

## CATALOGUE OF 482 EARTHQUAKES IN 1885.

### JANUARY.

- 1.—January 1st, 6.30.0 a.m., Station 179; 71 square miles.
- 2.—January 3rd, 2.30.0 a.m., Stations, 81, 83, 84, 85, 86, 87, 88, 89, 90, 91, 96, 98, 99, 100, 101, 102, 103, 104, 105; 4,291 square miles.
- 3.—January 3rd, 3.0.0 a.m., Station, 55; 369 square miles.
- 4.—January 8th, 9.58.0 a.m., Station, 65; 149 square miles.
- 5.—January 8th, 10.0.0 a.m., Stations, 80, 81, 84, 85, 86, 87, 88, 89, 90, 91, 98, 100, 101, 102, 103, 104, 145; 4,120 square miles.
- 6.—January 8th, 11.30.0 p.m., Station, 23; 493 square miles.
- 7.—January 13th, 10.0.0 a.m., Stations, 207, 208, 209; 720 square miles.
- 8.—January 13th, 9.28.0 p.m., Station, 89; 124 square miles.
- 9.—January 15th, 9.0.0 p.m., Stations, 83, 84, 85, 81, 80, 74, 78, 79, 88, 89, 87, 90, 92, 97, 96, 100, 98, 101, 102, 103, 104; 5,458 square miles.
- 10.—January 16th, 10.15.0 a.m., Station, 79; 493 square miles.
- 11.—January 17th, 10.0.0 a.m., Stations, 75, 74, 77, 78, 79, 80, 81, 88, 89, 90, 92, 91, 97, 99, 101, 100, 102; 4,197 square miles.
- 12.—January 17th, 11.0.0 p.m., Stations, 79, 80, 81, 88, 87, 89, 90, 91, 92, 98, 100, 101, 102; 2,828 square miles.
- 13.—January 18th, 3.22.0 p.m., Station, 125; 695 square miles.
- 14.—January 19th, 0.05.0 p.m., Station, 83; 344 square miles.
- 15.—January 20th, 1.0.0 p.m., Station, 124; 101 square miles.
- 16.—January 20th, 1.33.18 p.m., Station, 144; 72 square miles.
- 17.—January 20th, 2.20.0 p.m., Station, 89; 493 square miles.
- 18.—January 20th, 10.20.0 p.m., Station, 131; 149 square miles.
- 19.—January 24th, 9.30.0 a.m., Stations, 78, 79, 80, 88, 87, 89, 90, 91, 92, 97, 96, 98, 99, 100, 101, 102, 103, 105, 106, 107, 108, 109, 110, 111; 4,892 square miles.
- 20.—January 23.0.0 a.m., Stations, 140, 139, 138, 141, 142, 144, 151, 152, 153, 150, 154, 155, 156; 3,328 square miles.
- 21.—January 27th, 2.54.0 a.m., Station, 152; 289 square miles.

- 22.—January 27th, 6.43.00 a.m., Station, 152; 471 square miles.
- 23.—January 27th, 4.35.00 p.m., Station, 152; 471 square miles.
- 24.—January 27th, 6.5.0 p.m., Station, 152; 289 square miles.
- 25.—January 28th, 2.0.0 a.m., Station, 152; 289 square miles.
- 26.—January 28th, 3.10.0 a.m., Station, 152; 289 square miles.
- 27.—January 29th, 5.0.0 a.m., Station, 152; 289 square miles.
- 28.—January 29th, 10.15.0 a.m., Station, 54; 250 square miles.
- 29.—January 29th, 10.0.0 p.m., Stations, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 102; 2,732 square miles.
- 30.—January 31st, about 10.0.0 p.m., Stations, 53, 54, 66, 68, 67, 69, 70, 71; 2,991 square miles.
- 31.—January 31st, 11.35.0 p.m., Station, 23; 618 square miles.
- 32.—January 31st, 12.0.0 m.n., Stations, 43, 47, 49, 50, 51, 52, 46, 53, 54, 68, 66, 55, 56, 63, 65, 67, 64, 72, 71, 69, 70, 82, 83, 81, 80, 73, 74, 78, 79, 77, 94, 93, 92, 90, 88, 89, 87, 86, 85, 104, 103, 101, 102, 91, 97, 96, 98, 99, 95, 118, 100; 17,379 square miles.

## FEBRUARY.

- 33.—February 1st, 0.15.0 a.m., Station, 70; 369 square miles.
- 34.—February 1st, 0.9.55 a.m., Station, 77; 125 square miles.
- 35.—February 1st, 5.0.0 a.m., Station, 55; 220 square miles.
- 36.—February 2nd, 0.0.0 a.m., Station, 92; 100 square miles.
- 37.—February 2nd, 3.2.0 a.m., Stations, 99, 100; 124 square miles.
- 38.—February 2nd, after 4.0.0 a.m., Stations, 154, 158; 220 square miles.
- 39.—February 2nd, 9.30.0 a.m., Stations, 157; 368 square miles.
- 40.—February 2nd, 10.35.0 p.m., Station, 120; 571 square miles.
- 41.—February 2nd, 4.8.0 p.m., Stations, 79, 88, 89, 90, 91, 92, 98, 100, 101, 102; 1,810 square miles.
- 42.—February 4th, 6.10.0 p.m., Station, 131; 149 square miles.
- 43.—February 4th, 7.40.0 p.m., Stations, 83, 81, 80, 88, 84, 85, 86, 87, 89, 90, 81, 98, 102, 100, 101, 103, 104, 105; 3,375 square miles.
- 44.—February 4th, 8.0.0 p.m., Stations, 54, 68; 470 square miles.
- 45.—February 6th, 8.5.0 a.m., Station, 152; 344 square miles.
- 46.—February 6th, 8.10.0 a.m., Station, 152; 344 square miles.
- 47.—February 6th, 9.40.27 a.m., Station, 100; 71 square miles.
- 48.—February 6th, 1.34.57 p.m., Stations, 110, 111, 99, 100, 101, 105, 108, 109, 107, 106, 103, 102, 98, 96, 116, 114, 115, 117, 118, 91, 104, 86, 85, 87, 88, 89, 90, 92, 97, 95, 119, 130, 120, 122, 76, 94, 93, 77, 78, 79, 80, 81, 84, 83, 82, 74, 75, 73, 64, 68; 15,429 square miles.

- 49.—February 6th, 1.20.0 p.m., Station, 54; 141 square miles.
- 50.—February 6th, 5.50.0 p.m., Stations, 54, 68; 249 square miles.
- 51.—February 6th, about 11.0.0 p.m., Stations, 178, 148, 149, 174, 177, 181, 179, 147; 2,460 square miles.
- 52.—February 7th, 1.0.0 a.m., Station, 23; 620 square miles.
- 53.—February 8th, 0.30.0 a.m., Station, 64; 893 square miles.
- 54.—February 8th, 4.0.0 a.m., Stations, 217, 218, 219, 200, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 236; 8,562 square miles.
- 55.—February 9th, 2.0.0 a.m., Stations, 33, 34, 35, 36, 37, 38, 39, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 116, 117, 118, 119, 120; 30,905 square miles.
- 56.—February 9th, 10.25.23 p.m., Station, 136; 220 square miles.
- 57.—February 10th, 11.57.0 a.m., Station, 41; 249 square miles.
- 58.—February 10th, 10.20.00 p.m., Station 125; 322 square miles.
- 59.—February 12th, 2.56.58 p.m., Stations, 82, 73, 74, 75, 76, 94, 120, 119, 117, 115, 114, 112, 110, 111, 118, 95, 93, 77, 78, 79, 80, 81, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108; 13,255 square miles.
- 60.—February 12th, 3.45.40 p.m., Station, 81; 90 square miles.
- 61.—February 12th, 5.7.00 p.m., Station, 23; 619 square miles.
- 62.—February 12th, 4.26.45 p.m., Stations, 165, 166, 167, 168, 169, 170, 171, 172, 173, 211, 176, 212, 213; 4,566 square miles.
- 63.—February 15th, 1.41.00 p.m., Station, 89; 173 square miles.
- 64.—February 15th, 3.40.00 p.m., Station, 81; 173 square miles.
- 65.—February 16th, 5.20.00 p.m., Station, 124; 249 square miles.
- 66.—February 17th, 1.00.00 p.m., Station, 89; 71 square miles.
- 67.—February 18th, 1.00.00 a.m., Station, 29; 869 square miles.
- 68.—February 19th, 4.00.00 a.m., Station, 100, 107; 273 square miles.
- 69.—February 20th, 9.10.00 a.m., Station, 127; 1,066 square miles.
- 70.—February 24th, 7.30.00 p.m., Station, 204, 203; 1,142 square miles.
- 71.—February 25th, 2.30.00 a.m., Station, 81; 298 square miles.
- 72.—February 26th, 1.43.00 a.m., Station, 51; 124 square miles.
- 73.—February 27th, 1.30.00 p.m., Stations, 74, 78, 79, 80, 81, 88, 89, 90, 91, 92, 98, 100, 101, 102, 103, 105; 3,845 square miles.
- 74.—February 27th, 3.10.20 p.m., Station, 86; 100 square miles.

75.—February 28th, 8.30.00 p.m., Stations, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 213; 4,172 square miles.

76.—February 28th, 10.30.00 p.m., Stations 81, 90, 91, 96, 98, 99, 100, 102; 1,269 square miles.

### MARCH.

77.—March 3rd, 4.5.0 p.m., Station, 203; 298 square miles.

78.—March 5th, 7.3.0 p.m., Station, 51; 149 square miles.

79.—March 5th, 6.30.0 p.m., Station, 59; 273 square miles.

80.—March 5th, 8.25.0 p.m., Station, 70; 893 square miles.

81.—March 7th, 0.40.0 a.m., Station, 218; 124 square miles.

82.—March 8th, 5.40.0 a.m., Stations, 4, 18; 221 square miles.

