

OCEAN GALES AND STORMS, JUNE 1934

Vessel	Voyage		Position at time of lowest barometer		Gale began	Time of lowest barometer	Gale ended	Lowest barometer	Direction of wind when gale began	Direction and force of wind at time of lowest barometer	Direction of wind when gale ended	Direction and highest force of wind	Shifts of wind near time of lowest barometer
	From—	To—	Latitude	Longitude									
NORTH ATLANTIC OCEAN													
Scannenn, Am. S.S.	Copenhagen	Philadelphia	42 12 N.	56 42 W.	June 1	Sa. June 1	June 1	29.84	WSW	W, 4	W	WSW, 8	WSW-W.
Europa, Ger. S.S.	New York	Cherbourg	40 22 N.	50 52 W.	June 3	Sp, 3	June 4	29.74	NW	N, 11	NNE	N, 11	NW-N-NNE.
Edingham, Am. S.S.	New Orleans	London	40 30 N.	49 40 W.	do	9p, 3	June 3	29.74	NNE	NNE, 7	NE	NE, 9	N-NE.
Berlin, Ger. S.S.	Cobh	Halifax	48 12 N.	33 02 W.	June 5	6a, 5	June 5	29.13	E	NNE, 12	WNW	N, 12	E-NNE-WNW.
Carillo, Am. S.S.	Puerto Barrios	New York	17 35 N.	87 10 W.	June 4	6p, 6	June 6	29.61	ESE	E, 7	E	E, 7	None.
Exermont, Am. S.S.	Lisbon	do	42 33 N.	36 00 W.	June 6	9p, 6	do	29.59	S	S, 9	SSW	S, 9	S-W.
Poseidon, Du. S.S.	English Channel	San Juan	41 20 N.	32 05 W.	June 7	10a, 7	June 7	29.61	SW	SW, 8	NW	SSW, 10	SSW-NW
Silvercedar, Br. M.S.	Houston	Colon	21 11 N.	86 05 W.	June 8	2a, 9	June 10	29.83	ESE	ESE, 9	SE	ESE, 9	ESE-SE.
Sixaola, Am. S.S.	New Orleans	Tela	19 26 N.	86 32 W.	do	4a, 9	June 9	29.64	E	SSE, 10	S	E, 10	SE-S.
Darien, Pan. S.S.	Mobile	Belize	20 24 N.	86 12 W.	do	do	June 10	29.71	E	E, 8	SSE	ESE, 9	E-ESE.
Wawa, Hond. S.S.	A. Obregon, Mexico	Galveston	23 13 N.	93 59 W.	June 9	Noon, 10	June 11	29.59	WNW	N, 7	E	NE, 7	NW-N-NE.
Morazan, Hond. S.S.	New Orleans	Vera Cruz	20 40 N.	95 20 W.	June 10	2a, 11	do	29.51	NE	W, 8	W	W, 9	WNW-W.
Oriente, Am. S.S.	New York	do	19 30 N.	94 12 W.	do	5a, 11	do	29.47	S	SW, 8	WNW	SW, 9	SW-W.
Hedderheim, Ger. S.S.	Houston	Bremen	39 21 N.	52 27 W.	June 11	2p, 11	do	29.74	SW	SW, 8	W	SW, 9	SW-W.
Author, Br. S.S.	Vera Cruz	Vera Cruz	21 10 N.	192 46 W.	June 12	4a, 15	June 13	29.00	SSE	WNW, 8	W	S, 12	S-WNW-W.
