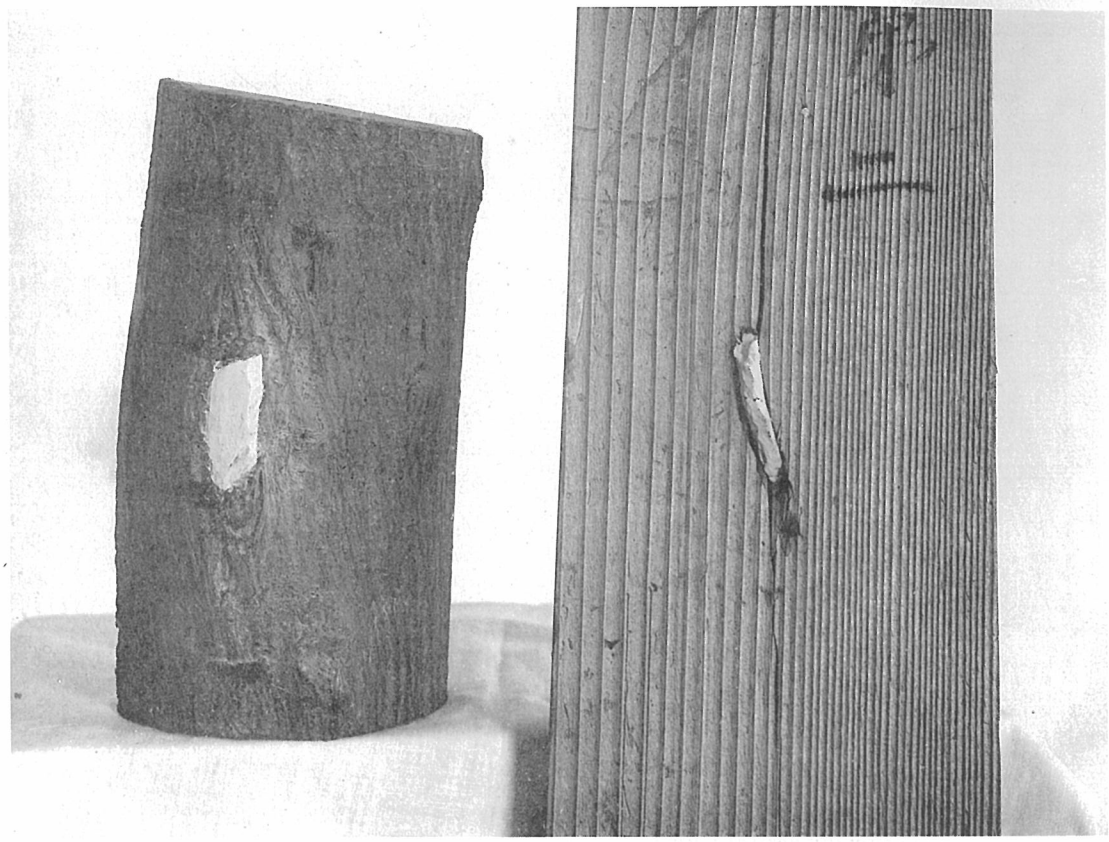
圖風颱日六·五十二月八年四十治明　Plate V.





Barographic records and Isobars, Typhoon of August 25—27, 1911.

