Cyclones and gales.—As usual in midsummer, there was little storminess in the extra-tropical regions. Two periods of the month, however, deserve comment:

About the 10th there was a marked fall of pressure near that portion of the 50th parallel of latitude from the Grand Banks to somewhat eastward of mid-ocean; and strong gradients were found near the chief steamship routes, although the actual center of low-pressure was, for several days, near Iceland or southern Greenland. Several steamships reported gales, mainly near the 50th parallel and on the 10th, 11th, or 12th.

On the 28th a considerable fall of pressure occurred over a small area not far to the eastward of Hatteras. The pressure changes on this day presumably were connected with the local downpour noted in waters east of South Carolina, which is described below. A well-marked center of comparatively small size advanced northeastward, increasing in strength, and for the 29th there are 5 gale reports for the waters just southeast of Nova Scotia, 2 of these estimating the force as whole gale (10). This LOW then turned in its course somewhat to northward, and quickly ceased to affect the main vessel lanes.

No tropical storm occurred in Atlantic waters during July. There were, however, 6 different reports of winds of force 6 to 8; all save 1 were encountered in the Caribbean Sea, and 4 of them occurred during the second week of July. The contrast between high pressure of the Azores region and low pressure near the equator was clearly the cause of these winds, which were of the nature of intensified trades.

Fog.—There was much more fog than normal during July. From the 45th meridian to the coasts of Europe, fog was considerably more prevalent than it had been during June. The area from 45° to 50° N. and 30° to 40° W. had fog on 14 days. There was less in the region nearer to the European coasts, where the highest incidence was in the square from 45° to 50° N., 10° to 15° W., which had a count of 10 days.

In the Gulf of St. Lawrence and close to Newfoundland less fog was encountered than during June; but over the Grand Banks and to the southwestward and westward to Cape Cod about as much as during June. The square from 40° to 45° N., 65° to 70° W., had 26 days of fog—every day from the 6th to 26th inclusive furnished at least one report. Southwest of Nantucket, fog was distinctly less common than it had been during June, and none has been reported anywhere south of the 35th parallel.

Downpour.—From the American steamer *Mariana*, Capt. C. Zeuthen, an interesting report about torrential rain encountered on a voyage from Philadelphia to Tampa has been received from the observer, Second Officer R. C. Spaulding:

> July 28, 1935, at 1:30 to 2:00 a. m., local mean time, in latitude 32°10′ N., longitude 79°20′ W., encountered a torrential downpour of rain, so heavy it reduced visibility to nothing. It fell straight down and spattered to a height of 3 or 4 feet off the deck. It was actually difficult to breathe standing out in it. The whistle when sounded made a gurgling sound, as if under water. The decks were filled to the "gunnels", water streaming everywhere. Lightning was observed, though barely visible through the murk; continuous loud thunder was heard. There was very little wind, mostly westerly. It was, no doubt, a "cloudburst."

NORTH PACIFIC OCEAN, JULY 1935

By WILLIS E. HURD

Atmospheric pressure.—Almost normal barometric conditions prevailed over the North Pacific Ocean during July 1935. Most of the eastern part of the ocean was dominated by the usual high-pressure area, within which few cyclonic disturbances occurred. The Aleutian LOW on the average lay over the northwestern part of the ocean and the Bering Sea. Pressure was low throughout Asiatic waters, with the center on the average off the southeast coast of China (mean at Hong Kong, 29.59 inches). The greatest departure from the monthly normal, as shown in table 1, was —0.06 inches, at Guam.

