# MONTHLY WEATHER REVIEW, AUGUST, 1881.

(General Weather Service of the United States.)

WAR DEPARTMENT,

Office of the Thief Signal Officey, division of Telegrams and Reports for the Benefit of Commerce and Agriculture.

### INTRODUCTION.

In preparing this REVIEW the following data, received up to September 20th, have been used, viz: the regular tri-daily weather charts, containing the data of simultaneous observations taken at 133 Signal Service stations and 15 Canadian stations, as telegraphed to this office; 185 monthly journals and 180 monthly means from the former, and 15 monthly means from the latter; 201 monthly registers from Voluntary Observers; 50 monthly registers from United States Army Post Surgeons; Marine Records; International Simultaneous Observations; monthly reports from the local Weather Services of Iowa, Nebraska and Missouri, and of the Central Pacific Railway Co.; reliable newspaper extracts; special reports. Areas of Low Barometer.—Six such areas are described for the month of August, 1881; five of them are charted. No. VI is specially noted for its very unusual path, its energy and the extensive destruction of property and lamentable loss of life caused by it.

No. I.—(Not charted.) High winds accompanied by heavy rain prevailed at intervals, and with variable intensity at the Gulf ports, from Indianola to Pensacola, from the 1st to the 8th. The following is the report of velocities and rainfall : Port Eads, 34 miles on 1st; 29 miles on 2d; 40 miles on the 3d; 27 miles on the 5th. 7.12 inches rain fell between midnight of the 4th and the morning of the 6th. Pensacola, 32 miles on the 2d; 40 miles on the 3d; 28 miles on the 5th. 10.41 inches rainfall on 2d and 3d; 5.54 inches rainfall on 4th and 5th. Mobile, 40 miles on 8th; 6.20 inches rainfall on the 3d, and 6.66 inches on the 4th and 5th. Indianola, 30 miles on the 1st, and 38 miles on the 6th. Signals for this storm were ordered as follows: Port Eads—up, morning of 2d; down, midnight of the 3d; up, morning of the 7th; down, morning of the 8th. Mobile—up, morning, 2d; down, midnight, 3d. Pensacola—up, morning, 2d; down, midnight, 3d. Cedar Keys—up, morning, 2d; down, midnight, 8th; velocities, 56 miles on the 7th; 25 miles on the 8th.

No. IV.—A storm, whose path can only be charted for a short distance, passed from the Gulf of Mexico across the southern end of Florida on the 17th. The following velocities are reported: Port Eads, 25 miles on the 16th; Cedar Keys, 27 miles on the 17th; Punta. Rassa, 28 miles on the 17th; Key West, 27 S. miles on the 16th, and 28 miles NE. on the 17th. Heavy rain fell at Key West and Punta Rassa.

OFFICE CHIEF SIGNAL OFFICER, WASHINGTON, D. C., August 23d; 10.15 P. M.

#### To the Press and all Seacoast Statims on the Atlantic Coast:

It is reported to the Chief Signal Officer that a hurricane was central last night a short distance north or northeast of St. Thomas, West Indies, with a maximum hourly wind velocity of 60 miles; wind backing from northwest to southwest; one vessel blown ashore. The information given is insufficient to determine the path of the storm's center, but it will probably move northwestward, and unless it recurves to the northeast will reach the South Atlantic coast. While storm signals will not be displayed at present, the Chief Signal Officer considers it advisable to send special warnings to all Atlantic ports and to caution shipping against possible danger from the hurricane for the next two or three days.