A. C. Bedford, Am. S.S.	Port Aransas	New York	26 00 N.	88 50 W.	June 14	5a, 15	June 15	29.34	ENE	SE, 7	S	S, 8	None.
Teguigalpa, Hond. S.S.	New Orleans	Vera Cruz	28 18 N.	90 00 W.	June 16	6a, 16	June 16	29.43	ESE	SSE, 9	S	SE, 10	ESE-SSE-S.
Maiden Creek, Am. S.S.	Avonmouth	Mobile	32 43 N.	54 23 W.	June 18	4a, 18	June 18	29.62	SW	SW, 7	NW	WNW, 8	SW-NW.
Grevstoke Castle, Br. M.S.	Gibraltar	New York	38 06 N.	45 31 W.	do	Noon, 18	do	29.82	SSW	SSW, 8	W	SSW, 8	SSW-W.
Breedyk, Du. S.S.	Rotterdam	Baltimore	37 08 N.	73 35 W.	June 19	1a, 19	June 19	29.56	S	S, 8	S	S, 8	SSE-S.
F. Q. Barstow, Am. S.S.	Christi	Boston	36 55 N.	72 40 W.	June 18	8p, 19	do	29.75	SE	SE, 8	NW	SE, 8	SE-NW.
Colytto, Du. S.S.	Montreal	London	50 08 N.	13 55 W.	June 21	1p, 21	June 21	29.86	WSW	WSW, 8	W	WSW, 8	WSW-W.
Skagerak, Ger. M.S.	Liverpool	Port Arthur	46 40 N.	31 14 W.	do	9p, 21	June 22	29.70	N	N, 5	NNE	N, 10	None.
Leto, Du. S.S.	Swansea	Montreal	51 54 N.	54 42 W.	June 30	1p, 30	June 30	29.19	E	NNE, 8	NNW	NNE, 8	NNE-NNW.
NORTH PACIFIC OCEAN													
Dorothy Luckenbach, Am. S.S.	Los Angeles	Balboa	17 24 N.	101 54 W.	June 4	2a, 4	June 4	29.75	E	E, 8	E	E, 8	E-SE.
Slemmestad, Nor. M.S.	do	Yokohama	35 15 N.	143 30 E.	do	9p, 4	do	29.68	SSW	SW, 4	SW	SW, 9	SW-WSW.
Pres. Jackson, Am. S.S.	Yokohama	Victoria, B.C.	48 15 N.	125 30 W.	June 11	10p, 11	June 11	29.85	NNW	SSW, 5	WNW	NW, 8	NW-SSW.
Taisei Maru, Jap. S.S.	do	Portland, Oreg.	36 30 N.	152 00 E.	June 17	9p, 17	June 17	29.26	SSW	SW, 9	NW	SW, 9	SSW-SW-NW.
Bronxville, Nor. M.S.	Dairen	Los Angeles	38 53 N.	148 40 E.	do	11a, 17	June 18	29.49	ESE	E, 6	NNW	ENE, 8	ESE-ENE.
Golden Star, Am. S.S.	San Francisco	Yokohama	35 48 N.	141 54 E.	June 20	2p, 21	June 21	29.66	SSW	SW, 9	SW	SW, 9	SSW-SW.
Bronxville, Nor. M.S.	Darien	Los Angeles	45 40 N.	173 20 E.	June 22	11 p, 22	June 22	29.25	ESE	Var. 1	ESE	ESE, 8	ESE-NW.
Bonneville, Nor. M.S.	Manila	do	34 55 N.	121 33 W.	do	4a, 23	do	29.98	N	N, 5	N	N, 8	None.
San Julian, Am. S.S.	Shanghai	Portland, Oreg.	48 06 N.	178 06 E.	June 23	Noon, 23	June 23	29.09	E	N, 6	NW	E, 9	E-N-NNW.