83.—March 8th, 6.55.0 a.m., Station, 23; 643 square miles.

84.—March 8th, after 7.0.0 p.m., Station, 100; 71 square miles.

85.—March 8th, 9.30.0 p.m., Stations, 85, 86; 71 square miles.

86.—March 8th, 10.15.10 p.m., Station, 104; 71 square miles.

87.—March 11th, 3.30.0 a.m.; Stations, 216, 222; 495 square miles.

88.—March 12th, 4.8.13 p.m.; Stations, 74, 78, 79, 80, 81, 84, 88, 89, 87, 90, 91, 92, 97, 98, 100, 101, 102; 4,714 square miles.

89.—March 13th, 8.42.30 p.m., Station, 57; 149 square miles.

90.—March 17th, 11.44.57 a.m., Stations, 144, 146; 1,119 square miles.

91.—March 17th, 0.15.0 p.m., Stations, 78, 79; 250 square miles.

92.—March 20th, 10.15.0 a.m., Stations, 74, 77; 571 square miles.

93.—March 20th, 0.0.5 p.m., Station 107; 78 square miles.

94.—March 20th, 1.1.13 p.m., Stations, 71, 72, 73, 64, 74, 75, 82, 83, 81, 80, 79, 78, 77, 92, 91, 90, 89, 87, 86, 85, 84, 101, 102, 103, 104, 105, 106, 107, 108, 109, 76, 123, 126, 121, 127, 129, 142, 141, 128, 140, 134, 133, 131, 113, 122, 94, 93, 120, 95, 119, 117, 115, 114, 116, 112, 110, 111, 97, 96, 118, 98, 99, 100; 22,860, square miles.

95.—March 20th, 1.57.0 p.m., Station, between 112 and 113; 98 square miles.

96.—March 20th, 2.21.48 p.m., Stations, 114, 115, 116, 117, 130, 100; 1,571 square miles.

97.—March 20th, about 4.0.0 p.m., Station, 96; 149 square miles.

98.—March 20th, 4.10.0 p.m., Station, 140; 173 square miles.

99.—March 20th, 11.20.0 p.m., Station, 141; 411 square miles.

100.—March 21st, 9.48.46 a.m., Station 124; 124 square miles.

101.—March 22nd, 11.25.0 a.m., Station 115; 368 square miles.



- 102.—March 23rd, 2.31.28 a.m., Station, 100 ; 71 square miles.
- 103.—March 23rd, 5.54.0 a.m., Station, 4 ; 149 square miles.
- 104.—March 24th, after 2.0.0 a.m., Station, 100 ; 71 square miles.
- 105.—March 24th, 11.50.0 p.m., Station, 4 ; 149 square miles.
- 106.—March 25th, 9.40.0 a.m., Stations, 23, 24, 25, 26 ; 1,737 square miles.
- 107.—March 26th, 1.0.0 p.m., Station, 89 ; 124 square miles.
- 108.—March 27th, 2.27.35 p.m., Stations, 100, 101, 103, 105 ; 422 square miles.
- 109.—March 28th, 1.7.0 a.m., Station, 100 ; 71 square miles.
- 110.—March 30th, 9.25.0 p.m., Stations, 204, 203, 201, 194, 195, 196, 197, 198, 200, 199 ; 4,714 square miles.
- 111.—March 30th, 9.35.0 p.m., Station, 221 ; 149 square miles.
- 112.—March 31st, 7.55.0 a.m., Station, 170 ; 149 square miles.
- 113.—March 31st, 10.15.0 p.m., Station, 216 ; 173 square miles.

#### APRIL.

- 114.—April 1st, 4.48.20 p.m., Station, 22 ; 398 square miles.
- 115.—April 1st, 5.55.0 p.m., Station, 23 ; 620 square miles.
- 116.—April 2nd, 3.50.0 a.m., Station, 125 ; 422 square miles.
- 117.—April 2nd, 5.30.0 a.m., Station, 202 ; 368 square miles.
- 118.—April 2nd, 8.25.0 a.m., Station, 181 ; 471 square miles.
- 119.—April 6th, 9.40.0 p.m., Station, 140 ; 349 square miles.
- 120.—April 7th, after 2.0.0 a.m., Station, 100 ; 71 square miles.
- 121.—April 8th, 8.10.0 a.m., Station, 81 ; 744 square miles.
- 122.—April 10th, 7.35.45 p.m., Station, 40 ; 344 square miles.
- 123.—April 10th, 8.18.0 p.m., Station, 87 ; 173 square miles.
- 124.—April 12th, 10.17.35 a.m., Station, 81 ; 744 square miles.
- 125.—April 17th, 11.10.0 p.m., Station, 41 ; 493 square miles.
- 126.—April 18th, 7.5.0 a.m., Station, 41 ; 493 square miles.
- 127.—April 18th, 7.5.0 p.m., Station, 107 ; 249 square miles.
- 128.—April 19th, 3.10.5 p.m., Station, 218 ; 220 square miles.
- 129.—April 21st, 3.45.0 p.m., Station, 4 ; 344 square miles.
- 130.—April 22nd, 2.9.45 a.m., Station, 81 ; 249 square miles.
- 131.—April 22nd, 4.30.0 a.m., Station, 181 ; 249 square miles.
- 132.—April 22nd, 3.44.0 p.m., Station, 84 ; 124 square miles.
- 133.—April 22nd, 4.30.0 p.m., Stations, 80.81 ; 993 square miles.
- 134.—April 23rd, 11.52.24 a.m., Station, 100 ; 71 square miles.
- 135.—April 23rd, about 0.0.0 p.m., Station, 79 ; 371 square miles.
- 136.—April 23rd, 7.41.0 p.m., Station, 89 ; 249 square miles.

- 137.—April 24th, 1.30.0 p.m., Stations, 67, 69, 70, 71, 72, 82, 83, 81, 80, 84, 88, 89, 90, 87, 86, 85, 102, 101, 103, 104, 105, 106, 107, 108; 6,591 square miles.
- 138.—April 24th, 2.30.0 p.m., Stations, 54, 66, 68, 67, 69, 71; 2,858 square miles.
- 139.—April 24th, 2.55.0 p.m., Stations, 84, 86, 87; 399 square miles.
- 140.—April 24th, 6.25.0 p.m., Station, 107; 322 square miles.
- 141.—April 24th, 11.26.0 p.m., Station, 167; 620 square miles.
- 142.—April 25th, about 6.0.0 a.m., Station, 71; 89 square miles.
- 143.—April 25th, 7.1.53 a.m., Stations, 54, 68, 82, 81, 83, 84, 85, 86, 87, 88, 89, 90, 91, 98, 99, 100, 101, 102, 103, 104, 105; 4,007 square miles.
- 144.—April 25th, 8.25.0 a.m., Station, 87; 72 square miles.
- 145.—April 25th, 9.10.0 a.m., Stations, 84, 85, 86; 149 square miles.
- 146.—April 25th, 9.15.0 a.m., Station, 142; 620 square miles.
- 147.—April 25th, 1.0.0 p.m., Station, 100; 124 square miles.
- 148.—April 26th, 3.30.0 p.m., Stations, 167, 168, 213; 1,418 square miles.
- 149.—April 26th, 4.35.0 a.m., Station, 202; 249 square miles.
- 150.—April 28th, 10.0.0 a.m., Stations, 166, 168, 167, 169, 172, 170, 212, 213; 2,041 square miles.

## MAY.

- 151.—May 1st, 2.30.0 a.m., Stations, 89, 90, 91, 98, 99, 100, 101, 102, 107; 890 square miles.
- 152.—May 1st, 2.43.5 a.m., Stations, 169, 170; 250 square miles.
- 153.—May 1st, 8.20.0 p.m., Station, 23; 844 square miles.
- 154.—May 3rd, 3.30.0 a.m., Stations, 170, 169; 720 square miles.
- 155.—May 3rd, 10.15.0 p.m., Station, 107; 249 square miles.
- 156.—May 4th, 1.05.0 p.m., Station, 23; 720 square miles.
- 157.—May 4th, 5.30.0 p.m., Station, 23; 720 square miles.
- 158.—May 5th, 6.13.0 p.m. Stations, 204, 205; 422 square miles.
- 159.—May 6th, 8.45.30 a.m, Station, 49; 344 square miles.
- 160.—May 7th, 0.4.0 a.m., Stations, 48, 49, 50, 47, 51, 52, 53, 54, 68, 55, 66, 67, 69, 65, 63, 64, 72, 71, 70, 73, 75, 74, 82, 83, 84, 85, 86, 87, 81, 80, 88, 89, 90, 79, 78, 77, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 110, 111, 112, 116, 118, 119, 120; 19,104 square miles.
- 161.—May 7th, 10.54.0 a.m., Station, 48; 84 square miles.
- 162.—May 7th, 1.30.0 p.m., Station, 78; 344 square miles.
- 163.—May 8th, 3.30.0 a.m., Stations, 58, 59, 60, 61; 2084 square miles.