OCEAN GALES AND STORMS, JULY 1935

Vessel	Voyage		Position at time of lowest barometer		Gale began July—	Time of lowest barometer July—	Gale ended July—	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			° ′	° ′				Inches					
Waukegan, Am. S. S.	Havre	New York	44 57 N.	41 12 W.	6	10p, 6	7	29.87	SW	SW, 8	W	SW, 8	SW-W.
Betterton, Am. S. S.	New York	Houston	35 38 N.	75 08 W.	8	6p, 8	9	29.68	SW	SW, 7	SW	SW, 8	SSW-SW.
Sanyo Maru, Jap. M. S.	Puerto Colombia.	New York	12 10 N.	75 20 W.	9	4a, 9	10	[1] 29.85	NNE	NNE, 7	ENE	ENE, 8	
New York, Ger. S. S.	Cherbourg	do	42 28 N.	51 40 W.	10	4p, 10	10	29.62	SW	W, 7	SW	SW, 9	SW-W-WNW.
Collamer, Am. S. S.	Havre	do	48 36 N.	29 04 W.	10	11p, 10	11	29.55	SW	SW, 8	SW	SW, 8	
Montreal City, Br. S. S.	Fowey	Philadelphia	50 40 N.	30 45 W.	11	5a, 11	11	29.48	SSW	SSW, 8	SW	SSW, 8	SSW-NW.
Laganbank, Br. M. S.	Algiers	Boston	38 36 N.	55 42 W.	10	8a, 11	11	29.98	SW	SW, 9	W	SW, 9	SW-WSW.
Mopan, Br. S. S.	Jamaica	Avonmouth	49 12 N.	23 05 W.	11	11a, 12	11	29.47	SSW	SSW, 6	SSW	SSW, 8	SW-SSW-WNW.
S. B. Hunt, Am. S. S.	Cartagena	Aruba	[2] 11 15 N.	75 08 W.	14	4p, 14	14	29.70	NE	NE, 7	NE	NE, 7	None.
Winona County, Am. S. S.	Dundee	Boston	[2] 57 59 N.	20 42 W.	14	10p, 14	14	29.72	SW	SW, 5	SW	SSW, 9	SW-W.
Fred W. Weller, Am. S. S.	Cartagena	Aruba	11 42 N.	74 00 W.	19	4a, 20	19	29.85	ENE	ENE, 4	ENE	ENE, 6	ENE-E.
New Brunswick, Br. S. S.	Dakar	Boston	38 26 N.	64 26 W.	26	9p, 26	27	29.95	SW	SW, 10	N	SW, 10	SW-NW-N.
Yselhaven, Du. S. S.	Antwerp	Norfolk	[2] 41 33 N.	61 49 W.	28	4p, 29	29	29.34	SE	WSW, 10	WSW	SE, 10	SE-WSW-W.
Maasdam, Du. S. S.	Rotterdam	New York	42 04 N.	61 17 W.	29	6p, 29	29	[1] 29.19	SSE	SSE, 9	SW	SSW, 10	SSE-SW.
Silvercypress, Br. M. S.	Gibraltar	Halifax	42 56 N.	59 50 W.	29	10p, 29	30	29.61	S	SSW, 9	SW	SSW, 9	S-SSW.
NORTH PACIFIC OCEAN													
City of San Diego, Am. M. S.	Fishing grounds	Manzanillo	18 40 N.	104 20 W.	1	5a, 1	1	29.82	SE	N, 2	SE	SSE, 8	N-E-SE.
Grays Harbor, Am. S. S.	Seattle	Yokohama	51 48 N.	170 45 W.	1	8a, 2	2	29.32	S	S, 8	S	SSE, 8	SSE-SSW.
Silverash, Br. M. S.	San Francisco	Manila	20 50 N.	142 30 E.	2	3a, 3	3	29.79	SSE	S, 8	SSE	S, 9	SSE-SSW.
Oregon, Am. S. S.	Manila	Los Angeles	44 14 N.	154 W.	10	10p, 11	11	29.70	N	NW, 5	N	N, 8	N-NW.
Silverbelle, Br. M. S.	do	do	[2] 39 14 N.	145 07 W.	11	4p, 11	12	29.82	SSW	S, 7	S	SSW, 9	S-SSW.
Oregon, Am. S. S.	do	do	36 06 N.	124 35 W.	17	6p, 18	18	29.91	NNE	N, 8	N	N, 9	None.
General Lee, Am. S. S.	Portland, Oreg.	Yokohama	51 40 N.	171 15 W.	22	4p, 22	22	29.56	SSW	SW, 8	WSW	SW, 9	SSW-SW.

[1] Barometer uncorrected.

[2] Position approximate.