¹ Position approximate.
² Barometer uncorrected.

NORTH PACIFIC OCEAN, JUNE 1934

By WILLIS E. HURD

Atmospheric pressure.—The average pressure over the North Pacific Ocean during June 1934 was generally close to normal, although over the central Aleutians, at Dutch Harbor, the June average of 29.80 was 0.10 inch below. The Aleutian cyclone, though shallow, was thus indicated as persisting into early summer.

TABLE 1.—Averages, departures, and extremes of atmospheric pressure at sea level, North Pacific Ocean, June 1934, at selected stations

Stations	Average pressure	Departure from normal	Highest	Date	Lowest	Date
	Inches	Inch	Inches		Inches	
Point Barrow	29.89	-0.10	30.30	11, 12	29.18	20
Dutch Harbor	29.80	- .10	30.52	29	29.38	6
St. Paul	29.84	- .02	30.54	29	29.28	1
Kodiak	29.87	- .04	30.36	30	29.46	2, 20
Juneau	29.98	- .03	30.39	8	29.46	21
Tatoosh Island	30.07	+ .05	30.40	29	29.75	5
San Francisco	29.91	- .05	30.05	7	29.62	5
Mazatlan	29.85	+ .02	29.98	19	29.72	12, 13
Honolulu	30.04	.00	30.12	19	29.92	6
Midway Island	30.08	+ .03	30.20	19, 20, 24	29.76	7
Guam	29.90	+ .03	29.94	16	29.80	28, 29
Manila	29.81	- .01	29.86	6, 12, 15	29.76	20, 23, 24, 30
Hong Kong	29.75	-----	29.87	14	29.62	19
Naha	29.84	+ .09	29.96	14	29.70	9, 18
Chichishima	29.95	+ .04	30.10	14	29.82	27
Nemuro	29.86	-----	30.08	10	29.56	28

¹ And on 7 other dates.
NOTE.—Data based on 1 daily observation only, except those for Juneau, Tatoosh Island, San Francisco, and Honolulu, which are based on 2 observations. Departures are computed from best available normals related to time of observation.

More than half of the ocean south of the northern low was dominated by anticyclonic conditions practically throughout the month, with average pressures for the most part slightly plus. In middle latitudes of the Far East, where anticyclones are unusual in June, pressure, though low, was somewhat above the normal, with a maximum plus departure of 0.09 inch at Naha, Nansei Islands.

Cyclones and gales.—June 1934 was one of the proverbially quite months on the north Pacific. Depressions as a rule were of moderate depth only, and unaccompanied by severe gales. The highest wind force recorded was 9, occurring on 4 days, mostly in Japanese waters. The lowest corrected barometer reading of the month was 29.09 inches, reported by the American S.S. *San Julian*, near 48° N., 178° E., on the early morning of the 23d, accompanied by fresh to strong gales.

Gales equalling or exceeding force 8, as indicated by present information, were comparatively few. These occurred east of Honshu on the 4th, 17th, and 21st; south of the western Aleutians on the 22d and 23d; near Vancouver Island on the 11th; off the California coast on the 22d; and off the Mexican coast west of Acapulco on the 4th.

In the Central American Pacific area the weather was disturbed from the 4th to 8th, owing to a depression which, during these days, affected both the west and the Caribbean coasts. The only gale noted as occurring in Pacific waters during the progress of the disturbance, was the fresh gale of the 4th near Acapulco, but rainfall

in places was torrential. A report from the French S.S. *San Diego* said that on the 14th, "about 25 miles off the coasts of Guatemala and Salvador numerous big trees were met", which it was believed by the observer, were uprooted and washed to sea as a result of the disturbed conditions of the preceding week.

Fog.—The percentage of days with fog was below the normal for the month over most parts of the ocean. The American coast had less fog in June 1934 than in any previous month since December 1932. There were 2

days with fog off the southern end of Lower California, and 1 day with fog noted along the entire coast northward to Alaska. Along the northern shipping routes, between 135° W. and Japan, there were 3 to 7 or more days with fog in individual 5-degree squares, with the greatest number occurring south and east of the Kuril Islands. Over the western half of the central trans-Pacific routes fog diminished southward to the vanishing point at about 25° N.

CLIMATOLOGICAL TABLES ¹

CONDENSED CLIMATOLOGICAL SUMMARY

In the following table are given for the various sections of the climatological service of the Weather Bureau the monthly average temperature and total rainfall; the stations reporting the highest and lowest temperatures, with dates of occurrence; the stations reporting the greatest and least total precipitation; and other data as indicated by the several headings.

The mean temperature for each section, the highest and lowest temperatures, the average precipitation, and the greatest and least monthly amounts are found by using all trustworthy records available.

The mean departures from normal temperatures and precipitation are based only on records from stations that have 10 or more years of observations. Of course, the number of such records is smaller than the total number of stations.