- 164.—May 8th, 4.0.0 a.m., Stations, 60, 61, 58, 59; 1,488 square miles.
- 165.—May 8th, 1.56.0 p.m., Stations, 167, 168; 571 square miles.
- 166.—May 8th, 9.19.0 p.m., Station, 244; 124 square miles.
- 167.—May 8th, 11.25.0 a.m., Station 4; 249 square miles.
- 168.—May 9th, 2.55.0 p.m., Station, 85; 251 square miles.
- 169.—May 9th, about 2.0.0 p.m., Station 166; 125 square miles.
- 170.—May 12th, 4.0.0 p.m., Stations, 187, 188; 917 square miles.
- 171.—May 13th, 5.32.0 p.m., Station, 23; 720 square miles.
- 172.—May 13th, 7.25.0 p.m., Station, 23; 720 square miles.
- 173.—May 13th, 8.50.0 p.m., Station, 51; 249 square miles.
- 174.—May 14th, 4.35.0 a.m., Station, 23; 720 square miles.
- 175.—May 14th, 5.3.0 a.m., Station, 23; 720 square miles.
- 176.—May 14th, 10.30.0 p.m., Stations, 70, 71, 82, 83, 84, 86; 2,137 square miles.
- 177.—May 15th, 2.30.0 a.m., Station, 200, 199, 205, 206, 207, 208; 2,233 square miles.
- 178.—May 15th, 3.30.0 a.m., Stations, 229, 231; 844 square miles.
- 179.—May 15th, about 2.0.0 p.m., Stations, 78, 79, 90, 91, 92; 791 square miles.
- 180.—May 15th, 9.40.0 p.m., Station, 183; 344 square miles.
- 181.—May 16th, 1.30.0 a.m., Station, 184; 249 square miles.
- 182.—May 16th, 7.30.0 a.m., Station, 184; 344 square miles.
- 183.—May 16th, 1.22.0 p.m., Station, 79; 273 square miles.
- 184.—May 16th, about 8.0.0 p.m., Station, 128; 893 square miles.
- 185.—May 16th, 2.35.0 p.m., Station, 184; 298 square miles.
- 186.—May 17th, 7.0.0 a.m., Station, 53; 249 square miles.
- 187.—May 18th, 11.43.0 p.m., Station, 128; 993 square miles.
- 188.—May 19th, 1.35.0 a.m., Station, 87; 273 square miles.
- 189.—May 19th, 2.50.0 a.m., Stations, 81, 100; 566 square miles.
- 190.—May 19th, about 3.0.0 a.m., Station, 205; 71 square miles.
- 191.—May 19th, 4.10.0 p.m., Station, 50; 124 square miles.
- 192.—May 19th, 6.3.0 p.m., Station, 50; 124 square miles.
- 193.—May 19th, 11.53.32 p.m., Station, 81; 344 square miles.
- 194.—May 20th, 3.0.0 a.m., Station, 167; 720 square miles.
- 195.—May 21st, 5.15.0 a.m., Station, 79; 620 square miles.
- 196.—May 21st, 6.26.55 a.m., Station, 81; 368 square miles.
- 197.—May 21st, 1.40.0 p.m., Station, 244; 124 square miles.
- 198.—May 25th, 3.4.48 a.m., Station, 170; 124 square miles.

- 199.—May 25th, 6.12.30 a.m., Stations, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 141, 142, 140, 137, 138, 139, 154, 155, 156, 157, 158, 159, 160, 161, 164, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 184, 185; 12,039 square miles.
- 200.—May 25th, 7.35.0 a.m., Station, 175; 78 square miles.
- 201.—May 29th, 5.30.0 a.m., Stations, 151, 150, 153, 154, 155, 157, 158, 159, 160, 161, 148; 2,755 square miles.

## JUNE.

- 202.—June 1st, about 2.0.0 a.m., Stations, 189, 190, 194, 195, 196, 197, 198, 199, 200, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227; 8,418 square miles.
- 203.—June 4th, 0.40.0 p.m., Station, 50; 24 square miles.
- 204.—June 6th, about 4.0.0 p.m., Stations, 242, 238, 236, 237, 225, 227, 235, 240; 2,977 square miles.
- 205.—June 7th, 8.0.0 p.m., Stations, 43, 47, 48, 49, 50, 51, 52, 53, 54, 68; 2,828 square miles.
- 206.—June 7th, 11.34.18 p.m., Stations, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 98, 100, 101, 102; 4,590 square miles.
- 207.—June 8th, 8.20.0 a.m., Station, 33; 190 square miles.
- 208.—June 8th, 1.50.0 a.m., Stations, 4, 29, 33; 1,274 square miles.
- 209.—June 10th, 10.30.0 p.m., Station, 23; 720 square miles.
- 210.—June 11th, 9.30.0 a.m., Stations, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 68; 21,850 square miles.
- 211.—June 11th, 9.20.5 a.m., Stations, 79, 100, 118; 244 square miles.
- 212.—June 12th, 7.41.10 a.m., Station, 22; 249 square miles.
- 213.—June 13th, 11.0.0 a.m., Stations, 231, 233, 234, 246; 1,203 square miles.
- 214.—June 14th, 9.3.0 p.m., Station, 50; 173 square miles.
- 215.—June 14th, 9.33.21 p.m., Stations, 169, 170; 250 square miles.
- 216.—June 14th, 11.40.0 p.m., Station, 74; 368 square miles.
- 217.—June 15th, 1.41.41 a.m., Stations, 60, 64, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 130; 17,986 square miles.
- 218.—June 15th, 0.45.0 a.m., Station, 23; 238 square miles.
- 219.—June 15th, 4.0.0 a.m., Station, 77; 220 square miles.
- 220.—June 15th, 8.40.0 a.m., Station, 100; 71 square miles.
- 221.—June 15th, 9.20.0 p.m., Stations, 23, 24, 32; 1,715 square miles.

- 222.—June 15th, 12.0.0 p.m., Station, 17; 368 square miles.
- 223.—June 18th, 2.30.0 a.m., Stations, 81, 87, 88, 89, 90, 102; 596 square miles.
- 224.—June 18th, 1.36.45 p.m., Stations, 43, 47, 49, 50, 51, 52, 46, 53, 54, 68, 55, 66, 67, 65, 63, 70, 71, 72, 64, 73, 74, 82, 83, 84, 80, 81, 85, 86, 87, 88, 89, 90, 78, 79, 92, 91, 97, 96, 98, 99, 100, 101, 102, 103, 104, 105, 111; 15,571 square miles.
- 225.—June 19th, 0.30.0 a.m., Stations, 79, 82; 399 square miles.
- 226.—June 19th, 1.0.0 a.m., Station, 4; 71 square miles.
- 227.—June 19th, after 9.0.0 a.m., Stations, 49, 50; 220 square miles.
- 228.—June 19th, 11.10.0 p.m., Station, 23; 720 square miles.
- 229.—June 19th, 11.15.0 p.m., Station, 23; 720 square miles.
- 230.—June 21st, 2.12.0 a.m., Station, 23; 720 square miles.
- 231.—June 24th, 7.35.0 a.m., Stations, 79, 87; 471 square miles.
- 232.—June 24th, 7.0.0 p.m., Station, 179; 173 square miles.
- 233.—June 24th, 10.56.30 p.m., Station, 247; 71 square miles.
- 234.—June 26th, 9.45.0 a.m., Station, 50; 71 square miles.
- 235.—June 26th, 10.0.0 a.m., Stations, 150, 151, 153, 154, 155, 158; 1,363 square miles.
- 236.—June 26th, 10.10.0 p.m., Station, 117; 173 square miles.
- 237.—June 27th, 4.0.0 a.m., Station, 203; 273 square miles.
- 238.—June 27th, 8.52.0 a.m., Station, 4; 124 square miles.
- 239.—June 27th, 10.45.30 a.m., Station, 154; 71 square miles.
- 240.—June 27th, 1.40.0 p.m., Stations, 82, 83, 84; 471 square miles.
- 241.—June 28, 2.22.18 a.m., Stations, 123, 121, 120, 95, 118, 119, 117, 130, 115, 114, 113, 116, 112, 110, 111, 99, 100, 96; 5,090 square miles.
- 242.—June 30th, 1.0.0 a.m., Station, 169; 220 square miles.
- 243.—June 30th, 7.7.15 p.m., Station 151; 249 square miles.
- 244.—June 30th, 10.30.0 p.m., Stations, 31, 38, 39, 34, 40, 41, 42, 37, 43, 47, 48, 49, 50, 51, 52, 53, 54, 68; 822 square miles.

## JULY.

- 245.—July 1st, 3.2.0 a.m., Station, 4; 71 square miles.
- 246.—July 1st, 0.10.0 p.m., Stations, 123, 124; 993 square miles.
- 247.—July 1st, 7.0.0 p.m., Stations, 184, 181; 993 square miles.
- 248.—July 2nd, 2.57.0 p.m., Station, 23; 493 square miles.
- 249.—July 3rd, 7.32.15 a.m., Station, 22; 249 square miles.
- 250.—July 3rd, 2.15.0 p.m., Station, 184; 71 square miles.

- 251.—July 5th, 2.30.0 a.m., Station, 4; 71 square miles.  
 252.—July 5th, 2.27.0 p.m., Stations, 226, 228; 322 square miles.  
 253.—July 6th, 2.40.0 a.m., Station, 120; 471 square miles.  
 254.—July 8th, 11.27.0 a.m., Station, 244; 249 square miles.  
 255.—July 9th, 3.14.0 a.m., Stations, 13, 14; 471 square miles.  
 256.—July 10th, 3.10.0 a.m., Stations, 13, 14, 16, 17, 18, 19, 20, 22, 23, 24, 26, 27, 32, 30, 31; 13,475 square miles.  
 257.—July 10th, 1.32.0 a.m., Station, 22; 131 square miles.  
 258.—July 11th, after 1.0.0 p.m., Stations, 74, 78, 79, 80, 81, 88, 90, 89; 1,810 square miles.  
 259.—July 13th, 5.55.0 a.m., Station, 181; 71 square miles.  
 260.—July 14th, 8.17.0 p.m., Station, 70; 124 square miles.  
 261.—July 15th, 4.45.54 p.m., Stations, 99, 111; 124 square miles.  
 262.—July 16th, 6.37.15 a.m., Station, 81; 249 square miles.  
 263.—July 21st, after 2.0.0 a.m., Stations, 14, 17, 18, 20, 22, 23; 5,458 square miles.  
 264.—July 21st, about 6.0.0 a.m., Stations, 78, 79, 80, 88, 87, 89, 90, 91, 92, 98, 102; 1,935 square miles.  
 265.—July 22nd, 2.7.0 a.m., Station, 4; 71 square miles.  
 266.—July 22nd, 9.22.56 a.m., Station, 81; 368 square miles.  
 267.—July 24th, 1.50.0 a.m., Stations, 232, 233, 247; 344 square miles.  
 268.—July 24th, about 3.0.0 a.m., Stations, 231, 233; 493 square miles.  
 269.—July 24th, 8.45.28 a.m., Stations, 147, 148; 71 square miles.  
 270.—July 24th, 6.1.5 p.m., Stations, 147, 148; 71 square miles.  
 271.—July 28th, 8.50.45 a.m., Station, 170; 124 square miles.  
 272.—July 29th, 5.21.53 a.m., Stations, 4, 6, 5, 8, 7, 9, 10, 15, 16, 13, 14, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 49; 23,344 square miles.  
 273.—July 29th, 6.14.5 p.m., Stations, 81, 87, 88, 89; 869 square miles.  
 274.—July 29th, 6.30.2 p.m., Station, 19; 137 square miles.  
 275.—July 29th, 8.3.0.0 p.m., Stations, 81, 87, 88, 89; 744 square miles.  
 276.—July 30th, 11.42.0 p.m., Station, 88; 124 square miles.