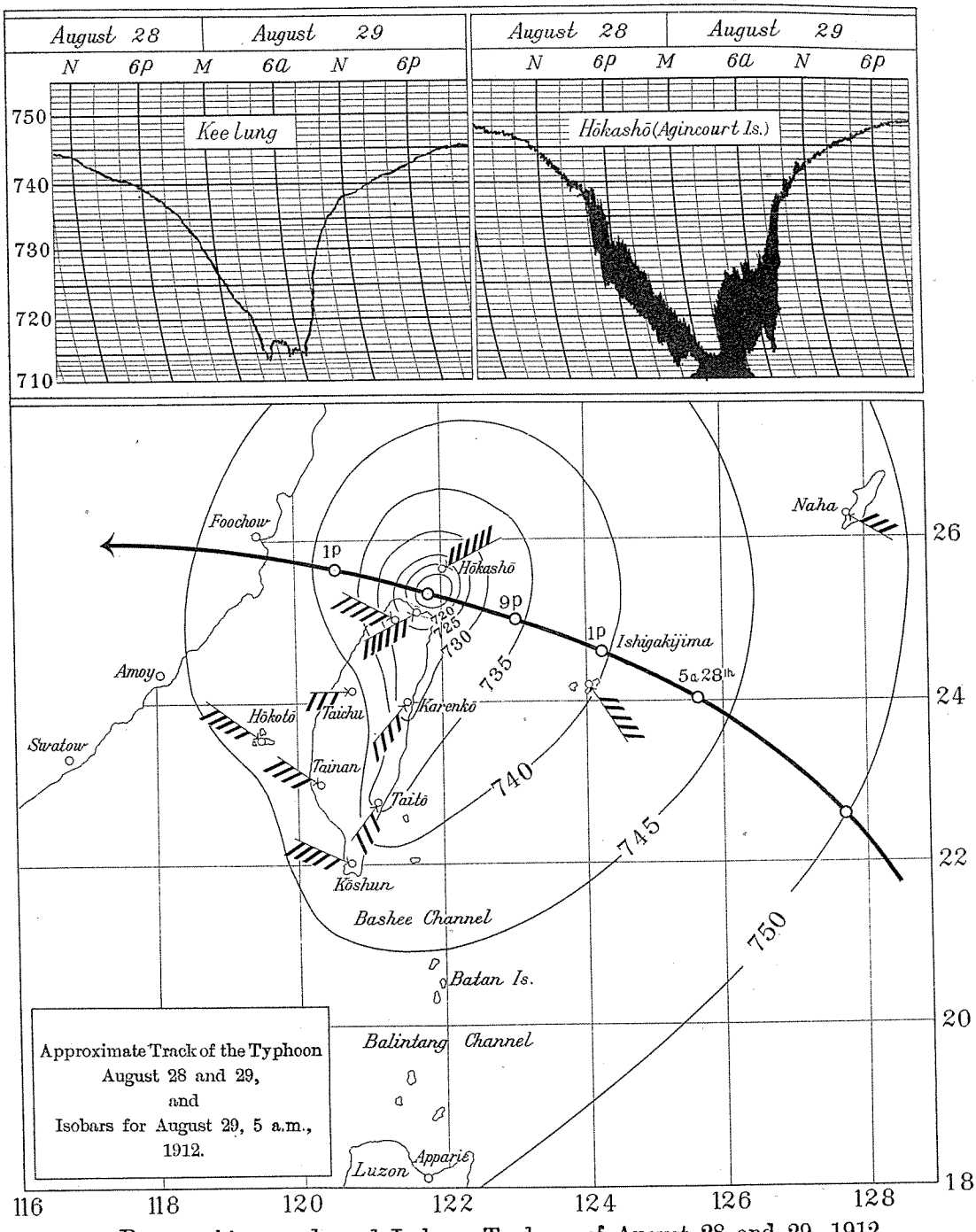
Plate VI.



½ of Natural Size.

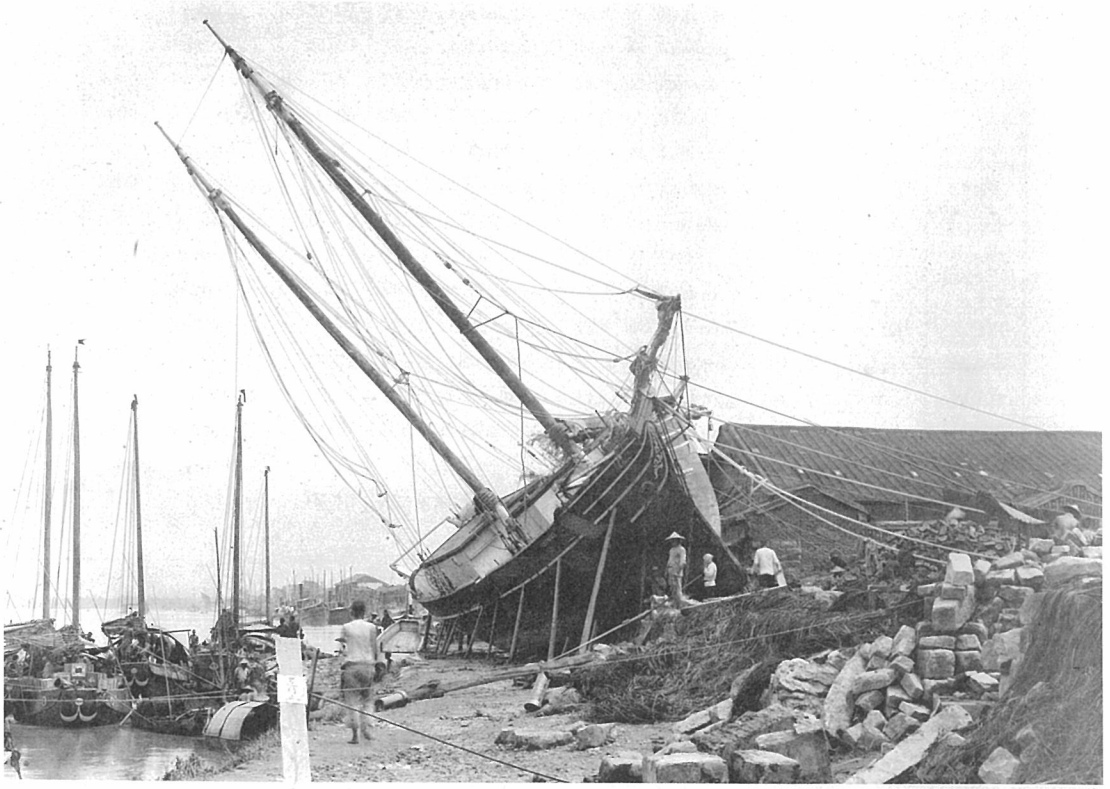
These photographs show the terrible force of the typhoon which passed Kōshun, the southernmost part of the island, on August 26, 1911. During this typhoon, the wind assumed such violent strength that broken pieces of roofing tiles were forced into wooden boards or trunks of trees, in the same manner as shrapnel discharged from a gun. The picture on the right shows how a broken tile has penetrated a wooden board, of 2 centimeters in thickness, its edge coming out on the other side; that on the left shows a piece of tile that was driven into the trunk of an acacia tree.

