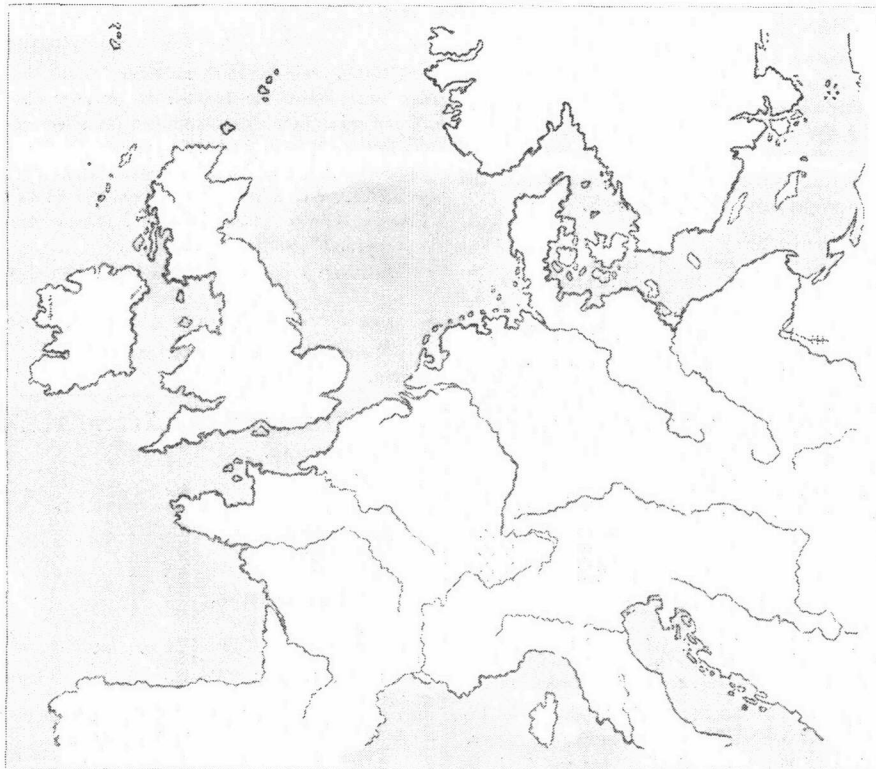


WEATHER CHARTS
OF
BRITAIN AND PART OF EUROPE,

During December 1861.

By FRANCIS GALTON, F.R.S.



INDEX MAPS.

On the opposite page are four Index Maps, which show the names and other data of the meteorological stations selected.

A 1 and A 2 refer to the General Maps, which represent the weather on the morning, afternoon, and evening of each of the 31 days of December 1861.

B and C refer severally to enlarged maps of Britain and the Continent, one or other of which occupies the lowest corner of each right-hand page, and is intended to illustrate some interesting occurrence during one of the six adjacent epochs.

As an example of the meaning of the symbols in A 2, we will take those corresponding to North Unst Light. They are printed $\frac{235}{29.95}$; that is to say, 1st, the elevation of that station above the sea is 235 feet; on that account, 2dly, 1° Fahrenheit has to be added to the thermometrical record, if it be desired to reduce the registered temperature to the sea level; and 3dly, 9 A.M., 3 P.M., and 9 P.M. are the hours of observation, in approximate local time. The symbol $\frac{235}{29.95}$ that is printed over the figures is merely another way of expressing the 1° and is a rude measure of the height of the station; 0°, 1°, 2°, 3°, 4°, and 5° being represented respectively by the symbols $\frac{0}{29.95}$, $\frac{1}{29.95}$, $\frac{2}{29.95}$, $\frac{3}{29.95}$, $\frac{4}{29.95}$, $\frac{5}{29.95}$. My object was to give, at a glance, a general notion of the elevation of the area under observation, by the intensity of the shade employed.

WEATHER CHARTS.

On opening the book at any place, we see the morning, evening, and afternoon observations of two consecutive days, making six epochs in all. They occupy the whole of the left-hand page, and the left half of the right-hand one. On the other half are printed six small symbolic charts, each of which corresponds to one of the foregoing epochs, and affords a convenient summary of its barometrical peculiarities. Red signifies higher, and Black lower than the average barometrical height (assumed at 29.95 inches). The symbols have been so arranged that the intensity of the shade is proportionate to the amount of deviation from the average.

Symbols in Barometrical Charts.

Black	Inches. 29.95 to 29.71	Inches. 29.70 to 29.46	Inches. 29.45 to 29.21	Inches. 29.20 and below.
Red	Inches. 29.96 to 30.20	Inches. 30.21 to 30.45	Inches. 30.46 to 30.70	Inches. 30.71 and above.

Below the barometric tables, is printed one of the enlarged maps, as mentioned above.

EXPLANATION OF THE SYMBOLS USED IN THE WEATHER CHARTS.

RAIN. Rain. Snow. Entirely and heavily clouded. Entirely clouded. Mostly clouded. Half clouded. A few clouds. Clear blue sky.

DIRECTION OF WIND. S. S.S.W. S.W. W.S.W. W. &c.

FORCE OF WIND. Gale. Strong. Moderate. Gentle. Almost calm. Calm.

In each compound symbol { 30 39 } respectively signify { 30.39 } to be the height of the barometer in English inches. The lower figures 34—1 mean 34° is the height of Fahrenheit thermometer, and 1° is its excess over the thermometer with a moistened bulb.

ÜBERSICHTSKÄRTCHEN.

Die vier Uebersichtskärtchen auf der gegenüberstehenden Seite enthalten Namen der gewählten Stationen und einige weitere Angaben.

A 1 und A 2 haben Bezug auf die General-Karten, auf welchen die Witterung am Morgen, Nachmittag und Abend jedes der 31 Tage des Decembers 1861 angegeben ist.

B und C haben Bezug auf die Spezialkarten von Britannien und dem Continent, von welchen je eine die untere rechte Ecke einer Seite einnimmt; auf ihnen sind bemerkenswerthe Erscheinungen niedergelegt, welche sich während einer der sechs nebenstehenden Epochen ereignet haben.

Die auf A 2 angebrachten Abkürzungen und Symbole erklären wir mit Hinweisung auf die Station North Unst Light. Dort steht $\frac{235}{29.95}$. Es heisst dies 1.) die Station liegt 235 Fuss über dem Meeresspiegel; 2.) um die Temperatur auf den Meeresspiegel zu reduciren muss 1° F. der beobachteten Temperatur zugezählt werden; und 3.) die Beobachtungszeit war 9 A.M., 3 P.M. und 9 P.M. in der ungefähren Zeit des Ortes. Das über die Zahlen gedruckte Symbol $\frac{235}{29.95}$ zeigt die annähernde Höhe der Stationen, und drückt auf andere Art den 1° F. aus. 0°, 1°, 2°, 3°, 4°, und 5° sind beziehungsweise durch die Symbole $\frac{0}{29.95}$, $\frac{1}{29.95}$, $\frac{2}{29.95}$, $\frac{3}{29.95}$, $\frac{4}{29.95}$, $\frac{5}{29.95}$ ausgedrückt. Es wurde durch diese stufenweise Schattirung bezweckt auf einen Blick die annähernde Höhe des Beobachtungs-Areals zu geben.

WITTERUNGS-KARTE.

Öffnen wir das Buch an einer beliebigen Stelle, so finden wir auf der ersten Seite und auf der linken Hälfte der zweiten die an zwei sich folgenden Tagen am Morgen, Nachmittag, und Abend gemachten Beobachtungen (in allem sechs Epochen) niedergelegt. Die rechte Hälfte der zweiten Seite enthält sechs symbolische Kärtchen, deren je eins sich auf eine der beistehenden Epochen bezieht, und welche eine übersichtliche Zusammenstellung barometrischer Erscheinungen enthalten. Der mittlere Barometerstand ist zu 29.95 Zoll angenommen; roth bedeutet einen höheren, schwarz einen niederen Barometerstand. Die Symbole bezeichnen die Abweichung von dem mittleren Stand, wie folgt:—

Schwarz	- 29.95 bis 29.71 Zoll	29.70 bis 29.46 Zoll	29.45 bis 29.21 Zoll	29.20 und niedriger.
Roth	- 29.96 bis 30.20 „	30.21 bis 30.45 „	30.46 bis 30.70 „	30.71 und höher.

Unterhalb dieser barometrischen Kärtchen befindet sich eine der oben erwähnten Spezialkurten.

ZEICHENERKLÄRUNG FÜR DIE WITTERUNGSKARTEN.

NIEDERSCHLAG. Regen. Schnee.