## AUGUST.

- 277.—August 1st, 3.0.0 a.m., Station, 75; 132 square miles.  
 278.—August 2nd, 2.30.0 a.m., Station, 78; 95 square miles.  
 279.—August 2nd, 11.20.0 a.m., Station, 4; 232 square miles.

- 280.—August 3rd, 3.47.0 p.m., Station, 78; 37 square miles.
- 281.—August 7th, about 0.0.0 a.m., Station, 68; 78 square miles.
- 282.—August 8th, 8.4.0 a.m., Stations, 169, 170; 422 square miles.
- 383.—August 8th, 11.30.0 p.m., Stations, 43, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56; 3,555 square miles.
- 284.—August 11th, after 5.0.0 a.m., Stations, 81, 85, 86, 87, 88, 89, 102; 1,005 square miles.
- 285.—August 11th, about 8.0.0 a.m., Stations, 195, 196, 197, 198, 201, 194; 1,394 square miles.
- 286.—August 12th, 2.30.0 a.m., Stations, 81, 84, 86, 87, 88; 422 square miles.
- 287.—August 13th, 9.32.0 a.m., Stations, 227, 228, 229, 230, 231, 232, 233, 234, 246, 247; 3,763 square miles.
- 288.—August 16th, 10.20.0 p.m., Stations, 219, 220; 227 square miles.
- 289.—August 19th, 9.13.30 p.m., Stations, 170; 37 square miles.
- 290.—August 19th, 11.30.0 p.m., Station, 165; 196 square miles.
- 291.—August 20th, 3.45.0 a.m., Stations, 135, 136, 137, 138, 139, 140, 156, 155, 153, 150, 154, 159, 153, 157, 149, 161, 160, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 148, 181, 184, 185; 9,401 square miles.
- 292.—August 21st, 11.30.00 p.m., Stations, 140, 137; 612 square miles.
- 293.—August 22nd, after 2.0.0 a.m., Stations, 141, 142, 140, 137, 139, 138; 1,588 square miles.
- 294.—August 24th, 11.55.0 p.m., Station, 5; 488 square miles.
- 295.—August 24th, 1.31.0 a.m., Station 8; 72 square miles.
- 296.—August 25th, 2.30.0 a.m., Stations, 5, 8, 7, 9, 16, 23; 2,553 square miles.
- 297.—August 25th, 1.35.0 p.m., Station, 102; 66 square miles.
- 298.—August 26th, 5.2.30 a.m., Station, 100; 83 square miles.
- 299.—August 26th, after 6.0.0 p.m., Stations, 235, 236, 237, 245; 1,459 square miles.
- 300.—August 26th, after 8.0.0 p.m., Stations 235, 237, 238, 240, 242, 245; 1,620 square miles.
- 301.—August 28th, 9.37.28 p.m., Station, 100; 66 square miles.
- 302.—August 29th, about 1.00.00 a.m., Stations, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 211, 212, 213, 214, 215, 189, 190; 5,858 square miles.
- 303.—August 30th, about 10.0.0 p.m., Stations, 187, 192, 191; 583 square miles.
- 304.—August 31st, about 4.0.0 a.m., Station, 107; 29 square miles.
- 305.—August 31st, 5.23.55 a.m., Station, 100; 29 square miles.

## SEPTEMBER.

- 306.—September 2nd, 8.31.22 a.m., Stations, 73, 74, 78, 79, 80, 81, 84, 85, 86, 87, 88, 89, 90, 91, 92, 98, 100, 101, 102, 105, 119; 5,030 square miles.
- 307.—September 2nd, 9.50.0 a.m., Station, 89; 72 square miles.
- 308.—September 5th, 8.40.0 a.m., Station, 100; 66 square miles.
- 309.—September 5th, about 8.0.0 p.m., Stations, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 16, 17, 20, 22, 23, 24, 25, 26, 27, 28; 18,575 square miles.
- 310.—September 5th, 9.11.0 p.m., Station, 1; 130 square miles.
- 311.—September 5th, 11.10.0 p.m., Stations, 1, 2, 3, 4, 5, 6, 8; 4,895 square miles.
- 312.—September 6th, 2.21.0 a.m., Stations, 26, 27; 714 square miles.
- 313.—September 6th, 2.30.21 a.m., Station, 1, 2; 65 square miles.
- 314.—September 6th, 7.35.0 a.m., Station, 31; 649 square miles.
- 315.—September 6th, 8.10.0 a.m., Station, 8; 429 square miles.
- 316.—September 8th, 8.40.0 a.m., Station, 78; 132 square miles.
- 317.—September 8th, 10.5.0 p.m., Station, 6; 135 square miles.
- 318.—September 8th, 11.20.0 p.m., Stations, 3, 4, 5, 6, 7, 8, 9, 10, 16, 17, 20, 22, 23, 24, 26, 27, 31, 32; 12,761 square miles.
- 319.—September 9th, about 9.0.0 p.m., Stations, 82, 83, 81, 84, 86, 87, 88, 89, 90, 102, 103, 80, 73, 74, 79; 3,340 square miles.
- 320.—September 10th, 11.15.0 a.m., Stations, 243, 244; 100 square miles.
- 321.—September 10th, 8.19.6 p.m., Station, 100; 29 square miles.
- 322.—September 11th, 1.24.30 a.m., Station, 100; 90 square miles.
- 323.—September 12th, 3.5.0 a.m., Station, 23; 471 square miles.
- 324.—September 14th, 1.45.0 p.m., Station, 100; 29 square miles.
- 325.—September 14th, 6.50.0 p.m., Station, 164; 83 square miles.
- 326.—September 14th, 9.40.0 p.m., Station, 143; 95 square miles.
- 327.—September 15th, 5.48.40 p.m., Station, 170; 60 square miles.
- 328.—September 15th, before 7.0.0 p.m., Stations, 96, 117, 118; 690 square miles.
- 329.—September 16th, 3.55.0 p.m., Station, 73; 26 square miles.
- 330.—September 18th, 0.33.23 p.m., Station, 170; 132 square miles.
- 331.—September 20th, 1.13.50 a.m., Station, 100; 29 square miles.
- 332.—September 22nd, 2.29.43 a.m., Station, 100; 30 square miles.
- 333.—September 22nd, about 3.0.0 a.m., Stations, 113, 114, 118, 119, 120, 122; 887 square miles.
- 334.—September 22nd, 0.11.0 p.m., Station, 246; 59 square miles.



- 335.—September 23rd, about 7.0.0 a.m., Stations, 227, 228, 230; 71 square miles.
- 336.—September 25th, 2.10.0 a.m., Station, 3; 876 square miles.
- 337.—September 25th, 9.25.0 a.m., Station, 119; 161 square miles.
- 338.—September 25th, about 11.0.0 a.m., Station, 119; 66 square miles.
- 339.—September 26th, 2.39.0 a.m., Stations, 4, 5, 6; 1,430 square miles.
- 340.—September 26th, 11.35.0 a.m., Station, 113; 63 square miles.
- 341.—September 26th, 0.2.45 p.m., Stations, 107, 108, 109, 101, 102, 89, 90, 91, 92, 98, 100, 99, 110, 111, 96, 97, 93, 78, 95, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 150, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 149, 162, 163, 164, 177; 16,713 square miles.
- 342.—September 27th, about 6.0.0 p.m., Stations, 5, 8; 1,132 square miles.
- 343.—September 27th, 9.20.0 p.m., Station, 164; 66 square miles.
- 344.—September 28th, 5.25.0 a.m., Stations, 162, 163, 164, 165, 173, 174, 175, 161, 160, 149, 157, 158, 159, 150, 154, 153, 152, 153, 155, 156, 141, 140, 139, 138, 127, 142, 127, 128, 136, 135, 109, 89, 90, 91, 92, 96, 98, 100, 99, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 126, 129, 130, 131, 132, 133, 134; 15,578 square miles.
- 345.—September 28th, 6.1.0 a.m., Station, 122; 88 square miles.
- 346.—September 28th, 10.34.0 a.m., Station, 100; 63 square miles.
- 347.—September 28th, about 4.0.0 p.m., Stations, 246, 247; 132 square miles.
- 348.—September 29th, 8.39.9 a.m., Station 800; 30 square miles.
- 349.—September 29th, about 9.0.0 a.m., Stations, 119, 114; 232 square miles.
- 350.—September 29th, 6.20.0 p.m., Station 119; 95 square miles.