大正元年八月二十八·九日颱風圖 Plate VII.



Barographic records and Isobars, Typhoon of August 28 and 29, 1912.

Fuzengai, Taihoku.



Daitōtei, Taihoku.

Effects of the Typhoon: August 6–7, 1898, in the City of Taihoku.

List of Remarkable Typhoons in Formosa.

Year	Month	Date	Lowest Pressure	Maximum Wind Velocity	Progressive movement	Loss of life	Houses destroyed
			mm.	meters per second	km. p. hour		
1897	August.. ..	8–9	738.5 at Taihoku..	36.0 at Keelung..	26.2	great damage exact number unknown	
1898	August	6–7	723.1 at Keelung..	43.6 at Keelung..	14.8	182*	11,210*
„	September..	30	727.9 at Taichu ..	56.4 at Hōkotō ..	13.8	exact number unkuown	
1899	August	5	722.5 at Taichu ..	482. at Hōkotō ..	16.1	,,	
„	August	21–22	714.6 at Kōshun ..	wind cups blown away	?	—	105
1900	July	5–6	741.5 at Taihoku..	19.9 at Tainan ..	12.9	9	800
„	September..	14–15	727.0 at Keelung..	38.1 at Keelung..	13.8	44	2,598
1901	August	2–3	729.0 at Keelung..	40.1 at Keelung..	22.2	14	790
1902	August	30–31	734.1 at Keelung..	43.1 at Keelung..	13.8	13	273
1903	July	30–31	739.6 at Keelung..	26.3 at Keelung..	15.3		
„	August	6	735.9 at Hōkotō ..	38.4 at Taitō	16.6		
„	August	13	741.6 at Keelung..	27.1 at Keelung..	18.3	62	8,908
„	August	18–19	738.1 at Taitō	35.7 at Hōkotō ..	17.5		
„	August	29–30	742.2 at Tainan ..	26.2 at Tainan ..	13.8		
„	October	5–6	739.4 at Tainan ..	24.7 at Taitō	17.1	unknown	
1904	June	26–27	726.9 at Kōshun ..	40.3 at Kōshun ..	15.6	2	7,200
„	July	26–27	744.1 at Keelung..	26.9 at Keelung..	19.8	10	454
1905	June	18	728.0 at Tainan ..	35.0 at Tainan ..	29.9	21	9,547
1906	August	28–29	735.7 at Hōkotō ..	34.8 at Hōkotō ..	17.5	1	562
„	October	1	726.3 at Taitō	46.3 at Taitō	16.1	1	great part of Taitō Town
1909	September..	14–15	729.2 at Keelung..	48.1 at Keelung..	28.6	16	826
„	September..	18–19	742.3 at Taihoku..	25.4 at Keelung..	23.0	29	467
1910	July	17	741.4 at Taihoku..	24.3 at Taitō	15.6	1	375
„	August	29	734.5 at Kōshun ..	56.8 at Koshun ..	20.3	1	441
„	September..	1–2	725.8 at Hōkashō..	47.7 at Hōkashō..	16.1	25	621
1911	August	26–27	702.9 at Kōshun ..	wind cups blown away (54.5 at Tainan)..	11.6	180	36,085
„	August 31—	Sept. 1	721.3 at Keelung..	41.1 at Keelung..	20.8	495	28,731
1912	August	28–29	708.6 at Hōkashō..	50.7 at Keelung..	17.0	132	13,008
„	September..	16–17	712.4 at Taitō	43.7 at Taihoku..	19.3	124	94,777
1913	July	18–19	731.8 at Karenkō ..	29.3 at Hōkashō..	22.2	103	5,381
					mean 18.1		

* Number of Taihoku City only.

IV. EARTHQUAKES IN FORMOSA.

Earthquakes are frequent in Formosa and occasionally a severe shock causes very disastrous damage. The observation of earthquakes is one of the duties connected with the meteorological service of the island and all Formosan observatories are now equipped with seismological apparatus. At present, besides the Central Observatory in Taihoku, observatories at Keelung, Taichu, Tainan, Taitō, Kōshun, and Hōko-tō (Pescadores Islands) are furnished with Gray-Milne's seismograph and Ōmori's horizontal pendulum seismograph. It is also intended to install a seismograph in the lighthouse at Karenkō, on the east coast, where earthquakes are felt with great frequency.

Besides the observatories mentioned above, reports are received, whenever an earthquake occurs, from all the rainfall stations in the island. It is so arranged that a strong shock is immediately reported. By these means, any earthquake, even of local nature that occurs within the island, is recorded without any omission.

Here we must express our gratitude to Prof. Ōmori of the Imperial University of Tokyo, whose assistance was invaluable for the investigations of earthquakes in Formosa.