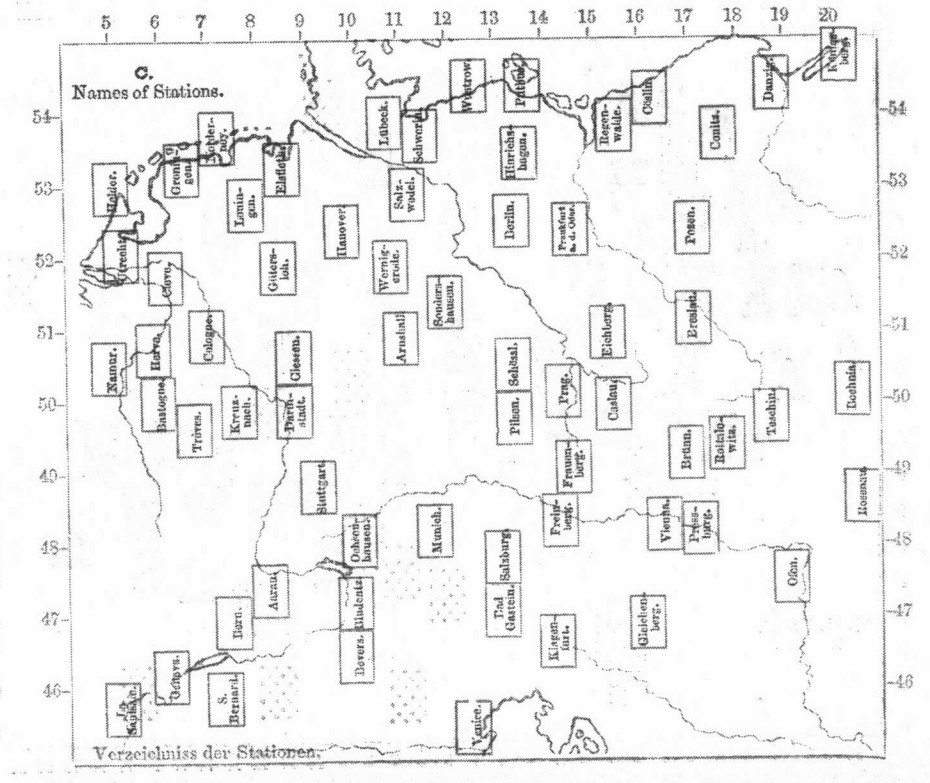
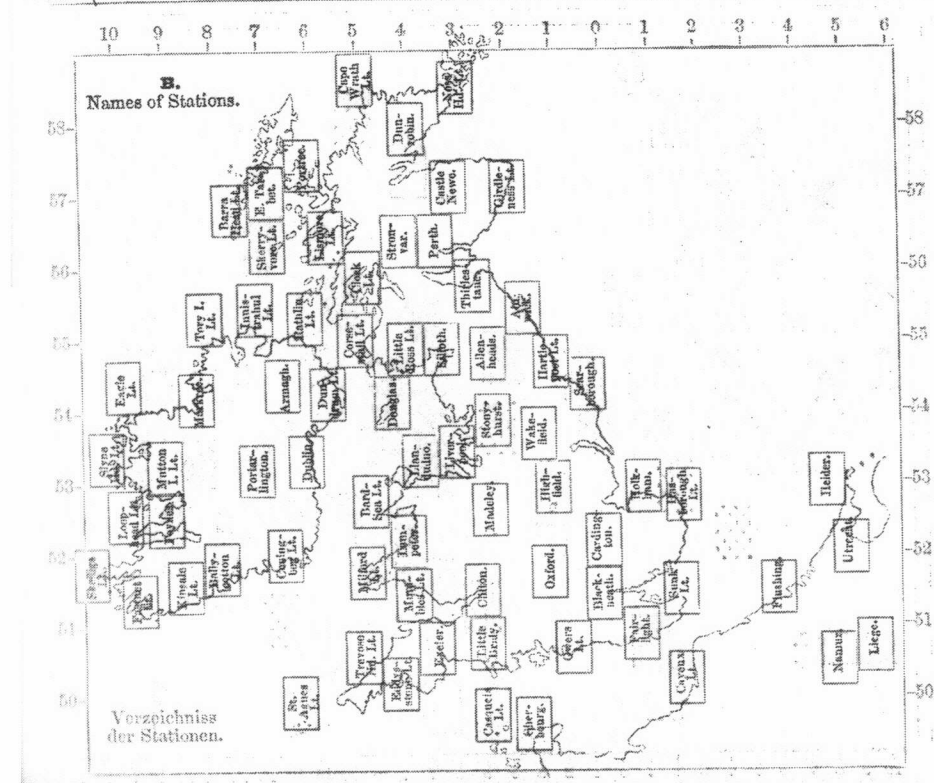
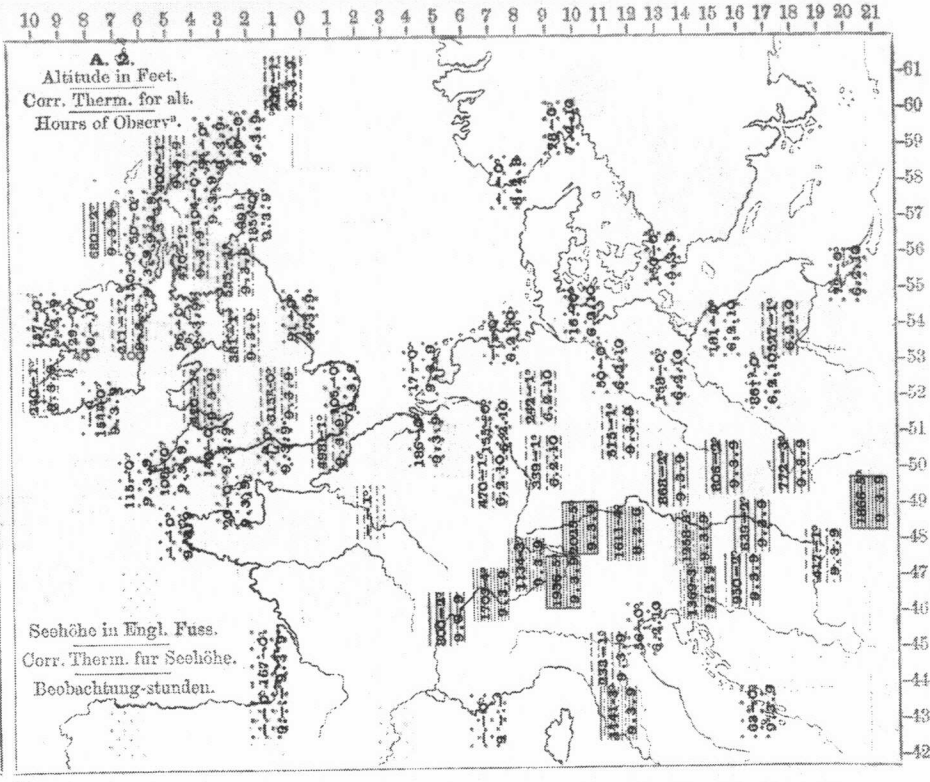
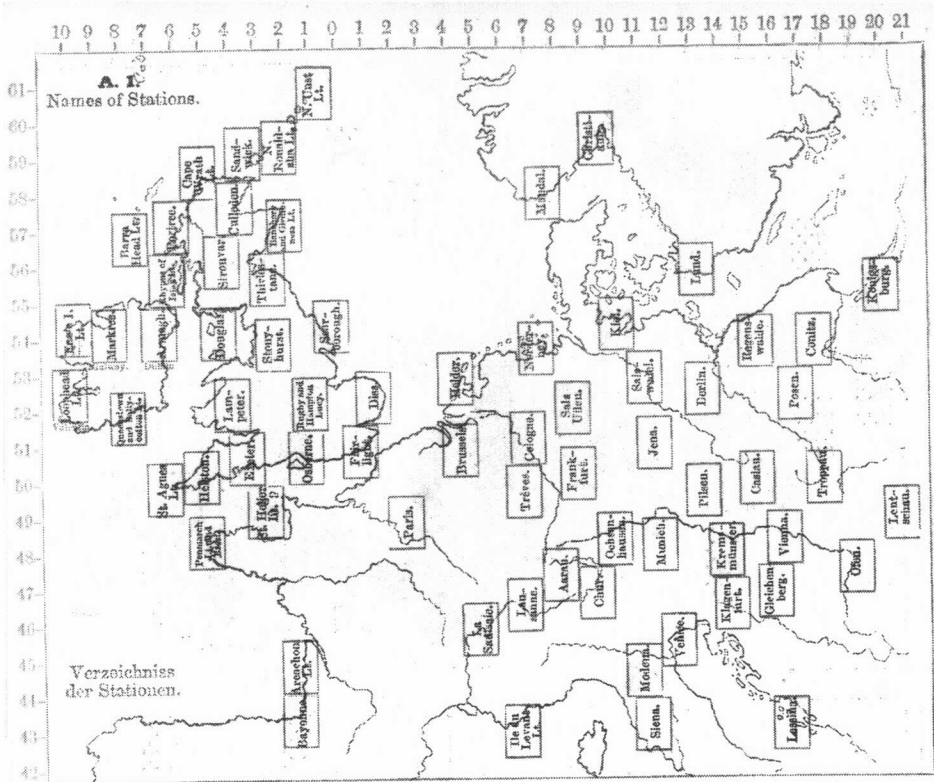
WOLKEN. Ganz bedeckt, schweres Gewölk. Ganz bewölkt. Zum grössten Theil bewölkt. Halb bewölkt. Wenige Wolken. Helle, klare Luft.