## OCTOBER.

- 351.—October 1st, 7.30.0 a.m., Station, 247; 190 square miles.
- 352.—October 1st, 1.8.57 p.m., Stations, 73, 74, 75, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108; 7,579 square miles.
- 353.—October 2nd, after 7.0.0 p.m., Stations, 31, 38, 39, 40, 41, 42, 43, 47, 48, 49, 50, 51, 52, 53, 54; 7,662 square miles.
- 354.—October 3rd, 5.4.0 a.m., Station, 4; 173 square miles.
- 355.—October 5th, after 11.0.0 a.m., Stations, 81, 84, 85, 86, 87, 88, 89, 102, 103, 104; 2,059 square miles.
- 356.—October 6th, 6.40.0 a.m., Station, 144; 100 square miles.

- 357.—October 7th, after 1.0.0 p.m., Stations, 73, 74, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 102, 103, 104; 4,226 square miles.
- 358.—October 7th, 7.35.0 a.m., Station, 100; 66 square miles.
- 359.—October 7th, 8.25.0 p.m., Stations, 1, 2, 3, 4, 5, 6, 8; 3,716 square miles.
- 360.—October 8th, 1.37.0 p.m., Station, 230; 1,599 square miles.
- 361.—October 9th, 7.53.0 p.m., Station, 100; 78 square miles.
- 392.—October 11th, 5.30.0 a.m., Station, 78, 79, 80, 81, 82, 83, 84, 85, 56, 87, 88, 89, 90, 91, 92, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108; 5,978 square miles.
- 363.—October 12th, 0.21.0 p.m., Station, 4; 178 square miles.
- 364.—October 12th, 9.10.0 p.m., Station, 168; 154 square miles.
- 365.—October 14th, about 9.0.0 a.m., Stations, 3, 4, 5; 1,525 square miles.
- 366.—October 15th, 1.40.0 a.m., Station, 41; 173 square miles.
- 367.—October 15th, before 9.0.0 a.m., Stations, 96, 98, 100, 99, 111, 112, 115, 116, 117, 118, 119, 95, 120, 121, 122, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165; 14,330 square miles.
- 368.—October 15th, 8.43.3 p.m., Stations, 87, 89, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111; 2,899 square miles.
- 369.—October 16th, 5.58.0 a.m., Station, 170; 154 square miles.
- 370.—October 17th, after 5.0.0 a.m., Stations, 206, 207; 590 square miles.
- 371.—October 17th, 1.55.0 p.m., Stations, 235, 237; 398 square miles.
- 372.—October 18th, 1.15.0 a.m., Station, 210; 207, square miles.
- 373.—October 18th, before 10.0.0 a.m., Station, 140; 273 square miles.
- 374.—October 18th, about 0.0.0 p.m., Stations, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 102, 103, 104; 2,567 square miles.
- 375.—October 19th, after 9.0.0 a.m., Stations, 127, 143; 2,179 square miles.
- 376.—October 20th, 10.0.0 p.m., Station, 89; 190 square miles.
- 377.—October 21st, 0.10.0 a.m., Station, 4; 220 square miles.
- 378.—October 21st, after 1.0.0 a.m., Stations, 76, 77, 93, 94, 95, 96, 97, 98, 99, 100, 110, 111, 112, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 164, 174, 175, 177, 178, 185; 19,522 square miles.

- 379.—October 21st, 7.38.0 p.m., Stations, 229, 231, 232, 233, 234, 246, 247; 2,245 square miles.
- 380.—October 22nd, 2.13.0 p.m., Station, 119; 166 square miles.
- 381.—October 24th, after 5.0.0 a.m., Stations, 84, 85, 86, 87, 89, 99, 100, 101, 102, 103, 104, 105; 2,555 square miles.
- 382.—October 24th, 1.5.0 a.m., Station, 4; 173 square miles.
- 383.—October 26th, before 7.0.0 p.m., Stations, 81, 83; 2,647 square miles.
- 384.—October 26th, 10.41.0 p.m., Stations, 108, 109, 95, 96, 97, 91, 92, 98, 99, 100, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 130, 131, 132, 133, 141, 142, 153, 155; 6,798 square miles.
- 385.—October 27th, 1.30.0 a.m., Station, 158; 132 square miles.
- 386.—October 27th, 7.50.0 p.m., Station, 213; 173 square miles.
- 387.—October 28th, 10.12.0 p.m., Stations, 197, 198; 231 square miles.
- 388.—October 29th, 3.18.0 p.m., Station, 81; 207 square miles.
- 389.—October 30th, 8.30.0 p.m., Stations, 4, 5, 6, 7, 8, 9, 17, 20, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 98, 100, 101, 102, 103, 105; 34,738 square miles.
- 390.—October 31st, 10.30.0 a.m., Station, 247; 120 square miles.
- 391.—October 31st, about 2.0.0 p.m., Station, 246; 83 square miles.

## NOVEMBER.

- 392.—November 1st, 3.27.0 a.m., Stations, 4, 5, 7, 8; 1,557 square miles.
- 393.—November 1st, 5.20.0 a.m., Station, 5; 97 square miles.
- 394.—November 1st, 1.17.0 p.m., Station, 198, 199, 200, 205, 218, 219, 220, 221; 2,054 square miles.
- 395.—November 1st, 8.25.0 p.m., Station, 247; 83 square miles.
- 396.—November 1st, 8.33.0 p.m., Station, 247; 83 square miles.
- 397.—November 2nd, 3.11.0 a.m., Station, 31; 293 square miles.
- 398.—November 2nd, 0.20.0 p.m., Stations, 4, 5, 7, 8; 1,418 square miles.
- 399.—November 3rd, 10.50.0 p.m., Stations, 114, 115, 117, 119, 130; 1,194 square miles.
- 400.—November 3rd, 11.30.0 p.m., Station, 119; 104 square miles.
- 401.—November 4th, 5.30.0 a.m., Station, 290; 173 square miles.
- 402.—November 6th, 7.8.0 a.m., Station, 103; 195 square miles.
- 403.—November 6th, about 9.0.0 p.m., Stations 78, 79, 80, 81, 87, 88, 89, 90, 91, 92, 102, 103; 2,301 square miles.

- 404.—November 7th, 1.7.0 p.m., Station, 20; 195 square miles.  
405.—November 7th, 7.16.0 p.m., Station, 4; 17 square miles.  
406.—November 7th, 8.29.0 p.m., Station, 57; 95 square miles.  
407.—November 7th, 8.55.0 p.m., Stations, 63, 64, 73, 80, 88;  
293 square miles.  
408.—November 7th, about 11.0.0 p.m., Stations, 63, 64; 322  
square miles.  
409.—November 8th, 11.5.0 a.m., Station, 81; 161 square miles.  
410.—November 9th, 2.07.0 a.m., Station, 178; 29 square miles.  
411.—November 10th, about 0.0.0 a.m., Stations, 233, 246, 247;  
285 square miles.  
412.—November 11th, 8.37.0 p.m., Station, 4; 83 square miles.  
413.—November 11th, about 9.0.0 p.m., Stations, 100, 107, 108,  
109; 715 square miles.  
414.—November 12th, after 7.0.0 a.m., Stations, 198, 199, 200, 207,  
208, 209; 1,261 square miles.  
415.—November 12th, 1.10.0 p.m., Station, 85; 649 square miles.  
416.—November 12th, about 8.0.0 p.m., Stations, 81, 85, 86, 87,  
89, 102, 103; 1,166 square miles.  
417.—November 12th, 9.7.15 p.m., Station, 170; 124 square miles.  
418.—November 13th, 5.30.0 a.m., Station, 5; 249 square miles.  
419.—November 13th, before 8.0.0 a.m., Stations, 78, 79, 80, 81,  
87, 88, 89, 90, 102; 1,637 square miles.  
420.—November 14th, 3.55.0 a.m., Station, 178; 29 square miles.  
421.—November 14th, 2.0.0 p.m., Station, 123; 30 square miles.  
422.—November 14th, 2.25.0 p.m., Station, 4; 124 square miles.  
423.—November 16th, 9.9.0 a.m., Station, 81; 215 square miles.  
424.—November 16th, 1.51.0 p.m., Stations, 98, 99, 100, 108; 227  
square miles.  
425.—November 18th, after 6.0.0 p.m., Stations, 71, 72, 81, 82, 83,  
84; 1,525 square miles.  
426.—November 18th, 8.7.0 p.m., Station, 7; 112 square miles.  
427.—November 18th, 9.21.0 p.m., Station, 88; 65 square miles.  
428.—November 18th, 9.55.0 p.m., Stations, 5, 6, 7, 8; 1,348  
square miles.  
429.—November 19th, 10.25.0 a.m., Station, 108; 95 square miles.  
430.—November 19th, 11.31.0 a.m., Station, 91; 178 square miles.  
431.—November 19th, 11.58.0 p.m., Station, 88; 95 square miles.  
432.—November 20th, 0.10.0 a.m., Station, 81; 195 square miles.  
433.—November 20th, about 8.0.0 p.m., Stations, 99, 100, 101, 105,  
106, 107, 108; 1,037 square miles.

- 434.—November 21st, 2.18.0 a.m., Stations, 4, 5; 368 square miles.  
 435.—November 21st, 8.27.0 p.m., Station, 51; 98 square miles.  
 436.—November 23rd, 7.58.0 a.m., Station, 88; 95 square miles.  
 437.—November 23rd, 10.45.0 p.m., Station, 52; 95 square miles.  
 438.—November 24th, 1.14.0 a.m., Station, 102; 66 square miles.  
 439.—November 24th, 2.14.0 p.m., Station, 52; 95 square miles.  
 440.—November 27th, midnight, Stations, 168, 167; 161 square miles.  
 441.—November 29th, about 11.0.0 a.m., Stations, 238, 239, 240, 241, 242; 1,278 square miles.  
 442.—November 29th, after 10.0.0 p.m., Station, 155; 161 square miles.