Number of Earthquakes. The following table contains the number of earthquakes in each year for the seventeen years, from 1897 to 1913, inclusive. The table has been compiled from the data obtained at each observatory and the rainfall station at Karenkō, in which only those shocks perceptible to persons were included. The slight unfelt shocks, which had been registered on the seismograph but not perceptible to persons, were omitted.

Year	Keelung	Taihoku	Taichu	Tainan	Karenkō	Taitō	Kōshun	Hōkotō
1897	—	7	3	9	—	—	0	1
1898	—	17	5	4	—	—	3	2
1899	—	9	10	4	—	—	5	2
1900	—	5	3	4	—	—	1	3
1901	3	12	4	8	—	3	2	3
1902	8	13	10	12	—	12	6	5
1903	6	7	14	19	—	120	7	4
1904	6	12	11	10	11	14	6	5
1905	5	12	24	8	23	24	3	4
1906	4	10	50	42	13	22	11	19
1907	5	11	10	11	22	6	7	2
1908	6	9	15	8	26	21	8	6
1909	5	14	14	19	22	68	5	3
1910	9	21	14	9	59	15	8	3
1911	6	18	12	7	74	15	5	2
1912	3	9	8	4	172	8	7	3
1913	3	18	11	13	203	16	7	5
mean	5.3	12.0	12.8	11.2	62.5	26.5	5.4	4.2

From the above table, we find that earthquakes occurred very often in Taitō, in 1903; in Taichu and Tainan, in 1906, and again in Taitō, in 1909. The high seismic frequency in 1906 is due, as is shown in the List of Remarkable Earthquakes, to the after-shocks of the violent earthquake which occurred in the district of Kagi, and that in 1903 and 1909, to the strong shocks which were experienced in the Taitō district. Since the year 1910, the number of earthquakes shows an increase in Karenkō, due to several strong shocks which happened in that district.

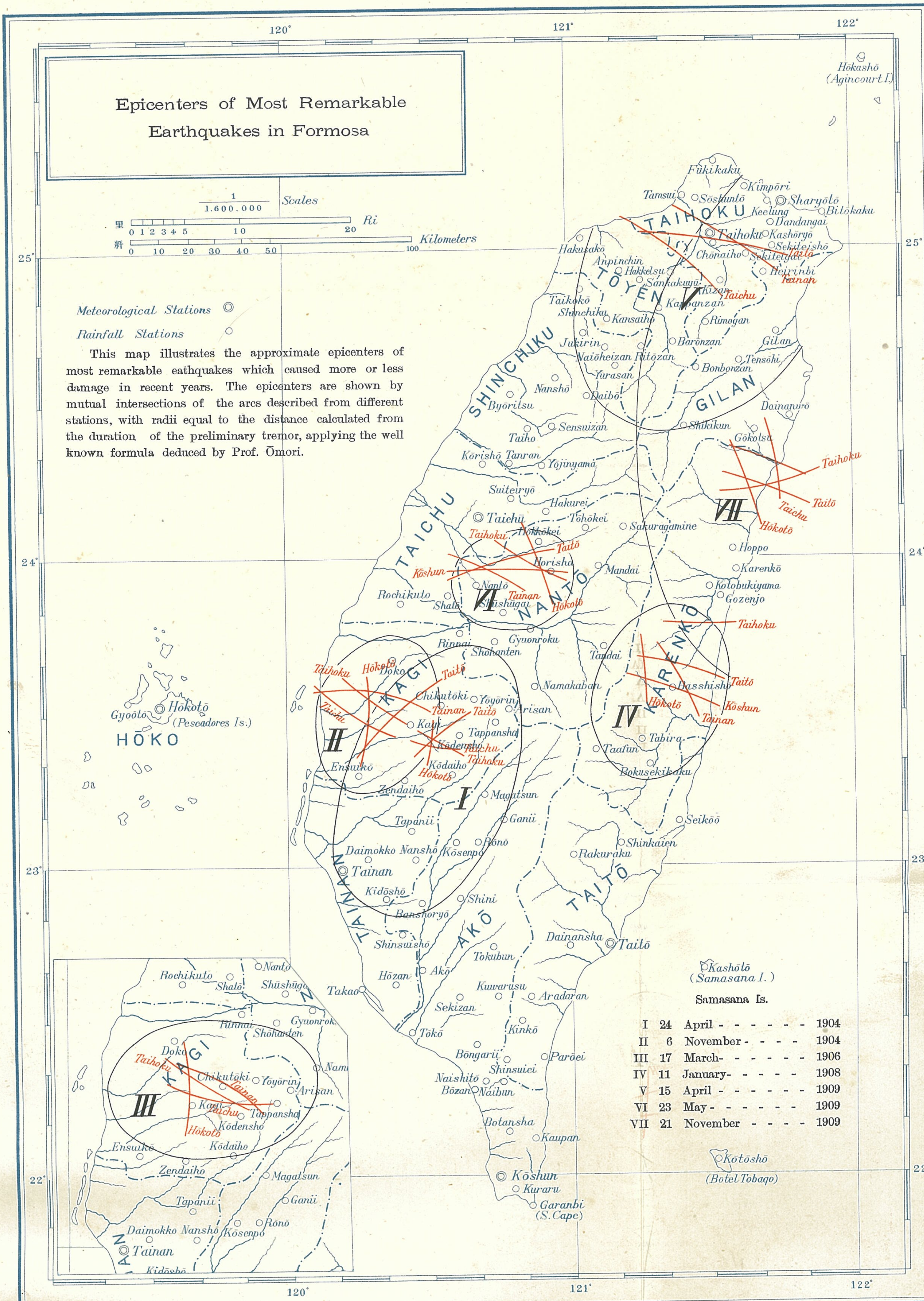
Frequency of Earthquakes. Every observatory in the island, as stated in the preceding pages, is furnished with