#### HAZEN.

The following collection of data relate to the destructive violence of the storm during its progress from a point north of St. Thomas northwestward to Savannah, Ga. Reports from vessels were very meagre, owing to the delay with which such data is generally obtained. Schooner W. B. Mackie, from Wilmington, N. C., for Port au Prince, encountered a terrific storm on the western edge of the Gulf Stream during the night of the 23d, in which she lost her deck load and sprung a leak. Schooner Lucie Wheatley, from Jacksonville for Baltimore, experienced from 21st to 24th, in about 32° N. 78° W., heavy cross seas, wind blowing a hurricane; 26th, storm increased in fury, threw over deck load; 27th, noon, vessel full of water, masts swept away, hull wholly under water. Steamer City of Antonio from New York for Galveston, experienced violent gales off Jacksonville during night of 27th; iron shutters stove in and saloon flooded. Ship Sandusky, in about 32° N. 76° W., experienced during 26th and 27th violent storm; vessel dismasted and all hands but two drowned. Bark Jupulco, 27th in 30° 35' N. 77° 26' W., violent hurricane from NE.; lost foremast, jibboom, maintopmast, and one seaman. Steamer Dessong, from Savannah for New York, night of 27th, 80 miles ESE. of Tybee Island experienced violent northeast hurricane. Steamer Geo. W. Clyde, from New York for Charleston, reports : left former port 4 p. m. of the 24th, wind SW., continuing in that direction until 7 p. m., when it shifted to NE. with increasing force. Passed Hatteras 4 a. m. of the 26th, wind now veered to ENE. and increased to moderate gale; 7 p. m. off Cape Fear, wind ENE. blowing with hurricane violence; impossible to run ship before the wind; hove to and headed southeast; hurricane lasted for 24 hours, reaching its height about 10 p.m. of the 26th and continuing until 2 p.m. of the 27th with extraordinary violence. Steamer Saragossa, from Baltimore for Savannah, reports: left former port 4 p. m. of the 25th, and on the morning of the 27th, about day break, encountered cyclone off Cape Lookout; wind SE. with a velocity of about 75 miles per hour, causing tremendous seas; no abatement of violence until late at night, when the wind slightly moderated, but the sea was still rough and exceedingly high. Morning of 28th (very early) gale began to subside with fine weather and clearing skies, but still experienced an ugly cross-sea setting in from the eastward; about 8 a.m., while to the southward of Cape Romain, experienced heavy cross-seas with gale from the SE. Schooner Hannah M. Lallis, 3 a. m. of 27th, in about 32° N. 78° W., encountered furious NE. to SE. gale and was entirely dismasted; most of the crew drowned. Bark Brunswick on 23d, and while over 100 miles east of Tybee Island, encountered a fierce hurricane from the NE. veering to SE.; 26th violence of storm increased, vessel nearly dismasted; 27th, 8 a. m., gale continued with very little abatement; 1 p. m. lee yards under water, gale still very furious; between 5 and 6 p. in. slight lull in tempest followed in a short time by a recurrence of the gale redoubled in fury; 9 p.m. vessel disappeared beneath the waves carrying down all but three of the crew. Bark Rubinson Crusoe, 27th, in 34° 30' N. 72° 30' W., experienced violent hurricane from NE. to SE. Bark Georgiana, for Milford, Conn., left Charleston on 21st; on 22d and 23d met fresh gales from the NE. with heavy cross-seas, which continued with increasing violence; on the 24th put back to Charleston, vessel badly damaged. The following reports from West India land stations are of interest: 23d, 10 a. m., St. Kitts, SE., cloudy; Antigua, SE., hazy; Point-a-Pitre, SE., fine; Gaudaloupe, SE., fine; Dominica, rainy; Martinique, cloudy, calm; St. Lucia, fine, calm; St. Vincent, fine; Grenada, fine, calm; Trinidad, rainy; Barbados, barometer 30.12, wind E. 4 p. m., St. Kitts, S.E., cloudy; Antigua, SE., hazy; Point-a-Pitre, calm; Gaudaloupe, calm and very hot; Dominica, very cloudy; Martinique, cloudy and calm; St. Lucia, calm and very hot; St. Vincent, fine and calm; Grenada, fine and calm; Trinidad, fine and calm; Barbados, barometer 30.05, wind E., fine. 24th, 10 a. m., St. Kitts, E., cloudy; Antigua, NE., hazy; Point-a-Pitre, calm; Guadaloupe, calm and hot; Dominica, cloudy; Martinique, fair; St. Lucia, cloudy and hot; St. Vincent, cloudy; Grenada, sky overcast, drizzling; Trinidad, fine; Barbados, barometer 30.14, E., fair. 4. p. m., St. Kitts, S., cloudy; Antigua, E., hazy; Point-a-Pitre, fair; Guadaloupe, calm, extremely hot; Dominica, cloudy, rainy; Martinique, rainy; St. Lucia, calm, hot; St. Vincent, calm; Grenada, calm; Trinidad, calm, hot; Barbados, barometer 30.05, wind W., fine. Reports from islands and other places adjacent to Savannah and along the neighboring coast give the following information concerning disasters : White Bluff, 27th, large number of dwellings, orchards