## DECEMBER.

- 443.—December 1st, 2.9.0 p.m., Station, 4, 5, 6, 7, 8, 9; 2,757 square miles.  
 444.—December 1st, 10.45.0 p.m., Stations, 72; 195 square miles.  
 445.—December 3rd, after 6.0.0 a.m., Stations, 87, 88, 89, 90, 91, 92, 98; 99, 100, 102, 101, 103, 111; 1,918 square miles.  
 446.—December 4th, 7.17.0 p.m., Stations, 23, 24, 26, 27, 30, 31, 32, 38, 40; 4,858 square miles.  
 447.—December 5th, 7.20.0 a.m., Station, 41; 131 square miles.  
 448.—December 5th, 7.20.0 a.m., Station, 71; 196 square miles.  
 449.—December 6th, 6.30.0 a.m., Stations, 51; 161 square miles.  
 450.—December 6th, before 5.0.0 p.m., Stations, 79, 80, 81, 87, 88, 89, 90, 91, 92, 102; 1,518 square miles.  
 451.—December 6th, 8.13.0 p.m., Stations, 99, 100, 98, 101, 103, 105; 971 square miles.  
 452.—December 7th, 6.30.0 a.m., Station, 214; 195 square miles.  
 453.—December 7th, about 1.0.0 p.m., Stations, 47, 49, 51, 52, 53, 54, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 117, 118, 119, 106, 107, 108, 109; 17,217 square miles.  
 454.—December 7th, 2.53.0 p.m., Station, 40; 322 square miles.  
 455.—December 7th, before 8.0.0 p.m., Stations, 98, 99, 100, 101, 103, 104, 105, 106, 107, 108; 226 square miles.  
 456.—December 7th, 8.8.0 p.m., Stations 79, 80; 89 square miles.  
 457.—December 8th, 3.0.0 a.m., Station, 54; 132 square miles.  
 458.—December 11th, 2.58.0 a.m., Station 246; 54 square miles.  
 459.—December 11th, after 10.0.0 a.m., Station, 207; 66 square miles.

## 82 CATALOGUE OF 482 EARTHQUAKES IN 1885.

- 460.—December 13th, about 3.30.0 a.m., Stations, 127, 128, 129, 154; 1,815 square miles.
  - 461.—December 13th, after 4.0.0 a.m., Stations, 128, 134, 137, 142; 1,249 square miles.
  - 462.—December 13th, 10.5.0 a.m., Station, 142; 132 square miles.
  - 463.—December 14th, 7.11.0 a.m., Station, 127; 261 square miles.
  - 464.—December 16th, 10.6.0 p.m., Station, 107; 132 square miles.
  - 465.—December 17th, 10.20.0 p.m., Stations, 48, 88; 90 square miles.
  - 466.—December 18th, about 0.30.0 a.m., Stations, 81, 87, 88; 649 square miles.
  - 467.—December 19th, 3.30.0 a.m., Stations, 81, 82, 83, 84, 85, 86, 87, 88, 89, 102; 1,488 square miles.
  - 468.—December 19th, 6.26.40 p.m., Stations, 69, 70, 71, 72, 73, 74, 75, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108; 9,827 square miles.
  - 469.—December 19th, about 8.0.0 p.m., Station, 86; 92 square miles.
  - 470.—December 19th, 11.46.0 p.m., Station, 186; 95 square miles.
  - 471.—December 21st, 0.20.0 a.m., Station, 79; 161 square miles.
  - 472.—December 22nd, after 11.0.0 a.m., Stations, 165, 166, 167, 168, 169, 170, 171, 172, 173, 213, 189, 190, 193; 2,852 square miles.
  - 473.—December 22nd, 1.21.0 p.m., Stations, 178, 175; 107 square miles.
  - 474.—December 24th, 6.30.0 a.m., Station 146; 142 square miles.
  - 475.—December 25th, 2.30.0 a.m., Stations, 46, 47, 49, 51, 52, 53, 54, 66, 67, 68, 69, 70, 71; 5,056 square miles.
  - 476.—December 25th, 9.38.0 a.m., Station, 142; 132 square miles.
  - 477.—December 26th, after 3.0.0 p.m., Stations, 146, 147, 179, 180; 781 square miles.
  - 478.—December 28th, 10.6.30 p.m., Stations, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 122; 13,261 square miles.
  - 479.—December 28th, 11.25.0 p.m., Station, 73; 72 square miles.
  - 480.—December 31st, 6.30.0 p.m., Station, 102; 95 square miles.
  - 481.—December 31st, 3.27.0 p.m., Station, 81; 95 square miles.
  - 482.—December 31st, 9.56.0 p.m., Station, 81; 95 square miles.
-

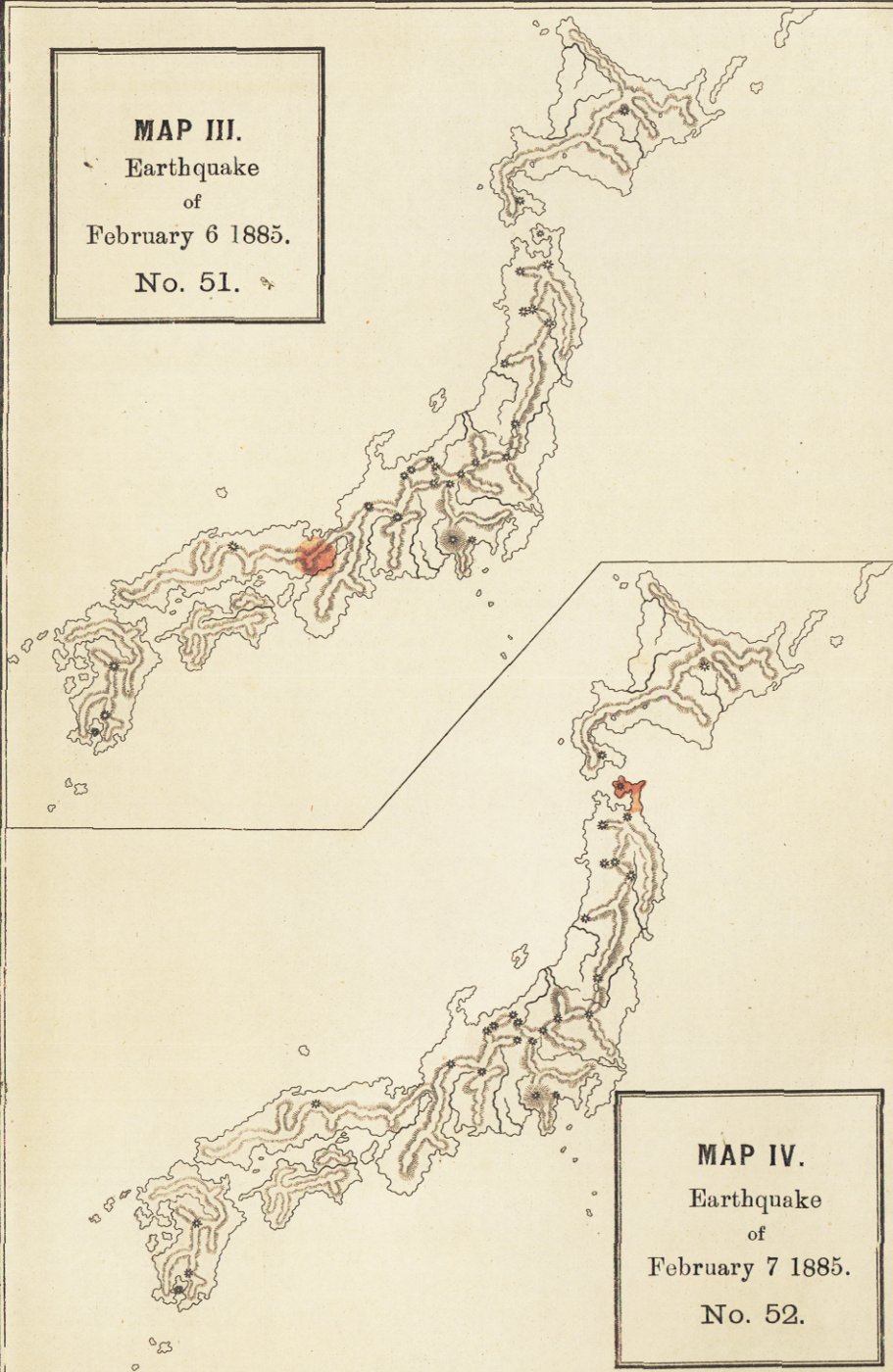
**MAP I.**  
Earthquake  
of  
January 15 1885.  
No. 9.