seismological apparatus, where every possible care is taken for the observation of earthquakes, but, as the observers engaged in rainfall stations consist of either policemen or school teachers, their observations, for several reasons, can not escape shortcomings; however, we have made minute investigations of all reports received during the period from 1908 to 1913, inclusive. The result shows that 1,587 shocks were experienced in these six years; making an average of 264 per year. In other words, there occurs an earthquake, somewhere in the island, every one and a half day.

Distribution of Earthquakes. The violent earthquakes are mainly felt in the southwestern part of the island, namely, in the lowlands of Kagi and Tainan districts. This phenomenon is found not only in recent years, but is continued from remote time, as is shown in the list at the end of this chapter. Following these places, in frequency of earthquakes, comes the extreme north and the Gilan district, where violent shocks are recorded.

In the central part of the island, that is, in the Taichu and Nanto districts, the strong shocks, which have occurred from time to time, were not very destructive. The districts of Karenkō and Taitō, on the east coast, were very often visited by shocks, which did not result in serious loss of life and property but were occasionally accompanied by numerous after-shocks.

The earthquake of January 11, 1908, which occurred at Basshishō, near the town of Bokkusekikaku, was one of the notable shocks felt on the east coast of the island. The village of Basshishō is situated in the middle of the longitudinal valley formed by the central mountain range on the west and the coast mountain range on the east. The place was supposed to be the epicenter of this earthquake, as it lies just at the end of the eastern


Epicenters of Most Remarkable Earthquakes in Formosa
1 / 1.600.000 Scales
Ri
Kilometers
Meteorological Stations
Rainfall Stations
This map illustrates the approximate epicenters of most remarkable eathquakes which caused more or less damage in recent years. The epicenters are shown by mutual intersections of the arcs described from different stations, with radii equal to the distance calculated from the duration of the preliminary tremor, applying the well known formula deduced by Prof. Ōmori.
I 24 April - - - - - - 1904
II 6 November - - - - 1904
III 17 March - - - - - - 1906
IV 11 January - - - - - 1908
V 15 April - - - - - - 1909
VI 23 May - - - - - - 1909
VII 21 November - - - - 1909
Samasana Is.
Kashōtō (Samasana I.)
Kotōshō (Botel Tobago)
Hōkashō (Agincourt I.)
Hōkotō (Pescadores Is.)
HŌKO
TAIHOKU
TŌYEN
SHINCHIKU
GILAN
TAICHU
NANTŌ
KAGI
KARENKŌ
TAINAN
AKŌ
TAITŌ
Taihoku
Taichū
Tainan
Taitō
Kōshun
Keelung
Tamsui
Karenkō
Takao
Garanbi (S. Cape)
120°
121°
122°
22°
23°
24°
25°

continuation of the great fault, which was formed by the Kagi earthquake of March 17, 1906.

In the following table, we give the number of earthquakes, in each district, for the six years, from 1908 to 1913, inclusive :

	1908.	1909.	1910.	1911.	1912.	1913.	*Total.*	*Mean.*	%.
North Formosa. . .	22	37	39	46	59	16	219	36.5	14
Central Formosa. .	15	17	10	7	22	22	93	15.5	6
Southwest Formosa.	91	86	50	45	29	56	357	59.5	22
Karenkō District..	55	36	52	72	182	296	693	115.5	44
Taitō District.....	14	67	14	31	28	26	180	30.0	11
Southern Extremity	6	5	11	4	18	1	45	7.5	3
Total.....	203	248	176	205	338	417	1,587	264.5	100

From this table, we see that the number of earthquakes shows a notable increase in Karenkō, during the years 1912 and 1913, due to the occurrence of numerous after-shocks.

Referring to 35 earthquarkes, described in the list at the end of this chapter, in which excluding those 8 strong after-shocks of the great Kagi earthquake of March 17, 1906, and 2 earthquakes in the Taitō district of September, 1903, and of January 1909,—there were numerous after-shocks but no damage done—there remain 25 remarkable shocks. These may be divided, according to locality as follows : 10 in the southwestern part, 6 in the north, 3 in Gilan district, 2 in the central part, 3 in Karenkō district, and 1 at Bassishō on the east coast. Thus it will be seen that strong earthquakes occurred most frequently in the southwestern part of the island.