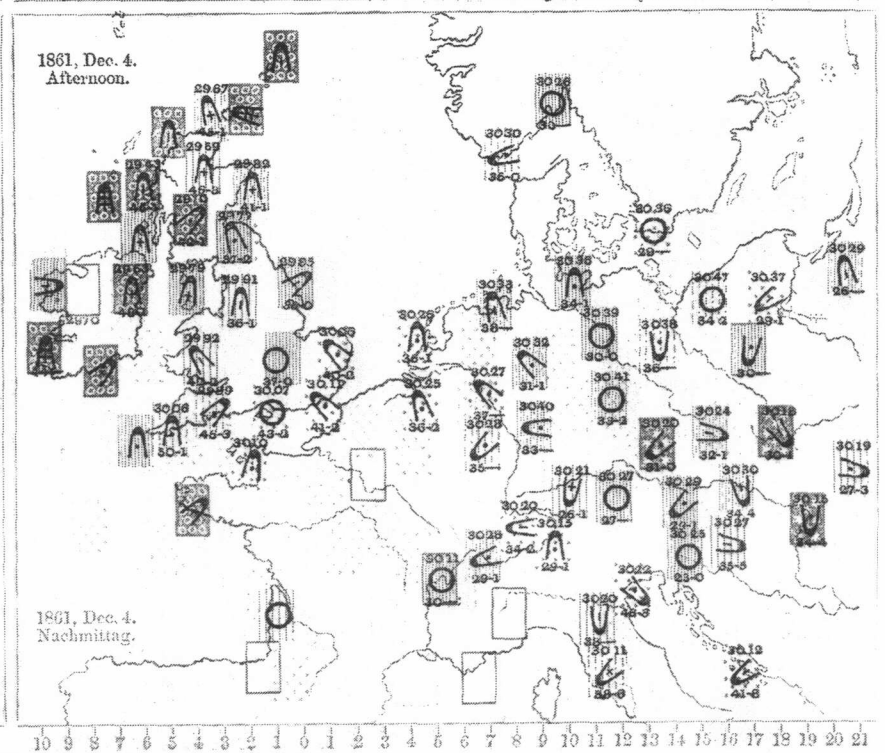
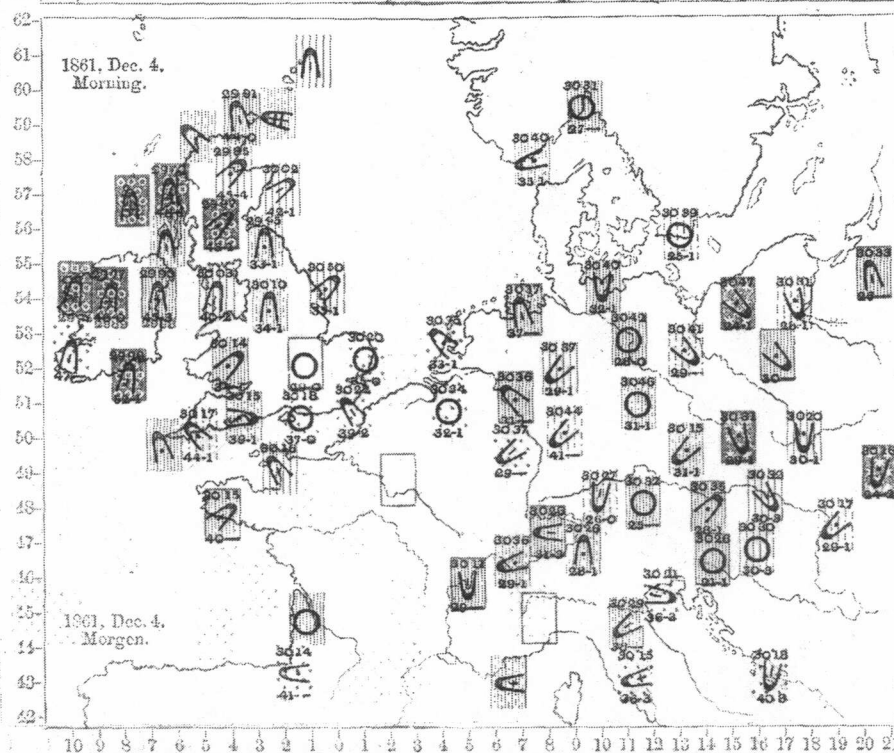
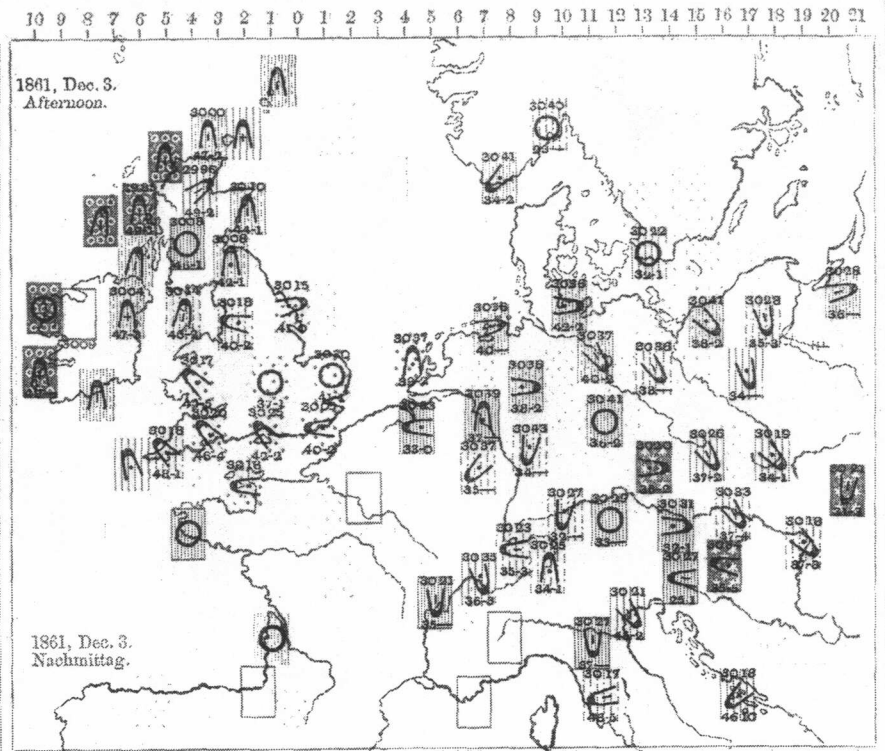
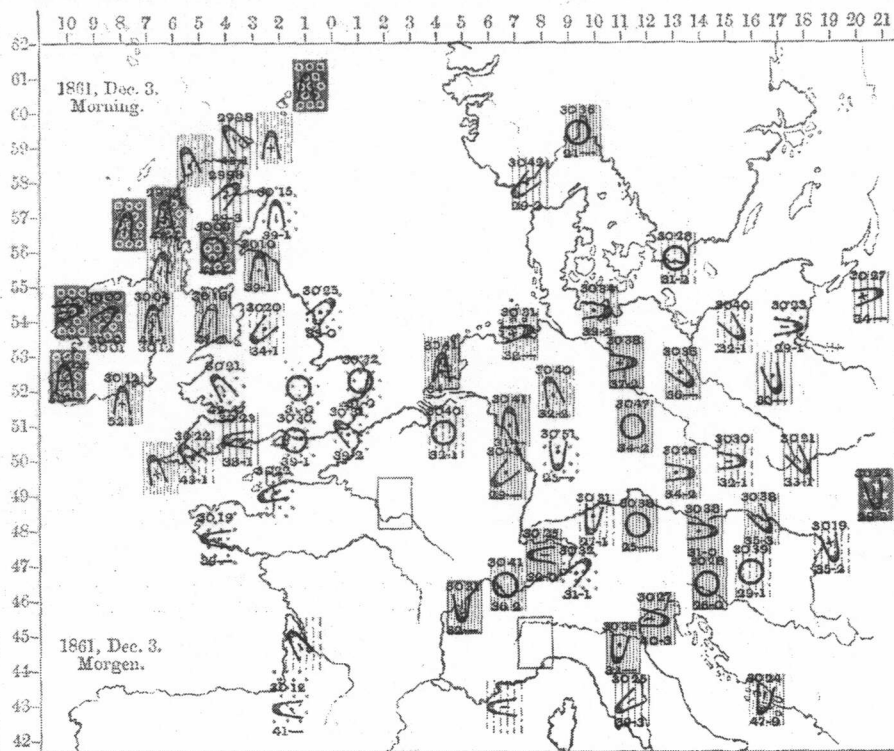
WINDRICHTUNG. S. S.S.W. S.W. W.S.W. W. u. s. w.