and fine shade trees destroyed; Bryan Neck, 27th, fearful destruction of property; Dorchester. 27th, severest hurricane ever experienced; six persons and many cattle, sheep and horses killed; houses, fences, trees and crops leveled to the ground; nearly all the churches in the county destroyed; highways completely blocked with debris. Beaufort, 27th, violent wind commenced on night of 26th, culminating on the following day in a terrific cyclone. which demolished everything in its course; the water rose above the sea-wall and spread through the streets and into the cellars and basements of many buildings. Fleming, 27th, 9.30 p. m., tremendous gale from ENE., causing great destruction. Colonel's Island, 27th, all buildings of every kind swept away; ten persons drowned; crops washed out of the ground; trees uprooted and thrown about in great confusion, making roads impassable. Half Moon Bluff, 27th, the turpentine farms totally destroyed; houses, fences and trees demolished. Egypt Depot, 26th, tremendous gale, with no abatement until the morning of the 28th, reaching its height about nidnight of the 27th; great destruction to cotton crop; fields badly washed. Jessup, 27th, during night violent hurricane; houses, fences and trees demolished; country roads in a deplorable condition, being blocked with trees and badly washed. Liberty Co., Ga., 27th, most terrific storm ever experienced; the extreme violence of the wind and the torrents of rain set in about 9 p. m., and continued till the following day; the destruction of forests was terrible; most of the trees, even the largest, were broken off at the trunks and twisted into splinters; the trunks, from three to five feet in diameter, were split into pieces about the size of rails; the highways everywhere were blockaded by fallen trees, and all communication cut off; buildings were in many instances lifted bodily from the ground and then crushed to pieces; huge pieces of timber were carried long distances by the force of the wind. An interesting peculiarity of the storm developed in this section of the state, which was shown by the destructive force of the wind being confined to wide streaks, running from southeast to northwest; the wind appeared to have bounded and rebounded like the waves of the sea; where the furrow of the air dipped there was a streak of destruction plainly marked for distances, in some instances, of 16 miles; in the interval between the streaks trees and buildings stood firm as though nothing had occurred. Montgomery, N. C., gale reached its height midnight of the 27th, as the wind veered to SE.; tide rose 6 feet above ordinary highwater mark, carrying away several large buildings; trees throughout the town were uprooted or broken off, and houses unroofed and otherwise demolished. Beaulieu 27th, fences, trees, and houses in terrible ruin; roads leading into the country rendered impassable by hundreds of fallen trees, all of which were either torn up by the roots or twisted off at a height of ten to twenty feet above the ground. White Bluff, 27th, all bath houses and boats swept away and several residences destroyed. Burnside Island, 27th, all dwellings and out-buildings unroofed or torn down; island nearly submerged. Shipyard Creek, 27th, everything flooded; nearly all buildings washed away. Wilmington Island, 27th, 11 houses blown down and all crops utterly destroyed; all through the woods and fields there were wrecks of furniture, houses, fencing and boats; dead cattle and hogs frequently found. Cockspur Island, 27th, everything swept away; the loss is terrible and unprecedented. Bonaventure, 27th, streets filled with the debris of trees, fences and buildings; in the cemetery several large tombstones were broken in pieces. Long Island, 27th, every building carried away save the light-house; the heavy sea burst open the door of the main portion of the latter, used as a residence, and carried away doors, windows, furniture, clothing and all supplies on hand. Hogg Island, 27th, 15 houses carried away and 25 persons drowned; all crops destroyed. William's Island, 27th, 20 houses carried away and 15 persons drowned; mules, horses and other stock lost; rice crops nearly destroyed. Rabbitt Island, 27th, island nearly submerged; all buildings and crops destroyed. Hutchinson's Island, 27th, 18 persons drowned and all buildings swept away. Fig Island, 27th, 13 persons drowned and every plantation destroyed; all huts on either side of the river carried off by the high water and the occupants drowned. McQueen's Island, 27th, all buildings and crops badly damaged. Charleston, 27th, most violent since the great storm of August, 1874; in eastern and southern parts of city wharves greatly damaged; section of city east of East Bay, including about 14 squares, submerged to a depth of several feet; much property in the southwestern portion of the city under water; roofs, window-shutters, fences, shade trees and gates, generally destroyed; all telegraph wires down; business seriously interfered with loss; variously estimated at from \$200,000 to \$300,000. Sullivan's Island, 27th, storm burst upon the island early in the morning, displaying unexampled fury; miles of fencing were blown down, and from 8 to 10 houses destroyed; entire loss estimated at \$40,000. Port Royal, S. C., 27th, ferry house carried away by the extremely high tide, and from 20 to 40 people drowned; the gale was one of the most violent ever experienced. Tybee Island,