Condensed climatological summary of temperature and precipitation by sections, June 1934

[For description of tables and charts, see REVIEW, January, p. 37]

Section	Temperature								Precipitation					
	Section average	Departure from the normal	Monthly extremes						Section average	Departure from the normal	Greatest monthly		Least monthly	
			Station	Highest	Date	Station	Lowest	Date			Station	Amount	Station	Amount
Alabama.....	80.1	+1.8	Decatur.....	105	27	St. Bernard.....	52	21	4.79	+0.46	Centerville.....	10.20	Lock No. 3.....	1.29
Arizona.....	73.8	-4.3	5 stations.....	114	29	Fort Valley.....	22	7	.19	-0.12	Sacaton.....	.75	14 stations.....	.00
Arkansas.....	81.1	+4.0	Ozark.....	108	30	Dutton.....	49	20	2.88	-1.11	Hot Springs.....	6.71	Jonesboro.....	.70
California.....	65.6	-2.5	Greenland Ranch.....	122	30	Twin Lakes.....	20	3	.74	+4.1	Shield's Ranch.....	4.58	9 stations.....	.00
Colorado.....	64.3	+2.8	Las Animas.....	106	8	Hermit.....	16	8	.94	-4.57	Sedgwick.....	5.40	Fruita.....	.06
Florida.....	80.2	+4	Mount Pleasant.....	103	21	2 stations.....	59	1	10.22	+3.52	St. Leo.....	24.26	Pensacola.....	1.25
Georgia.....	79.6	+1.5	Washington.....	103	26	Blairsville.....	49	12	5.08	+64	Clayton.....	14.20	Louisville.....	1.23
Idaho.....	60.5	+2	Orofino.....	102	11	Warren.....	21	1	1.48	+26	Moscow.....	4.15	Richfield.....	.12
Illinois.....	78.8	+7.1	2 stations.....	108	28	Mount Carroll.....	45	13	3.03	-1.03	Galesburg.....	6.28	Grand Chain.....	.70
Indiana.....	77.5	+6.0	Collegeville.....	109	1	2 stations.....	43	14	3.55	-26	Washington.....	9.34	Howe.....	.97
Iowa.....	77.2	+7.6	Lamoni.....	111	29	Boone (near).....	43	12	3.49	-1.12	Akron.....	9.13	Ames.....	1.24
Kansas.....	80.5	+6.7	3 stations.....	110	23	Oberlin.....	47	18	2.73	-1.24	Alton.....	7.14	Deerfield (near).....	.32
Kentucky.....	77.4	+3.5	2 stations.....	105	28	4 stations.....	50	13	4.58	+46	Hopkinsville.....	8.15	Whitesburg.....	.76
Louisiana.....	81.8	+1.8	5 stations.....	103	19	2 stations.....	60	1	4.80	+15	Franklin.....	15.73	Natchitoches.....	.01
Maryland-Delaware.....	74.7	+3.9	Baltimore, Md.....	105	29	Oakland, Md.....	42	15	3.25	-70	Franksville, Md.....	5.84	Brigitteville, Del.....	1.36
Michigan.....	68.3	+4.7	Houghton Lake.....	107	1	Munising.....	30	7	2.18	-94	Cooke Site.....	5.22	Adrian.....	.63
Minnesota.....	67.4	+2.4	New London.....	108	27	2 stations.....	34	17	4.02	-93	Red Lake Falls.....	7.57	Zumbrota.....	1.90
Mississippi.....	81.0	+2.2	Columbus.....	103	26	3 stations.....	57	13	5.65	+1.48	Cleveland.....	11.44	Bay St. Louis.....	1.38
Missouri.....	80.4	+6.8	4 stations.....	108	23	Goodland.....	47	19	2.85	-1.90	Caruthersville.....	5.95	Farmington.....	.23
Montana.....	60.2	+4	Mildred.....	102	26	Conways Ranch.....	24	2	2.99	+47	Babb (near).....	7.55	Sarpy Creek.....	.30
Nebraska.....	74.9	+5.9	Falls City.....	109	29	2 stations.....	37	19	3.07	-69	Hartington.....	6.52	North Loup.....	.68