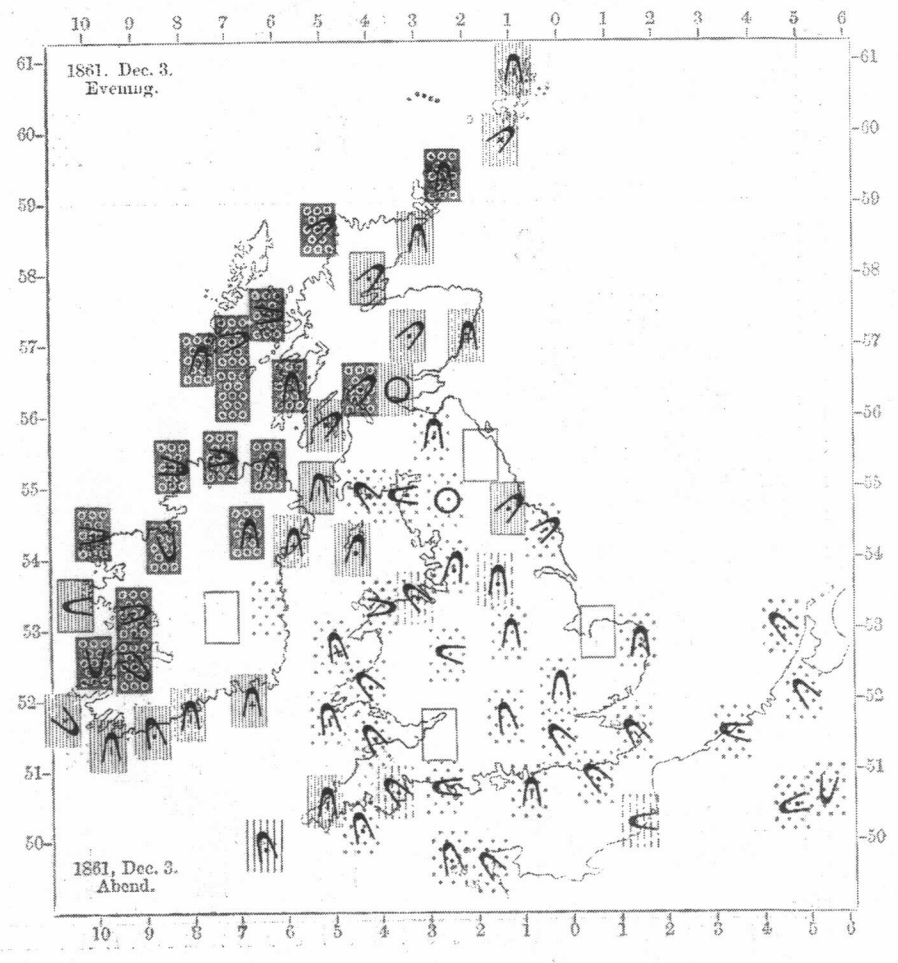
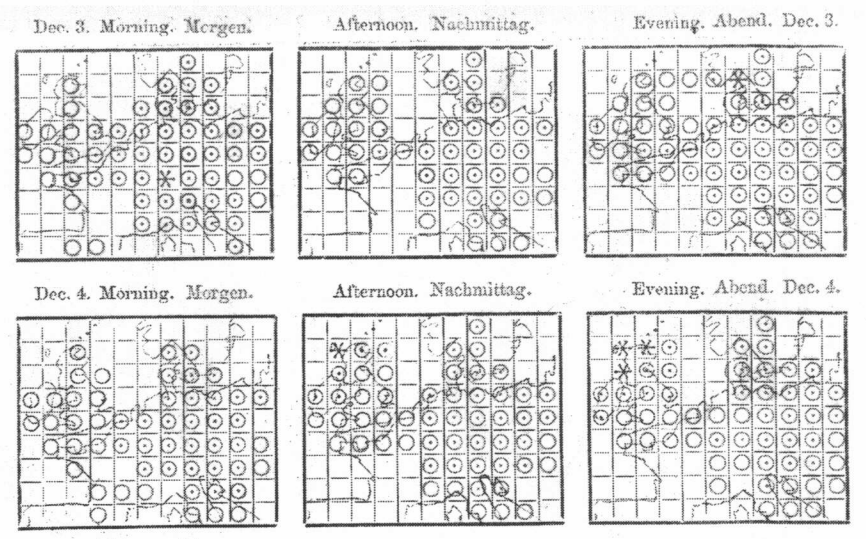
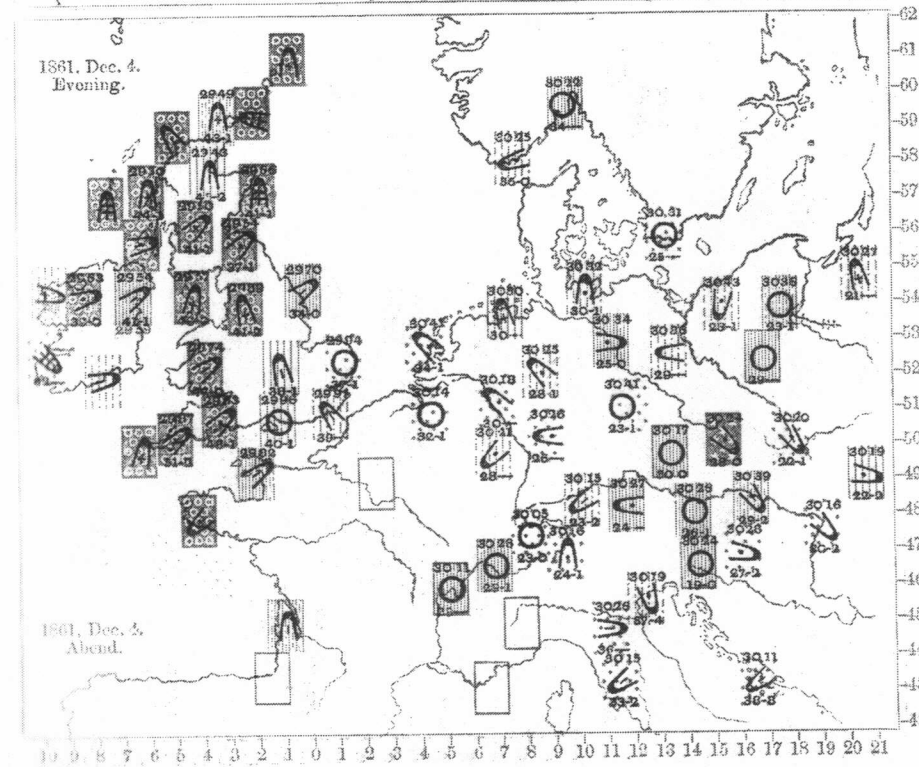
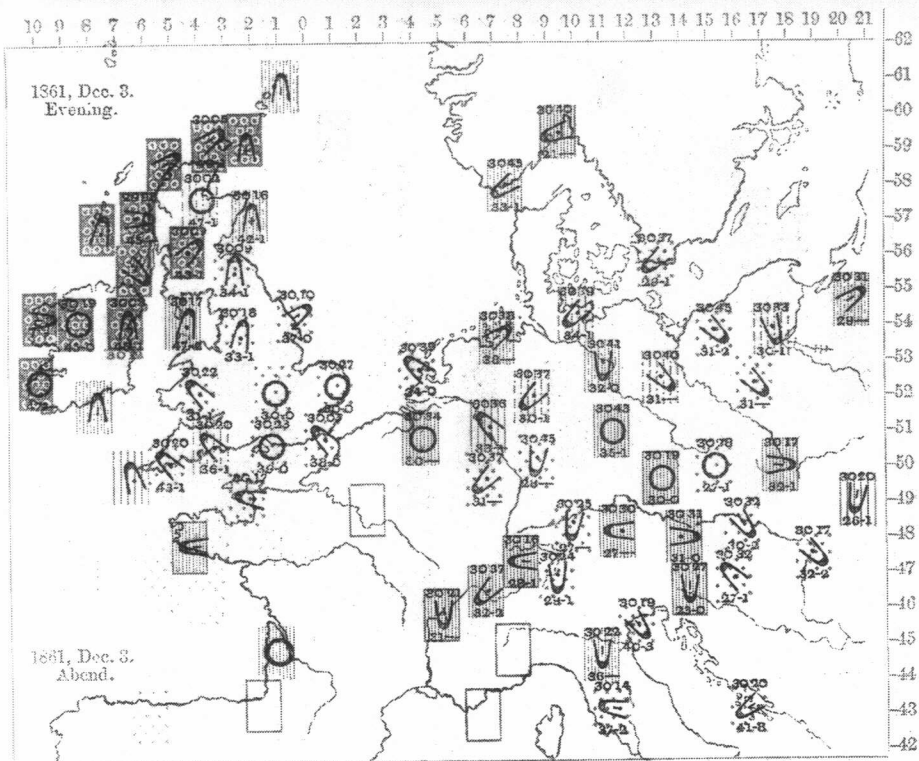
STÄRKE DES WINDES. Sturm. Stark. Mässig. Sanft. Fast windstill. Windstill.