27th, at 6 a. m. wind reached an estimated velocity of 80 miles per hour; whole rows of cottages were destroyed, and the strongest houses were unroofed or crushed in by the terrific force of the hurricane; bathing-houses, pavilions, and various out-buildings were swept clear from the beach and carried in shapeless masses through the woods; the ruins in some instances took fire, causing a frightful loss of life. Bethesda, 27th, storm raged with great fury until 1.30 a.m. of the 28th; ground strewn with the wrecks of trees, fences and buildings; all highways obstructed by huge piles of *debris*; railroad and telegraphic communication cut off. Moorehead City, N. C., 24th, over thirty hours in advance of the storm the skies became blackened with sea birds of every kind, size, color and description, moving rapidly towards the west, as if fleeing from the violence of the coming storm. The strange conduct of the birds was equaled, if not surpassed, by the finny tribe, as shown by the latter's rapid flight up Newport river, a narrow, turbid stream. All through the day the fish, in schools of millions, passed up the stream, followed by great droves of porpoises, so thick that the river looked like a slowly moving stream of ink. 27th, birds slowly returning; at Newport, where the stream is very narrow, the fishes and porpoises were so wedged in that they could not move either up or down. The above incident would appear to give evidence of the possession of a wonderful instinct by birds and fishes. Elba Island, 27th, every house and out-building carried away; all crops destroyed; 15 to 20 persons drowned. Fort Pulaski, 27th, storm raged for six hours with demoniac fury; water rose one foot above the floor of the officers' quarters; all houses on the island, as well as every head of cattle, were swept away. Savannah, 26th, during the day it was blustering and very threatening, barometer rapidly falling, wind NE.; through the night the velocity and violence of the wind increased, direction ENE., tide extremely high; at Tybee Island there was a perfect gale from the NE., veering to SE.; 27th, 6.44 a. m., barometer 29.70; 10:44 a. m., 29.61, N., 32 miles; 2.44 p. m., 29.48, N., 36 miles; 6.44 p. m., 29.30, NNW., 33 miles; 7 p. m., NE., 35 miles; 8 p. m., NNE., 48 miles, rain falling in sheets; 8.45 p.m., fierce gusts of from 60 to 80 miles per hour from the NE., accompanied by a deafening roar and the crash of falling buildings; barometer continued to fall rapidly until, at 9.20 p. m., it reached the minimum of 29.08, where it remained about stationary for 20 minutes; the pressure now began to recover quickly, and at 10.44 p. m., barometer read 29.17, wind SE., about 50 miles per hour; midnight, 29.84, SE., 36 miles per hour; 28th, 2 a. m., 29.49, SE., about 28 miles per hour. Damage to property in the city estimated at \$1,500,000. On the morning following the storm there was presented the most terrible scene of wreck, ruin and death that was ever witnessed within the memory of the oldest inhabitant; the memorable storm of 1854 was not as violent or prolonged; streets everywhere were completely blockaded with large trees, huge piles of tin roofing, bricks and parts of buildings; hardly a building in the city but received more or less injury; in and about the city over 300 negroes were drowned, and 35 white persons killed or drowned; along the immediate coast nearly 100 vessels were wrecked. At Bohanville, in southeastern part of city, 20 houses were unroofed and 12 completely demolished; all shade trees and fences blown down; the force of the wind was sufficiently great to drive the sea water up the Savannah river, far above the city; nearly every house received a copious supply of salt water, causing great inconvenience; all creeks leading inward from the sea rose to a great height and flooded the adjacent low lands. Reports from 47 rice plantations on the Cowbahee, Ashepoo and Edisto rivers, Rautowles creek and the eastern and western branches of Cooper river, state that only three plantations escaped with slight loss, while the remainder were almost or entirely submerged with salt water; loss can hardly be estimated. In advance of this storm cautionary signals, on the morning of the 25th, were ordered for the following stations, and justified by the accompanying maximum velocities: Smithville, E., 50 miles; Wilmington, E., 27; Fort Macon, E., 38; Hatteras, NE., 34; Kitty Hawk, E., 32; Cape Henry, NE., 32; these signals were lowered on the morning of the 28th. At other Atlantic coast stations signals were ordered on the 26th and partly justified, as follows; Cedar Keys, noon, SW., 27 miles; Jacksonville, a. m., SW., 37; Savannah, a. m., NE., 60; Charleston, NE., 54; Norfolk, p. m., E., 14; Baltimore, midnight, S., 9; Chincoteague, p. m., SE., 22; Delaware Breakwater, p. m., E., 16; Cape May, midnight, SE., 17; Atlantic City, midnight, E., 10; Barnegat, midnight, SE., 13; Sandy Hook, midnight, SE., 24. All of these signals were lowered on the morning of the 28th, except at Cedar Keys, which remained up until p. m. of 29th, owing to damage to telegraph lines, but was ordered down p. m. of the 28th. By the morning of the 28th the storm had moved westward into central Georgia with diminished violence. On the morning of 29th the center was near Memphis, the barometer at that station being 0.35 inch below the normal; heavy rain had fallen along the path of storm. The next morning the center had moved into Iowa, and thence passed off to the north and east.