Damage to House by Earthquakes. The sweeping destruction of houses and large loss of lives that follow a violent earthquake in Formosa are mainly due to the fragile construction of native houses. The ordinary Formosan houses are built of

sun-dried mud blocks, called "*tō-ka't*" by the natives. These are similarly shaped to an ordinary brick, but are five times larger in volume.

The blocks are laid in the same manner as ordinary bricks, and are joined together with mud mortar, in which a small quantity of lime is occasionally mixed. The interior of these houses is also devoid of the necessary pillars for support. Thus, at a time of a great earthquake, they crumble down almost instantaneously, giving little chance of escape and causing fatal results to the occupants.

In the following table, a comparison is given showing the relative number of houses totally destroyed and the loss of life, which has occurred in great earthquakes in Japan proper and Formosa, respectively. From this comparison it will be found that the timber construction of the houses in Japan is more durable against great shocks than the Formosan houses, and, as a consequence, the loss of life is less in Japan than in Formosa.

		Lives lost.	Houses totally Destroyed.	No. of Houses Destroyed per one death.
Japan	Kumamoto Earthquake, July 28, 1889.....	19	129	6.8
	Mino-Owari Earthquake. October 28, 1891.	7,273	80,000	11.0
	Riku-u Earthquake, August 31, 1896.	209	4,418	21.2
	Omi-Mino Earthquake, August 14, 1909.	37	601	17.3
Formosa	Kagi-Tainan Earthquake, November 6, 1904.....	145	611	4.2
	Kagi-Earthquake, March 17, 1906.....	1,258	6,769	5.4

In the above table, it will be seen that the number of lives lost is larger in the Formosan earthquakes, in comparison to the

houses destroyed. This fact shows clearly the bad and frail construction of Formosan houses.

In the two great earthquakes of Formosa, mentioned above, the wooden and brick houses built by Japanese suffered more or less damage, or were inclined from the perpendicular to a certain degree; but none collapsed completely, as did the native houses. The Formosan houses built of "*tō-ka't*" are not only dangerous against earthquakes, but easily collapse at a time of storm or flood, when they are saturated with water.

Plate X (Photograph) shows the result of the typhoon, which wrought such a havoc on the native *tō-ka't* houses.

Reports regarding Earthquakes in Formosa. With regard to the earthquakes in Formosa, there are several publications written in Japanese, but scarcely any in foreign languages. The only literature consists of those English articles by Prof. Ōmori, which are contained in vols. I–III of the Bulletin of the Imperial Earthquake Investigation Committee, published in Tokyo, 1907–1909. In these articles the earthquakes in Formosa are described at length. Further particulars on this subject may be found in these valuable papers.

The List of Remarkable Earthquakes in Formosa. The ten earthquakes, which occurred between 1721 and 1862 and are contained in the following list, have been abstracted from the Chinese records. These earthquakes, according to the said records, were violent and caused more or less damage. Besides these, there are description of several other shocks, but no information is given as to the amount of damage done or in case it is given, the damages are considered to be of slight nature; these were accordingly omitted from the list. Moreover, the records do not, in some instances, mention the date of occurrence

of earthquakes; also, no exact figures of casualty and damage are obtainable.

The great earthquake of Keelung in 1867 and that of Anping and Tainan in 1892 are, respectively, mentioned in the reports of the Chinese Maritime Customs at each port. Of those occurring in the period, under the Japanese rule since 1901, complete records are kept.

LIST OF REMARKABLE EARTHQUAKES IN FORMOSA.

Year.	*Month.*	*Date.*	*Hour.*	*District.*	*Remarks.*
1721	January	5	—	Tainan.	A violent earthquake occurred, in which a large number of houses were destroyed and many lives lost; also, large fissures, ejecting mud and water, were created. Shocks continued more than 10 days.
1736	January	29	—	Tainan.	A violent shock was reported twice in the small town of Wanri, in the northeast of the Tainan city. Destruction of much property and large loss of life resulted.
1776	December	—	—	Kagi.	Destructive in the mountain district of Kagi; resulting in the destruction of numerous houses and countless loss of life. A strong shock was felt in Tainan, where no damage was done.
1792	August	7	—	Kagi.	A violent earthquake occurred which destroyed many buildings;

					fire broke out succeeding to this earthquake; more than 100 people lost their lives. The day previous to this earthquake, a strong shock was felt in Tainan, by which a house was demolished and a person killed.
1815	July	—	—	Gilan.	A strong shock damaged a number of houses and walls; also there occurred subsidences on the paddy fields.
1815	October	—	—	N. Formosa.	A strong shock damaged several houses; small after-shocks continued during the following month.
1816	—	—	—	Gilan.	Many buildings, official and private, were destroyed; cracks occurred on the ground, ejecting spring.
1833	December	13	—	Gilan.	Numerous shocks followed a strong earthquake which gave great alarm to the inhabitants; inflicted damage to a number of houses.
1840	November	—	—	Unrin, near Kagi.	A landslide took place in the mountain district of Unrin, and numerous houses were damaged.
1862	June	6	—	Tainan, Kagi, & Taichu.	A very violent earthquake was reported in these three districts. It was most destructive in the Kagi district, where the castle-walls, which surround the city, were severely damaged; several thousand houses were reduced to ruins. Great fissures occurred which ejected mud water. More than 1,000 people lost their lives.