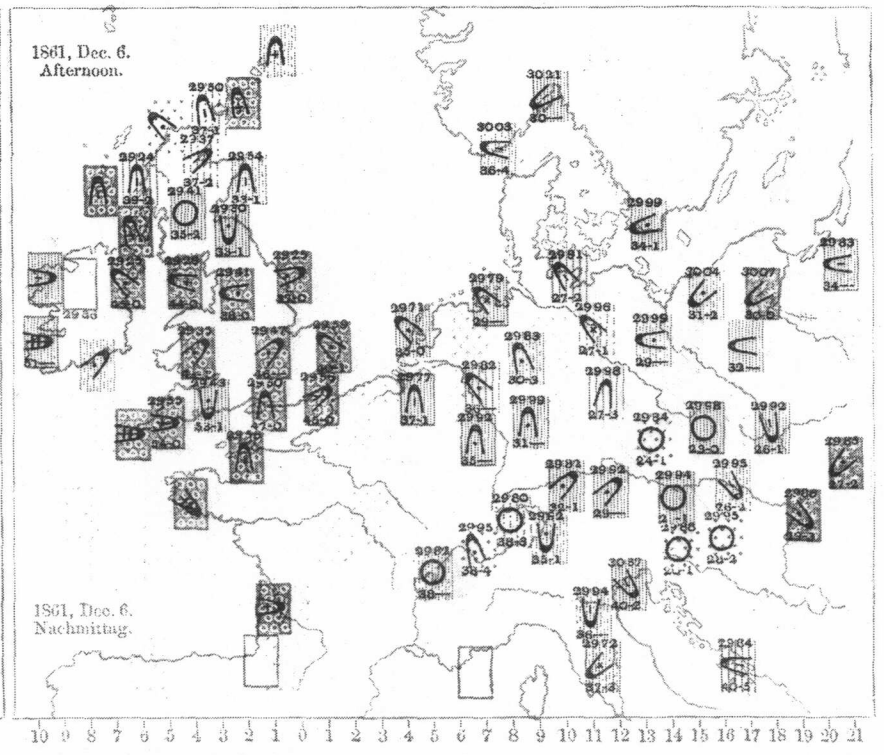
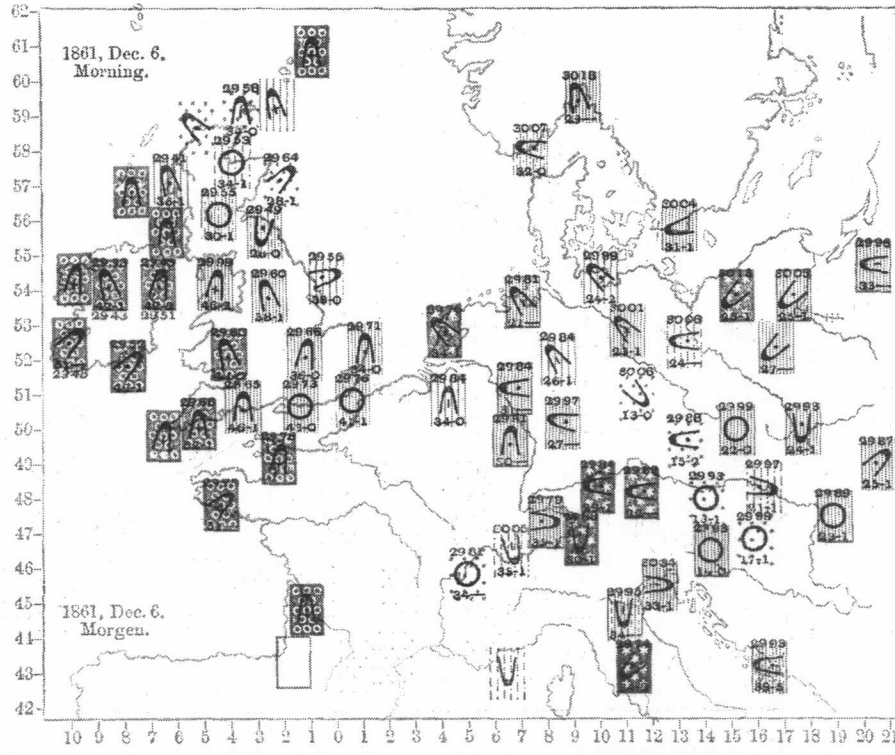
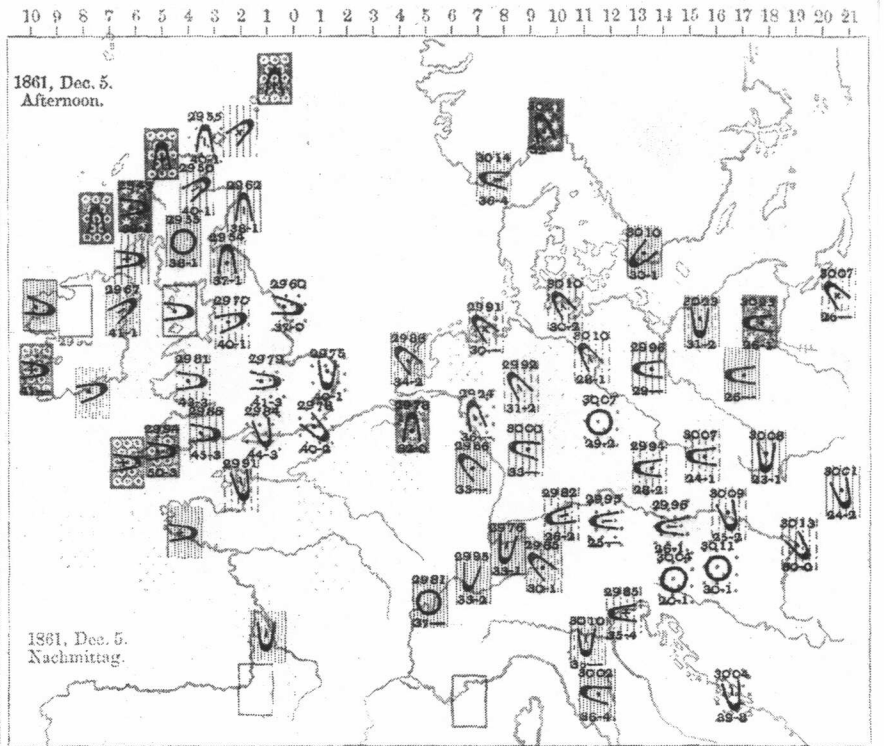
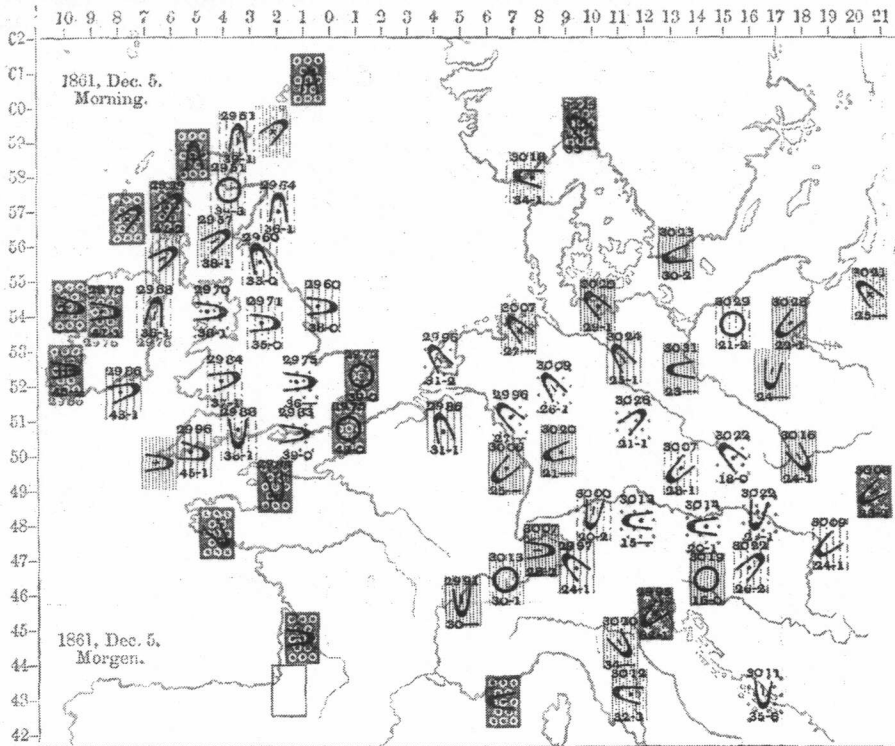
In jedem zusammengesetzten Symbol { 30 39 } { 29 72 } bedeuten die oberen Zahlen { 30.39 } die Barometerhöhe in Englischen Zollen.