Nevada.....	63.0	-1.3	Logandale.....	116	30	Zorra Vista Ranch.....	19	3	.91	+41	Marlette Lake.....	2.45	2 stations.....	.00
New England.....	65.2	+1.4	Waterbury, Conn.....	101	29	Pittsburg, N.H.....	26	8	4.49	+1.13	Adams, Mass.....	7.41	Lakeport, N.H.....	2.08
New Jersey.....	72.6	+3.8	Belvidere.....	103	29	Layton.....	38	8	3.68	-93	Long Valley.....	6.41	Northfield.....	1.64
New Mexico.....	69.8	+9	Oro Grande.....	112	11	Horse Springs.....	18	7	.52	-73	Fort Sumner.....	2.13	4 stations.....	.00
New York.....	68.4	+3.5	Geneva.....	102	2	Indian Lake.....	25	8	3.54	-99	Bainbridge.....	7.18	Fredonia.....	1.44
North Carolina.....	76.1	+2.2	High Point.....	105	28	Banners Elk.....	43	15	4.89	+15	Highlands.....	13.63	Manteo.....	1.14
North Dakota.....	64.3	+1.8	Hankinson.....	100	2	Garrison.....	29	11	3.04	-41	Wahpeton.....	5.52	Powers Lake.....	1.09
Ohio.....	76.0	+6.5	Germantown.....	108	29	Millport.....	43	14	3.52	-25	Mt. Vernon (near).....	7.47	Catawba Island.....	.88
Oklahoma.....	82.6	+5.4	Hollis.....	113	22	Kenton.....	48	8	2.45	-1.32	Camargo.....	6.90	Waurika.....	.24
Oregon.....	59.8	+3	Arlington.....	105	11	Lake.....	20	4	1.63	+31	Cove.....	4.84	Big Eddy.....	.00
Pennsylvania.....	72.9	+5.0	Marcus Hook.....	104	30	Brookville.....	35	8	3.64	-54	Coatesville.....	6.15	Catawissa.....	1.12
South Carolina.....	78.9	+1.5	2 stations.....	103	23	Long Creek.....	52	14	4.92	+15	Newberry.....	12.05	Beaufort (near).....	1.04
South Dakota.....	70.5	+3.9	Sisseton.....	105	2	Clark.....	37	11	3.35	-19	Vermillion.....	7.87	Wood.....	.83
Tennessee.....	77.5	+2.8	2 stations.....	103	26	Erwin.....	39	1	6.25	+1.01	Cedar Hill.....	12.08	Tiptonville.....	1.57
Texas.....	83.9	+3.7	Snyder.....	114	20	3 stations.....	52	1	.81	-2.39	Clarendon.....	3.85	24 stations.....	.00
Utah.....	63.9	-6	St. George.....	108	30	Soldier Summit.....	23	2	.61	-96	Ogden.....	1.81	Loa.....	T
Virginia.....	75.5	+3.9	Lincoln.....	107	29	Burkes Garden.....	38	14	3.63	-63	Stuart.....	7.72	Emporia.....	1.67
Washington.....	61.8	+1.4	3 stations.....	105	11	2 stations.....	25	2	.67	-92	Mount Baker Lodge.....	3.83	White Swan.....	.00
West Virginia.....	74.3	+4.7	Martinsburg.....	106	29	3 stations.....	41	13	3.45	-90	Pickens.....	6.78	Martinsburg.....	1.36
Wisconsin.....	60.2	+4.0	2 stations.....	106	1	Cornucopia.....	32	7	4.02	-91	Nellsville.....	8.15	Milwaukee (Airport).....	1.46
Wyoming.....	59.8	+1.2	Colony.....	100	26	South Pass City.....	18	2	1.83	+21	Bechler River.....	5.50	Riverton.....	.20
Alaska (May).....	42.6	-2	Wrangell.....	82	22	Kotzebue.....	0	6	1.73	+14	Cordova.....	16.38	Barrow.....	T
Hawaii.....	74.5	+1.0	Hahione Valley.....	93	17	Kanaloahuluhulu.....	50	1	7.36	+2.45	Puohakamoa No. 2.....	38.00	4 stations.....	.00
Puerto Rico.....	79.7	-6	Manati.....	96	7	Guineo Reservoir.....	48	18	4.42	-1.82	Coloso.....	14.60	Morovis.....	1.25

¹ Other dates also.