**MAP II.**  
Earthquake  
of  
January 27 1885.  
No. 21.



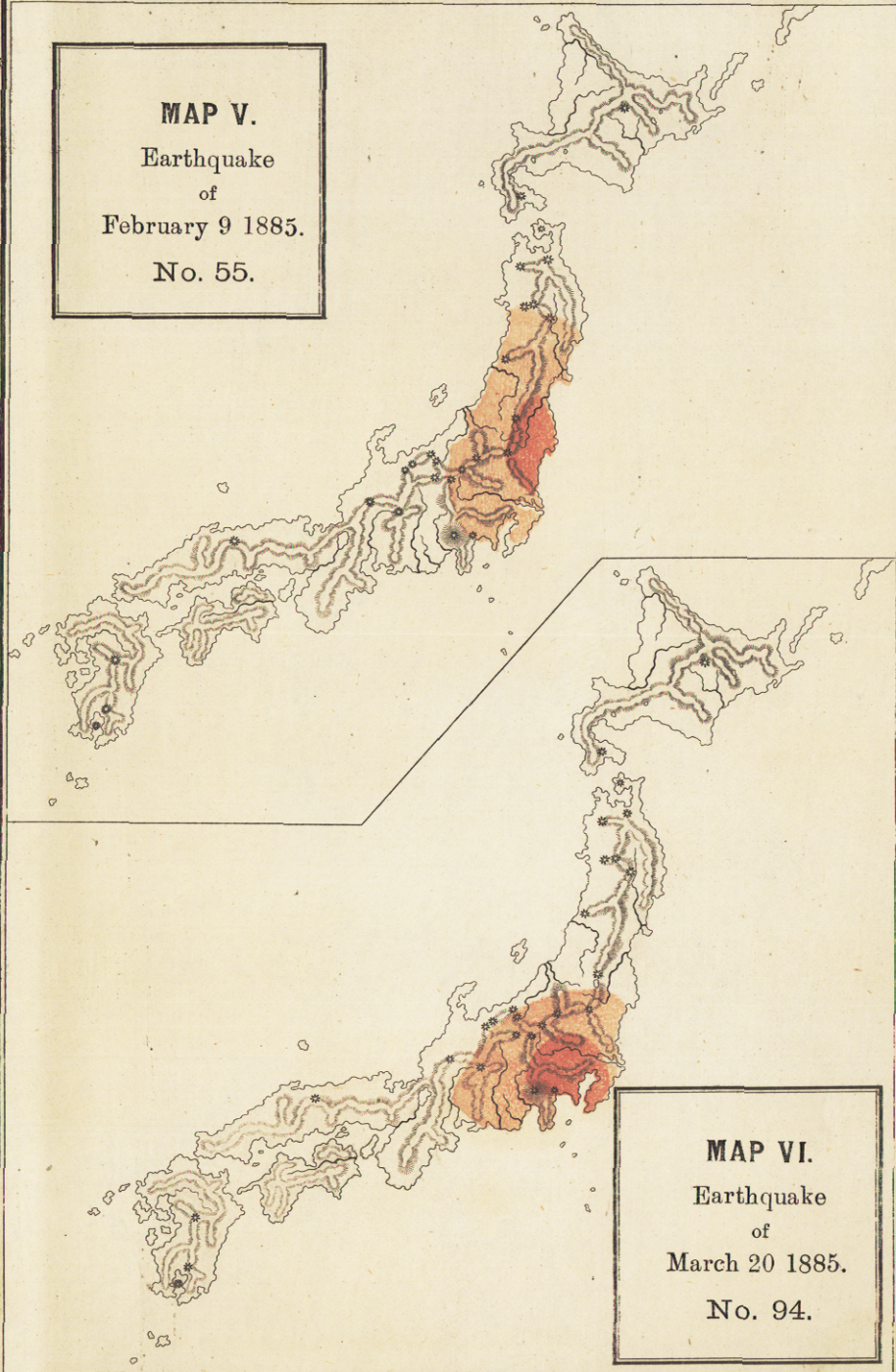
**MAP III.**  
Earthquake  
of  
February 6 1885.  
No. 51.



**MAP IV.**  
Earthquake  
of  
February 7 1885.  
No. 52.



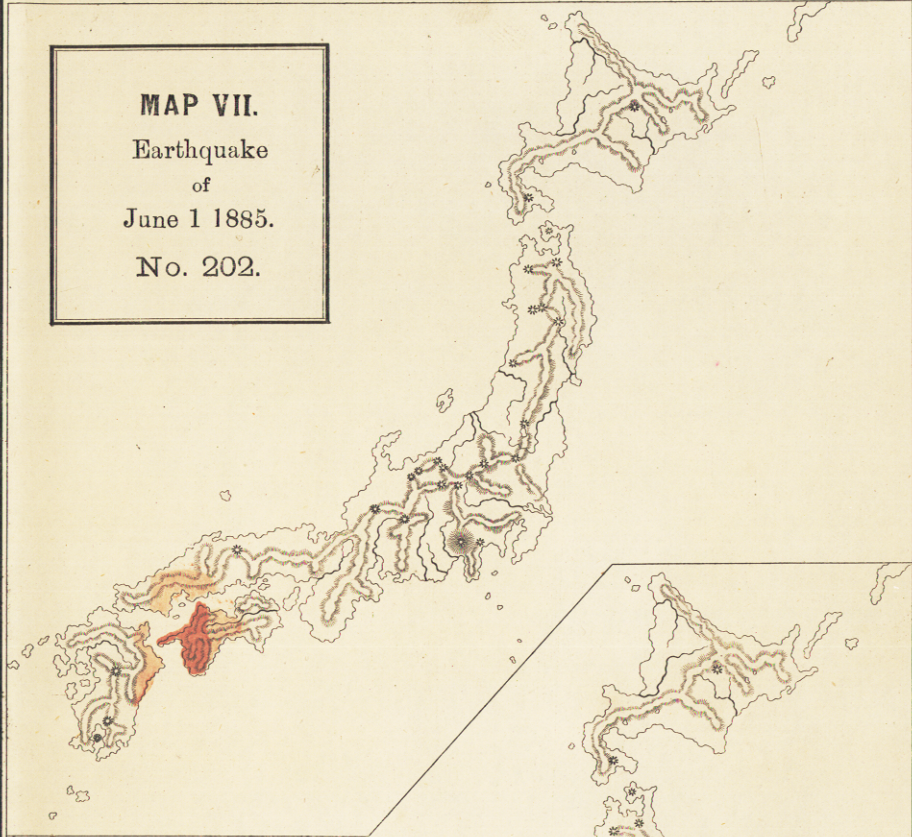
**MAP V.**  
Earthquake  
of  
February 9 1885.  
No. 55.



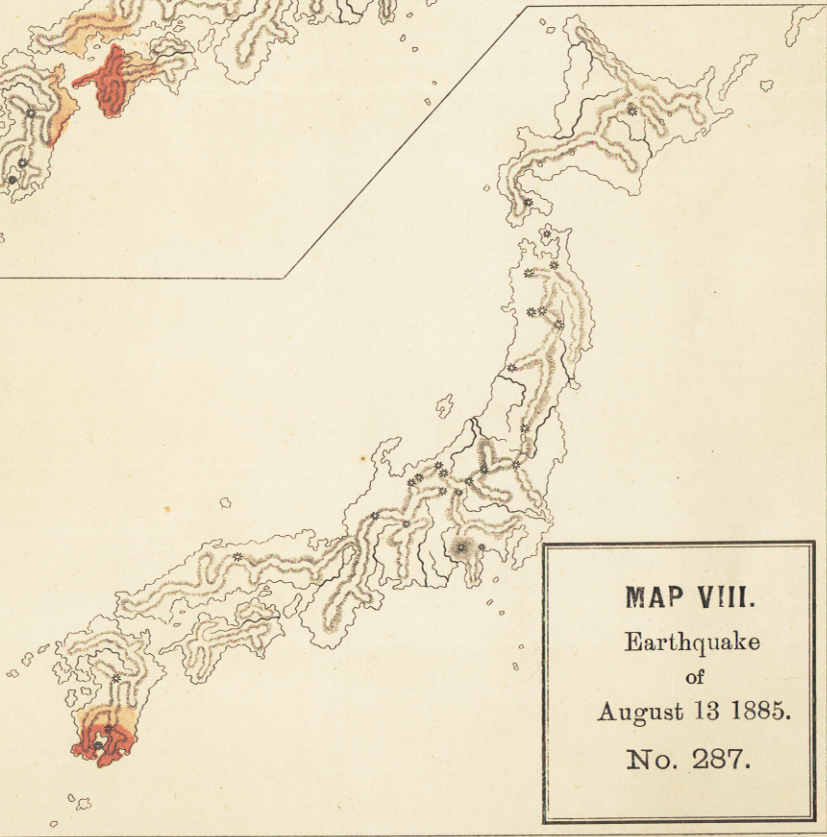
**MAP VI.**  
Earthquake  
of  
March 20 1885.  
No. 94.