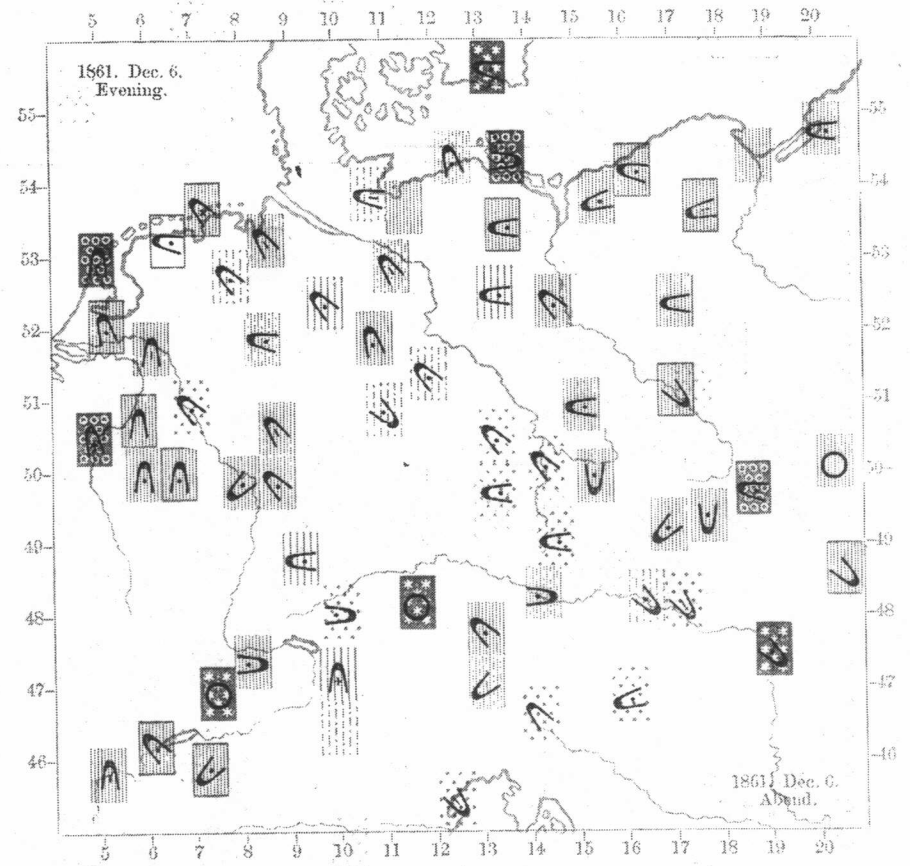
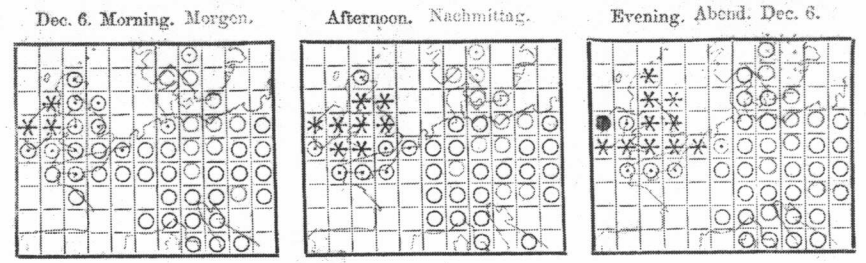
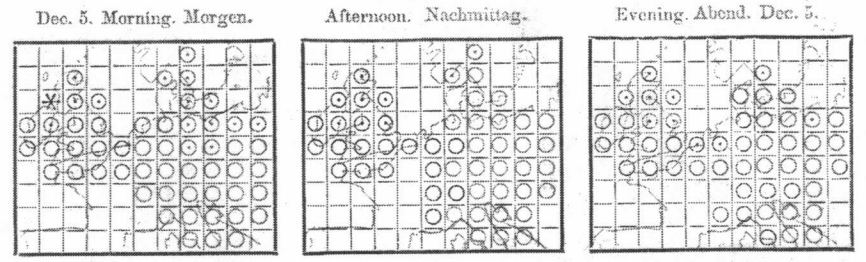
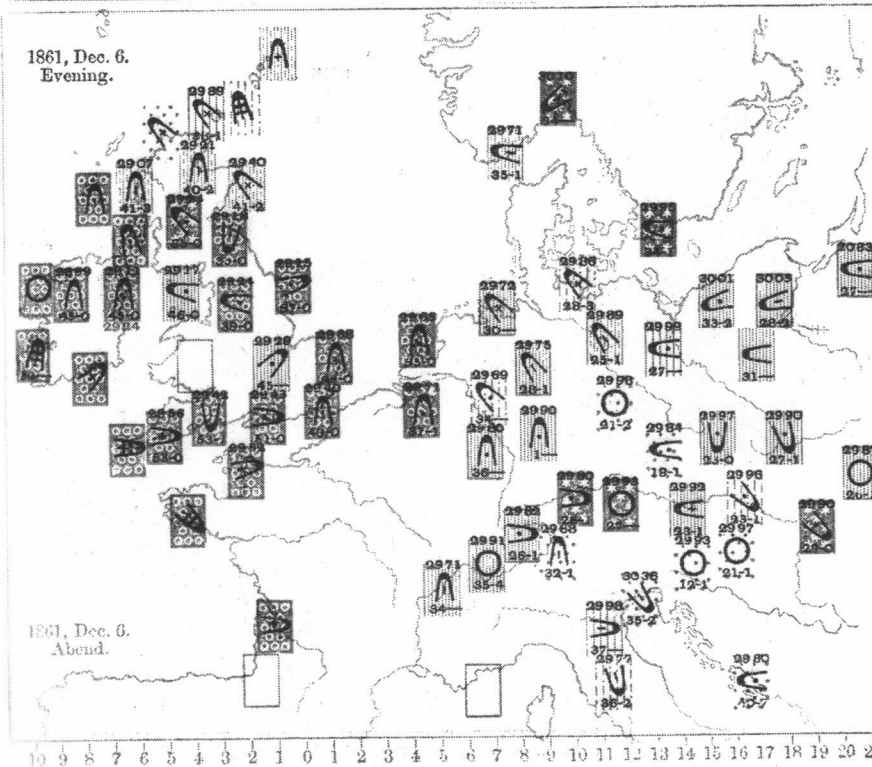
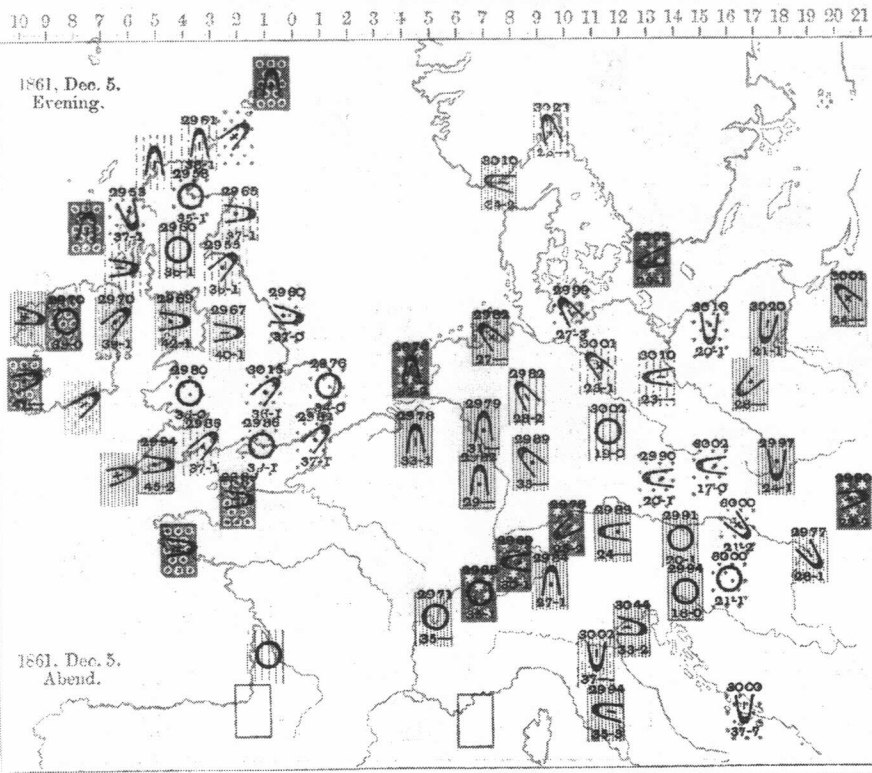
Von den untern Zahlen 34—1 bedeutet 34 die Thermometerhöhe in Graden Fahrenheit, und 1 den Excess derselben über den Thermometer mit befeuchteter Kugel.