No. XIII.—This storm

developed over the Carribean sea under much the same conditions that preceded the origin of No. X, (August, 1879,) of the July, 1881, REVIEW. During the night of the 11th there was a general but slight fall in barometer at all West India stations south of parallel 20° N., supplemented by two similarly conditioned reports from U. S. N. Vandalia, in 9° 50' N., 79° 55' W., and from ship Iron Cross, in 16° 46' N., 68° 31' W. 13th. Vandalia at Aspinwall, barometer 29.82, SW., no change in the past 24 hours; Kingston, Jamaica, 30.15, NE., a fall of 0.05 inch in past 24 hours; Navassa, 29.82, E., a fall of 0.05 inch in past 24 hours. Ship Iron Cross, in 17° 20' N., 71° W., 29.98, ENE., force 5; on the 12th, in 16° 46' N., 68° 31' W., 30.02, E., force 3; St. Thomas, 29.62, E., a fall of 0.03 inch in past 24 hours. During the 14th, 15th and 16th the barometer at the above-named stations, except St. Thomas, remained about stationary, winds steady from the east and northeast. It is safe to presume, knowing the narrow diameter possessed at times by this class of storms, that the stations from which reports have already been given were situated without the influence of the central area of disturbance, and therefore the passage of the depression would not be indicated in all cases by a change in pressure or wind direction. During the first two days of development the area was probably much less circumscribed, and therefore, a general fall in the barometer, as before noted. On the 17th, at stations in Cuba and southern Florida, the barometer fell from 0.02 to 0.06 inch, with winds shifting from south to northeast. On this day and the following, vessels reported heavy storms north and east of the Yuchatan Peninsula. On the morning of the 19th, as the depression lay to the eastward, the barometer at Havana read 29.88, wind S.; Key West, 29.92, SE.; Punta Rassa, 29.94, NE.; along the northern Gulf coast the pressure ranged from 30.00 to 30.09, winds north and northeast, which directions had been constant since the 3d. During this period of 17 days the pressure over the Gulf states ranged from 30.03 to 30.25. 20th, in 20° 10' N. 84° W., wind S., force 5, misty; in 20° 25' N., 85° 40' W., 29.84 SSE., light rain; Havana, 29.88 SE., fair; Key West, 29.90 S., cloudy, 1.74 inches of rain in past 24 hours; Punta Rassa, 29.89 E., cloudy, 0.48 inches of rain in past 24 hours; along the northern Gulf coast, east of Galveston, the barometer had fallen from 0.07 to 0.26 inch in the past 24 hours, winds NE., accompanied by light rains. 21st, in 22° N. 85° 35' W., 29.85 SSE., force 6; in 23° 20' N. 87° 30' W., 29.84 SW., gale; Havana, 29.90, SSE., light, fair; Key West, 29.90 S., light, fair; Punta Rassa, 29.87, SE., brisk, cloudy; on this day rain became general along the South Atlantic and Eastern Gulf coasts, with brisk to high north and northeast winds. By morning of the 22d the barometer had risen from 0.05 to 0.15 inch, at all stations in the Eastern Gulf, the depression having crossed northern Florida during the night and was now central off the South Atlantic coast in the form of an elongated area, extending northeast and southwest; in 40° 39' N. 67° 30' W., NE. and ENE. storm, high seas and heavy rain. 30 miles off Cape Hatteras, violent gale from N., heavy cross-seas, schooner White Wing foundered. Light rains with north and northeast winds, and the barometer generally above 30.05, prevailed along the South and Middle Atlantic coasts. 23d, in 41° N. 66° W., 29.82 NE., violent gale, heavy rain; in 40° N., 58° W., 29.96 ENE., violent gale, gloomy weather, drizzling rain; in 40° 32' N., 58° 47' W., 29.94 SE., violent gale, heavy rain. 24th, depression moving northeastward in about 40° N. 60° W; in 41° 37' N., 55° 38' W., 29.79 NNE., threatening; in 42° 18' N., 57° 12' W., 29.93 NE., heavy gale, light rain; in 41° 37' N., 54° 04' W., 29.83 NNE., foggy; in 41° N., 55° W., 29.82, SW., violent gale, heavy rain. 25th, central depression inclosed by the isobar of 29.80, which extended northward to Greenland, thus in a measure combining with area No. XX, then central northeast of Newfoundland, its center inclosed within the isobar of 29.60. 26th, depression rapidly filled up, disappearing between two areas of high pressure, (30.40,) one covering the Middle Atlantic and New England coasts and extending thence eastward to the 40th meridian, and the other embracing the Azores.