1867	December	18	10 a.m.	Extreme North Coast.	A violent earthquake occurred on the coast in the extreme north of the island, accompanied by a seismic tidal wave, which wrought great havoc on many buildings and caused a large loss of life. A foreign officer, who was stationed at the Keelung Custom House, at that time, reported this earthquake as follows :

" At Keelung some fifteen shocks were felt during the day, but it was the first movements that did the damage. In fifteen seconds after the first perceptible shock the damage was done and the town of Keelung was in ruins. The force of the earthquake may be judged when it is noted that the water of Keelung harbour ran out, leaving the bottom of the bay exposed. Fortunately there were no foreign vessels present, but the Chinese junks which were there, large and small, were in one second left dry on the bottom and in another caught by the huge returning wave to be either swamped or dashed into the town with fearful speed, to work havoc among the few remaining houses left near the shore Multitudes of fish were thrown upon the shore and promptly gathered by the populace. The earth opened in places and closed again. A large gorge was formed by the splitting of a mountain side through which now runs a stream of hot water from a volcanic pit abounding with sulphurous springs and geysers. Many other physical changes were noted, including the deepening by a few feet of the anchorage at Keelung. The loss of life was never known; it is extremely doubtful if there was any count made, but probably several hundreds perished."

1892	April	22	10 a.m.	Tainan.	A strong earthquake was felt at Tainan and Anping. Cracks occurred in a portion of the city-

					walls ; roofs of many Chinese houses were damaged.
1901	June	7	8.05 a.m.	North Formosa.	A strong earthquake was felt in the three districts of Taihoku, Keelung and Gilan. The damage was 1 house entirely destroyed, 1 house partly destroyed, and 69 houses damaged ; there was no loss of life, only one person was injured.
1903	June	7	5.07 p.m.	North Formosa.	A strong earthquake caused damage to 3 houses in Taihoku. It was also reported from Gilan that a number of houses were damaged and one person was wounded.
1903	September	7	3.14 p.m.	Taitō.	An earthquake was not so strong as to cause demage ; but it was followed by numerous after-shocks ; these numbered 26 in the first day. The total number of after-shocks, during the period of the succeeding 31 days, was 97. Many people were obliged to pass the nights in open air.
1904	April	24	5.07 p.m.	S. W. Formosa.	A violent shock was felt in the southwestern part of the island : viz., in the districts of Kagi, Tainan, and Akō. The epicenter was in the neighbourhood of the city of Kagi. The damage was 68 houses entirely destroyed, 152 houses partly destroyed, and 688 houses damaged. The loss of life was 3 and the wounded 10.

1904	November	6	4.26 a.m.	Kagi.	Very destructive in the city of Kagi and the villages in its vicinity. The epicenter was in the neighbourhood of the city, as shown in the Plate IX. The damage on this occasion was 611 houses entirely destroyed, 1,112 houses partly destroyed, and 2,067 houses damaged. The total loss of life was 145 and 158 persons were wounded.
1905	August	28	12.24 a.m.	Karenkō.	A strong shock, followed by numerous after-shocks, caused the destruction of one house and the damage to 8 houses.
1906	March	17	6.43 a.m.	Kagi.	This is the most destructive earthquake that occurred in the island in recent years and caused enormous damage to houses and large loss of life. Numerous after-shocks, which followed the first movements, completed the ruin of those houses, already shaken by the first shock. A great fault which runs nearly from the west to the east, with a total length of more than 25 kilometers, was opened. This is called "the Baishikō fault", as it happened close to that town, at a distance of about 15 kilometers north of Kagi city. A part of the ruined town and a portion of the fault which cut off the road at Baishikō are shown in the Plate

The fault near the town of Baishikō, Kagi Prefecture.

The town of Baishikō in ruins.

Effects of the Earthquake of March 17, 1906.

					X; the fault being sunk 6 feet on one side and sheared also 6 feet in the vicinity of the town. The details of this earthquake are described in articles by Prof. Ōmori, which are contained in vol. I No. 2 of the Bulletin of the Imperial Earthquake Investigation Committee, published in Tokyo, March, 1907. The total loss was 6,769 houses entirely destroyed, 3,633 partly destroyed, and 10,585 damaged; casualties were 1,258 killed and 2,385 wounded.
1906	March	26	11.29 a.m.	Kagi.	Following the above, frequent after-shocks occurred in this district, amongst them this shock was most severe, and caused the destruction of 29 houses, 43 houses were partly destroyed, 486 houses were damaged, and 5 persons were wounded.
1906	April	4 6 7 8	8.42 p.m. 2.58 a.m. 0.53 p.m. 6.40 a.m.	Kagi.	These strong after-shocks that followed the two preceding earthquakes again inflicted certain damage. Here it is impossible to make distinction of damage caused on each occasion, however, it is supposed that the shock of April 7 was the strongest. The damage inflicted during these days was 68 houses entirely destroyed, 96 houses partly destroyed, and 87