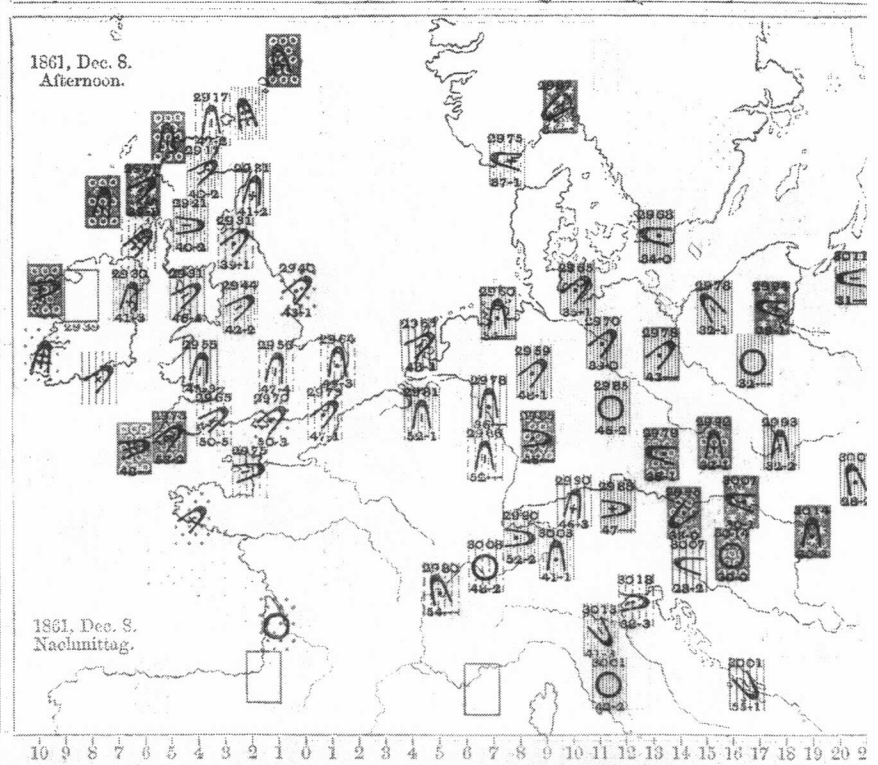
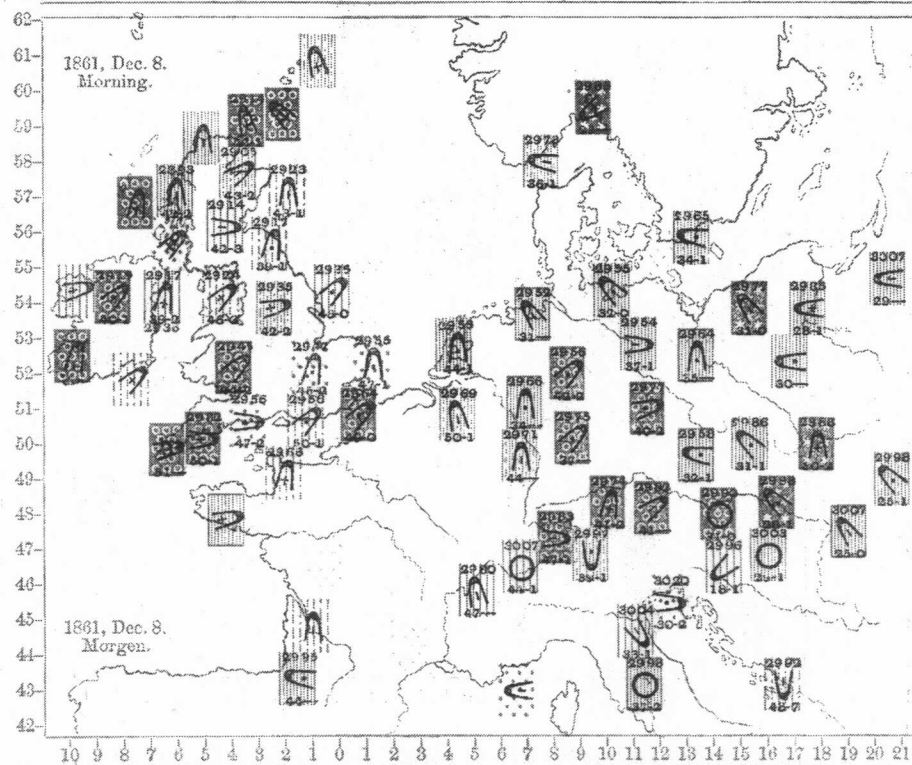
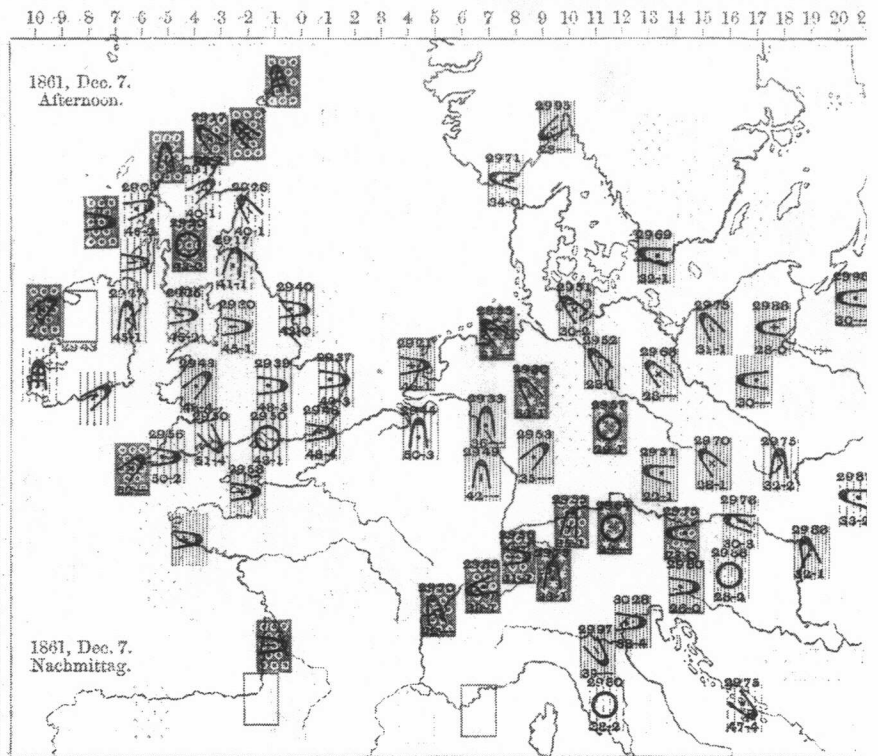
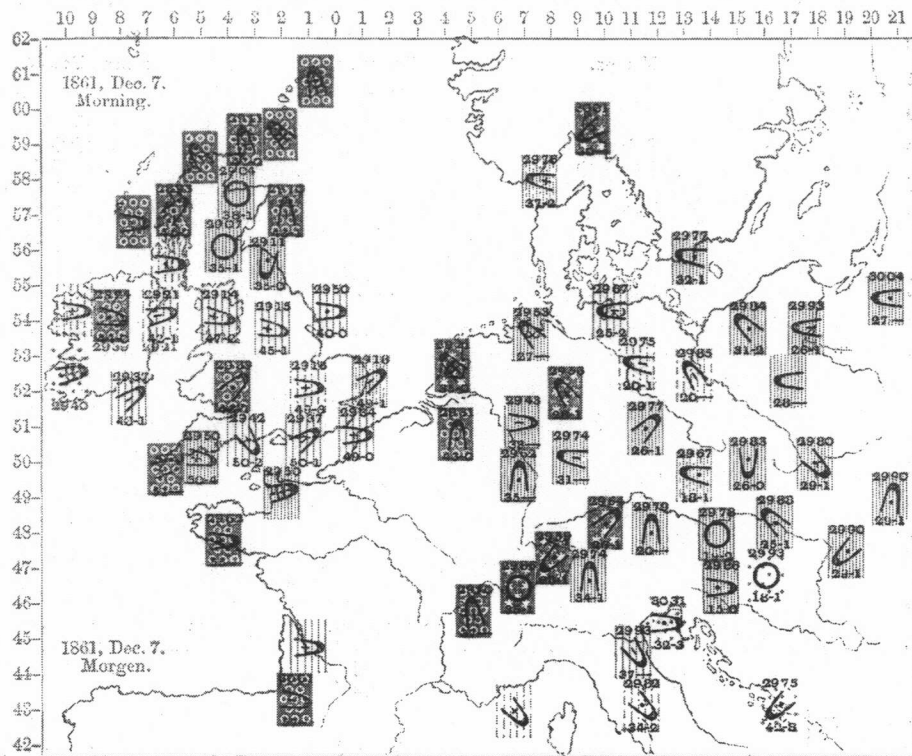