## MONTHLY WEATHER REVIEW, SEPTEMBER, 1881.

(General Weather Service of the United States.)

#### WAR DEPARTMENT,

Office of the Thief Signal Officen,

DIVISION OF

TELEGRAMS AND REPORTS FOR THE BENEFIT OF COMMERCE AND AGRICULTURE.

## INTRODUCTION.

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No. V.— Following the disappearance of area No. I, north of parallel 50° on the 7th, the pressure fell sud-denly to the southward and by morning of the 8th a depression of considerable energy appeared in about 45° N., 50° W.; steamer *Hooper*, from Boston to London, experienced heavy gales from NNE.

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veering to NE., E., SE. and S.; 9th, wind S. blowing very heavily, sea running mountain high; in 45° N., 45° W.heavy westerly gales lasting until the 12th. During the day depression moved slowly southwestward, while off Newfoundland heavy west and northwest gales prevailed continuing through the 10th. On the 9th, in 45°, 30′ N., 48°, 25′ W., 29.45, NE., force 6, heavy rain; winds on the eastern coast of Newfoundland shifted from NW. to N. and NE. and the pressure fell from 0.18 to 0.27 inch. 10th, pressure over Newfoundland rose from 0.05 to 0.10 inch, winds still NE. as the storm center passed to the southeastward; in 42°, 35′ N., 56°, 20′ W., 29.96, NE. force 6, rain; in 45°, 24′ N., 50°, 55′ W. very severe NE. gale; off Grand Banks, N. F., severe NNE. gale lasting 24 hours; off Banks of Newfoundland, steamer *Plantyn*, violent hurricane from E. veering to W. and lasting 24 hours; bark *Trenton* encountered fearful hurricane, seas mountain high. 11th, the following barometric readings show the extreme limit of the area of low to the east, west and south on, this date; St. Johns, N. F., 29.84, NE., light rain; in 36° N., 50° W., 29.82, NW., force 6, rain; in 29° N., 38° W., 29.92, SW., force 6, rain; Angra, Azores, 29.86, S., fair. Reports from vessels at sea are given as follows: in 50°, 37′ N., 32°, 29′ W., SE. to S., strong gale, high confused sea; in 45°, 24′ N., 50°, 56′ W., NE., hard gale, high sea; in 41°, 50′ N., 58°, 10′ W., schoner *Henry Lippett*, terrific gale from NE. changing to NW., lasting for five days, had to run S. to 33° N. before vessel was righted. 12th, in 35° N., 48° W., 29.63, NW., force 4; in 33° N., 37°, 40′ W., 29.80, S. force 6, rain; in 37°, 45′ N., 62° W., 29.92, force 6, cloudy; St. Johns, N. F., 29.74, NW., stormy; Angra, Azores, 30.06. SSW., fair; in 44°, 46′ N., 53°, 53′ W., N. hard gale, high sea; in 43° N., 53′ W., N. hard gale, high sea; in 43°, 51′ W., SE, sound, high sea; in 42°, 57′ N., 54°, 50′ W., fresh northeasterly gales. During the day this depression probably dis

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