**MAP VII.**  
Earthquake  
of  
June 1 1885.  
No. 202.

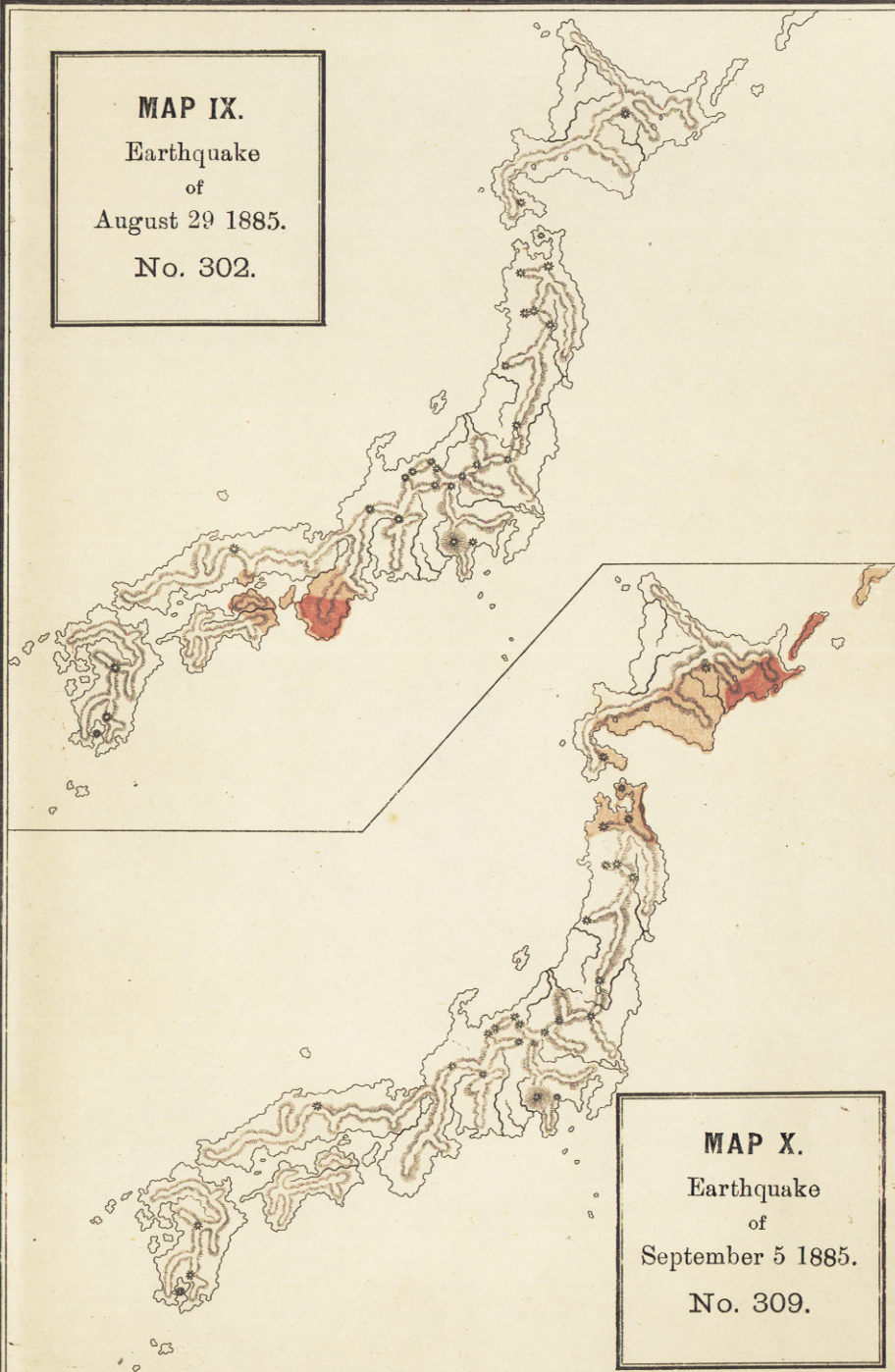


**MAP VIII.**  
Earthquake  
of  
August 13 1885.  
No. 287.





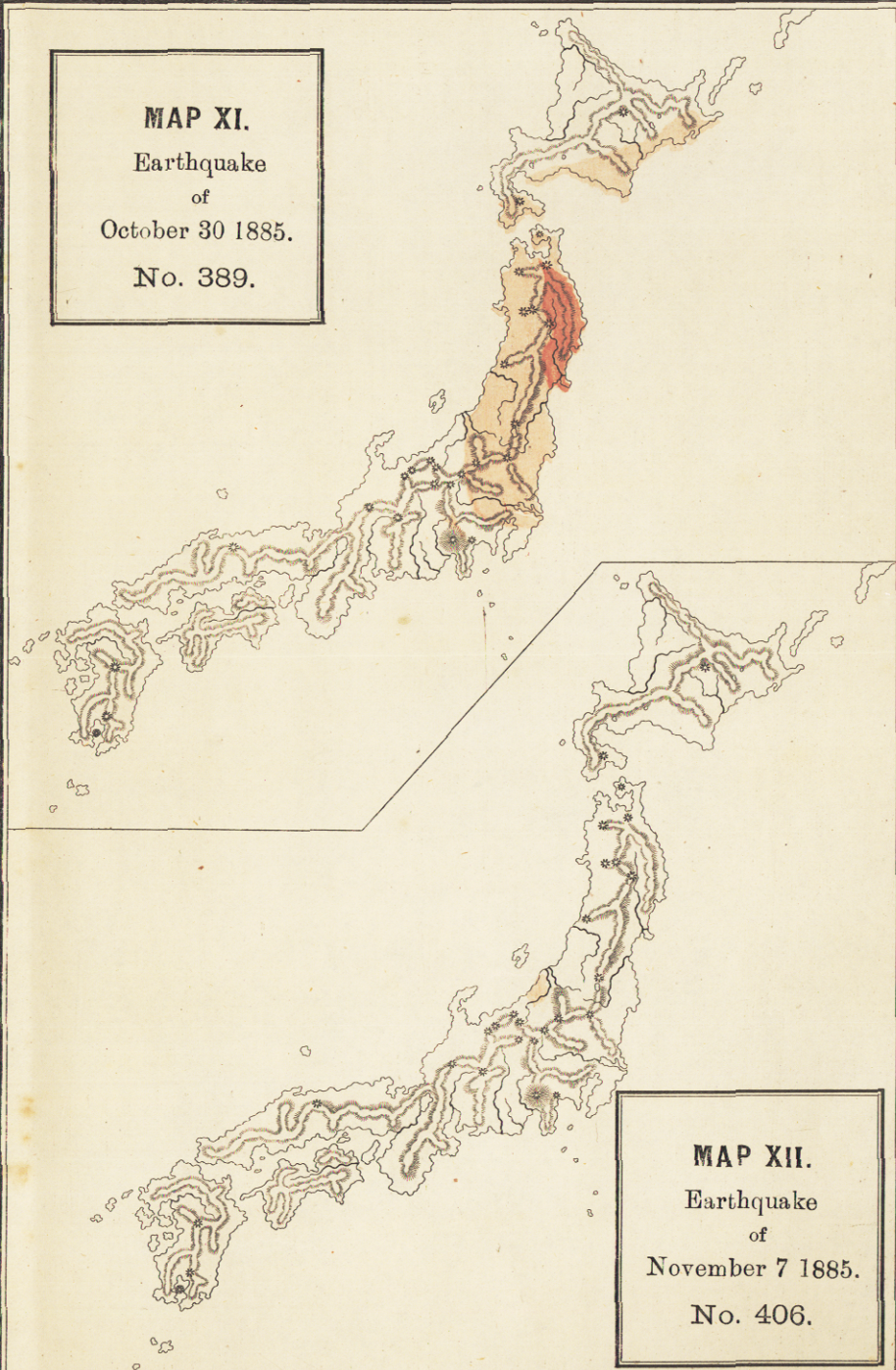
**MAP IX.**  
Earthquake  
of  
August 29 1885.  
No. 302.



**MAP X.**  
Earthquake  
of  
September 5 1885.  
No. 309.

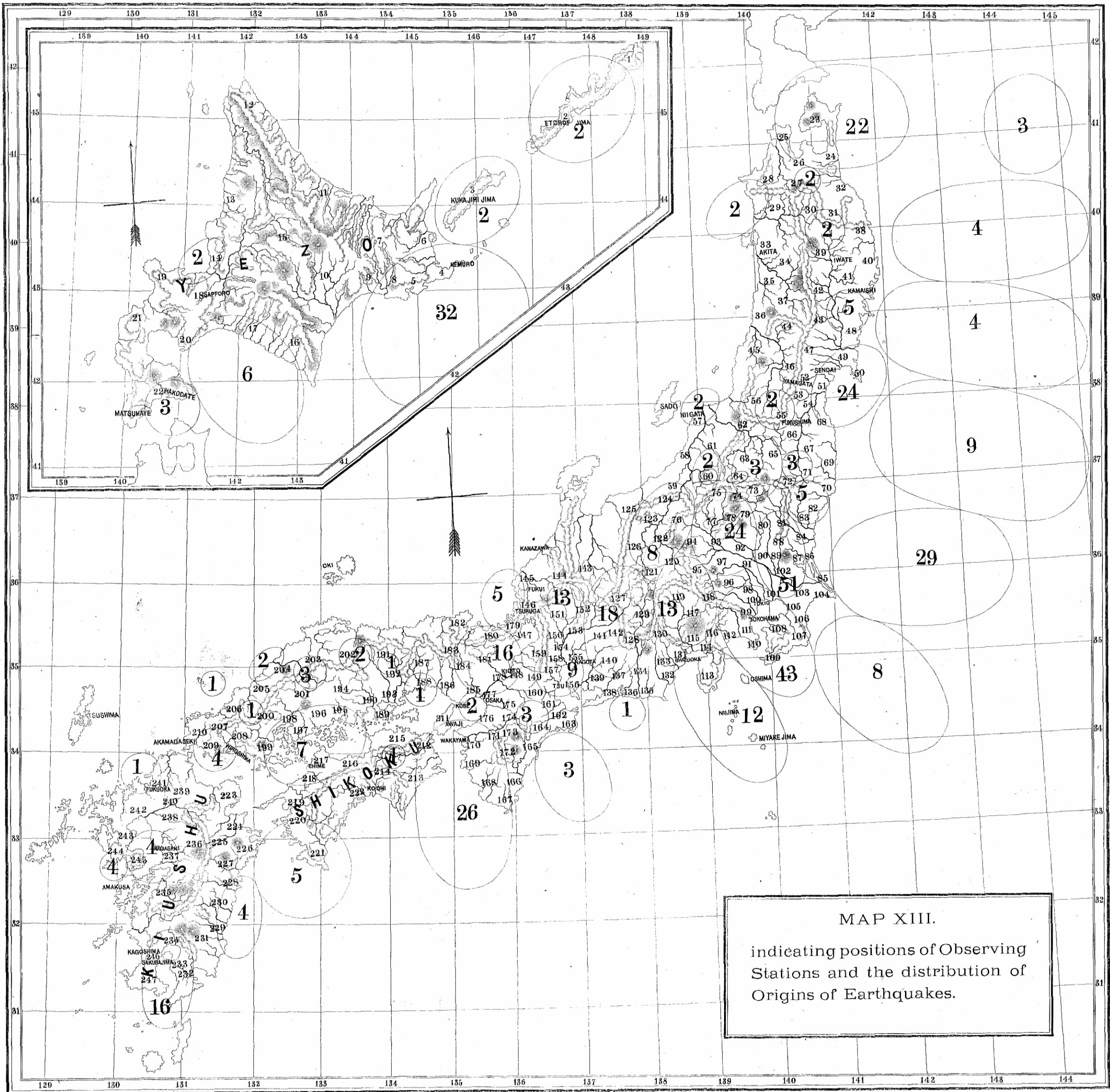


**MAP XI.**  
Earthquake  
of  
October 30 1885.  
No. 389.



**MAP XII.**  
Earthquake  
of  
November 7 1885.  
No. 406.

MAP XIII.





# MAP XIV.