					houses damaged. The loss of life was one and 6 persons were wounded.
1906	April	14	3.18 a.m. 7.52 ,,	Kagi, Tainan & Akō.	A violent earthquake occurred twice in these three districts. The second shock was more violent than the first occurrence, though the intensity of both was strong enough to cause considerable damage. These two shocks were the most violent of the after-shocks, felt continually since the occurrence of March 17; while no subsequent shocks were experienced in the present cases. The damage was 1,794 houses entirely destroyed, 2,116 houses partly destroyed, and 7,921 houses damaged; the loss of life was 15 and 84 were wounded.
1906	May	4	—	Kagi.	This is one of the numerous after-shocks felt in this district, and caused the destruction of 3 houses in the mountain village of Tenshikō.
1908	January	11	11.35 a.m.	E. Coast.	A strong earthquake was felt at the town of Bokusekikaku and the village of Basshishō, which are situated in the valley formed by the central and the coast mountain ranges on the east coast of the island. Owing to the mountainous condition of the country and the few inhabitants, there was but little damage inflicted. Besides

					which, most of the houses in these two places consist of aboriginal huts, built of bamboo and thatched with reed. The damage was 3 houses entirely destroyed, 5 houses damaged, and two people lost their lives.
1909	January	20	10.59 a.m.	Taitō.	A strong earthquake was followed by numerous after-shocks, similar to the earthquake of September 7, 1903; the origin was a suboceanic disturbance. During the following 17 days, 80 after-shocks were felt, but no damage was done.
1909	April	15	3.54 a.m.	North Formosa.	A strong earthquake was felt in the extreme north of the island; it was most severe in the neighbourhood of the city of Taihoku, where 122 houses entirely destroyed, 252 partly destroyed, and 798 damaged. The loss of life was 9 and 51 persons were wounded.
1909	May	23	6.44 p.m.	Nanto & Taichu.	The epicenter of this strong earthquake was close to the city of Nanto. The damage was 10 houses entirely destroyed, 32 houses partly destroyed, and 3 persons were wounded.
1909	November	21	3.37 a.m.	North Formosa.	A strong earthquake was felt in north Formosa, the epicenter being north of Karenkō, on the east coast. The damage was 14 houses

					entirely destroyed, 25 houses partly destroyed, and 14 houses damaged, while 3 persons were wounded, but there was no loss of life.
1910	February	20	10.13 p.m.	Taichu.	An earthquake damaged the roofs of some houses and cracks were made in the walls.
1910	April	12	8.22 a.m.	North Formosa.	A strong shock was felt in the three districts of Taihoku, Gilan, and Shinchiku, and caused the destruction to 18 houses, 13 were partly destroyed, and 41 were damaged; but there was no casualty of life.
1913	January	8	6.51 a.m.	Karenkō.	This shock was not strong but it was followed by numerous after-shocks; these numbered as many as 114 in the succeeding 4 days. The damage was cracks made in the walls of houses. The inhabitants of Karenkō were greatly alarmed by the continuation of these shocks, and spent a number of days outside or passed the nights in tents, pitched in the open air. The epicenter was situated in the sea off the coast of Karenkō.

大正三年六月二十五日印刷
大正三年六月三十日發行

編纂兼發行者　臺灣總督府通信局
東京市神田區美土代町二丁目一番地

印刷者　島連太郎
東京市神田區美土代町二丁目一番地

印刷所　三秀舍

Errata.

Page		Read	For
3	21 line	*Sidereal*	*siderical.*
8	27 line	*with*	in contact *witn*
20	14 line	*Sunless* days	*Sunlees* days.
21	7 line	*clear* days	*elear* days.
26	Table(20)	*79*	*9*, January, Tainan.
26	Table(20)	*73*	*75*, December, Koshun.
27	Table(21)	*47*	*44*, April, Hokoto.
30	Table(27)	*0.1*	1.0, June, Keelung.
30	Table(27)	*1.1*	0.1, October, Hokoto.
36	31 line	臺中○廳	臺北○廳
37	27 line	噍吧○哖	噍吧○哖
38	21 line	*Seikō ō*	*Seik$\overline{oo}$*
38	21 line	成○廣潨	曳○廣潨
38	26 line	巴聖○衛	巴塑○衛
38	33 line	柀○仔庄	稜○仔庄
38	last line	*Gyo-ōtō*	*Gy$\overline{oo}$tō*
41	Table(12)	*Sekiteigai*	*Seikiteigan*
42	Table(16)	宜○ 蘭	宣○ 蘭
43	Table(22)	*240.0*	*420.0* July, max. in a day.
44	Table(27)	(1904-*1913*)	mean for 10 years (1904-*1913*).
46	Table(39)	*7.0*	*7*. September, Rainy days
49	Table(55)	*2300*. meters	alt. *700* meters.
50	Table(58)	*19.1*	*9.1* September, Rainy days
51	Table(62)	噍○吧哖	唯○吧哖
57	Table(95)	*168.5*	*198.5* December, max, in a day.
Plate IX. 2 line of the explanation.		*earthquakes*	*eathquakes*