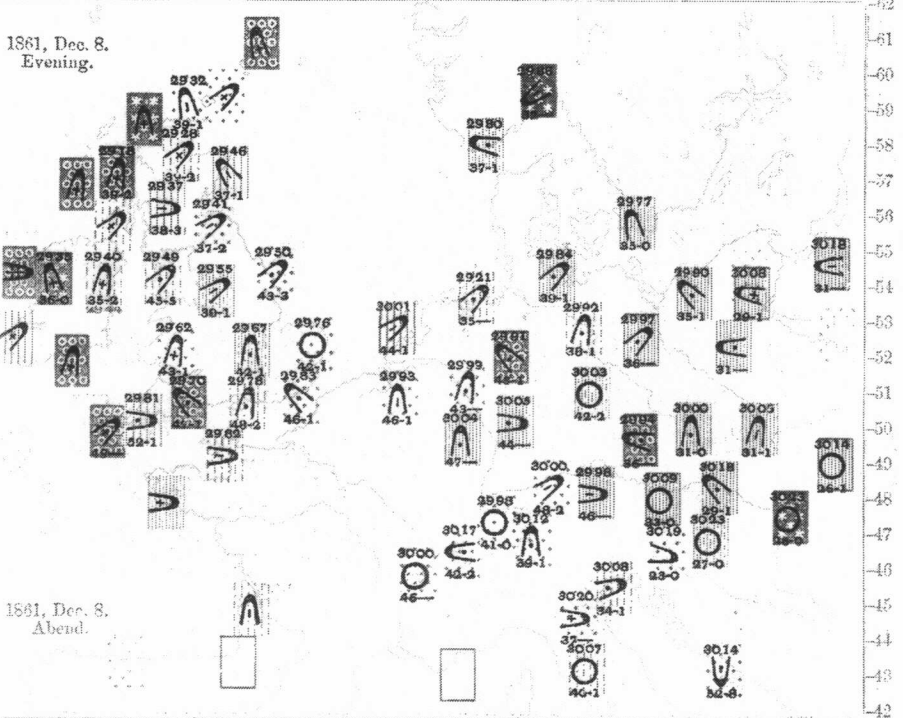
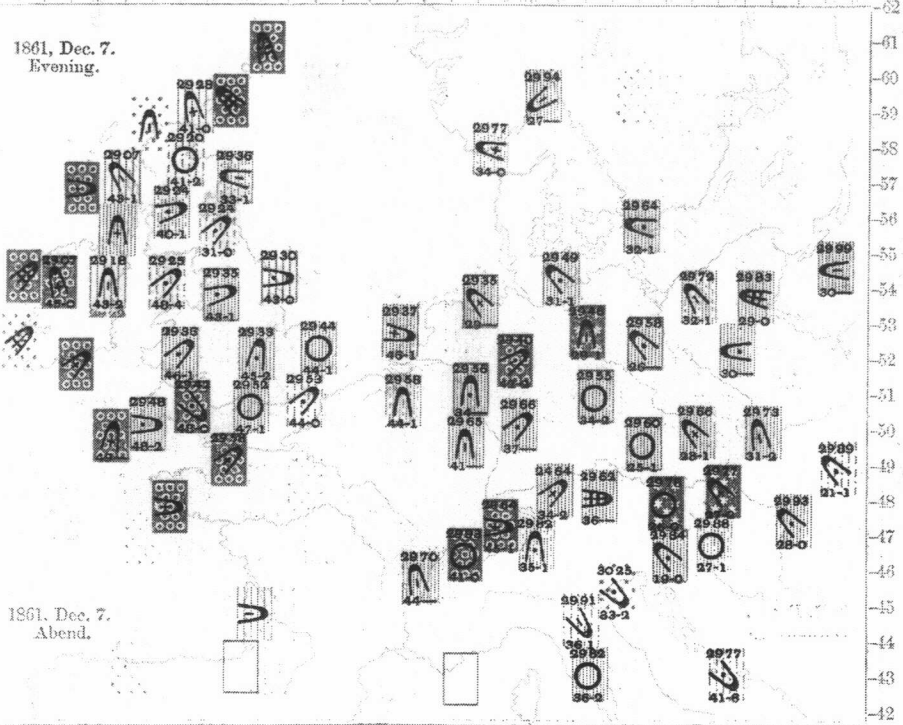






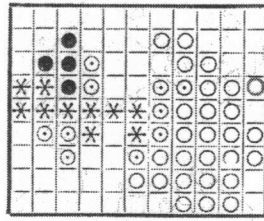


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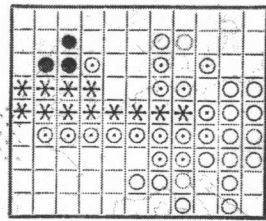


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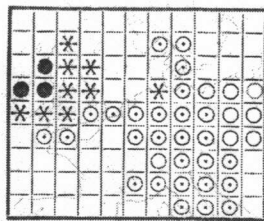
Dec. 7. Morning. Morgen.



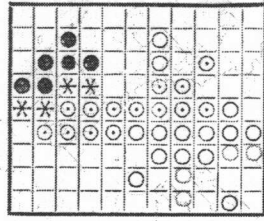
Afternoon. Nachmittag.



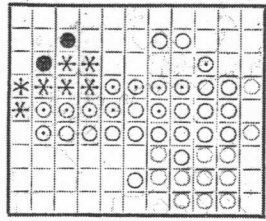
Evening. Abend. Dec. 7.



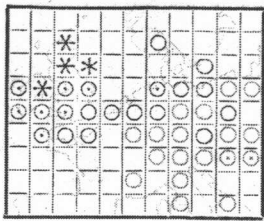
Dec. 8. Morning. Morgen.



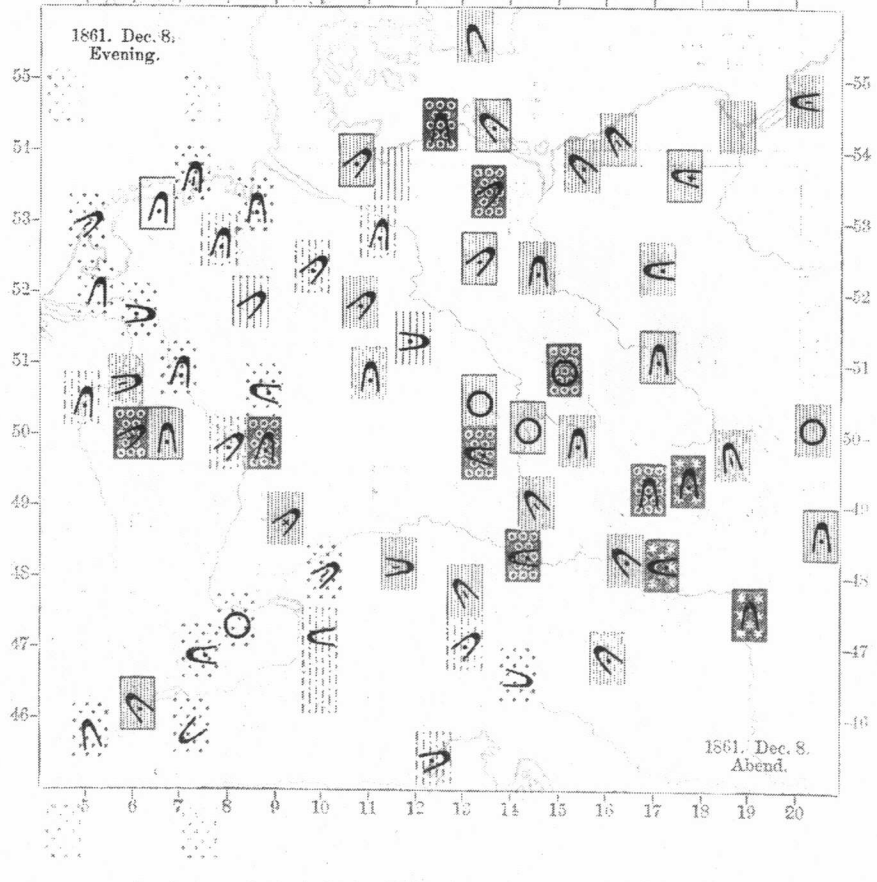
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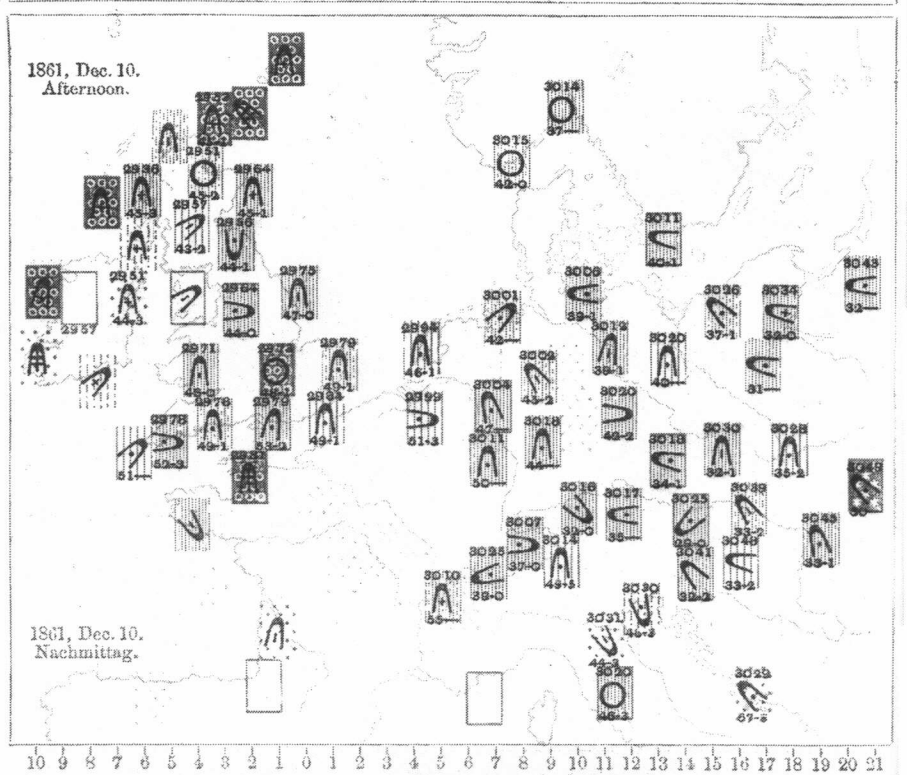
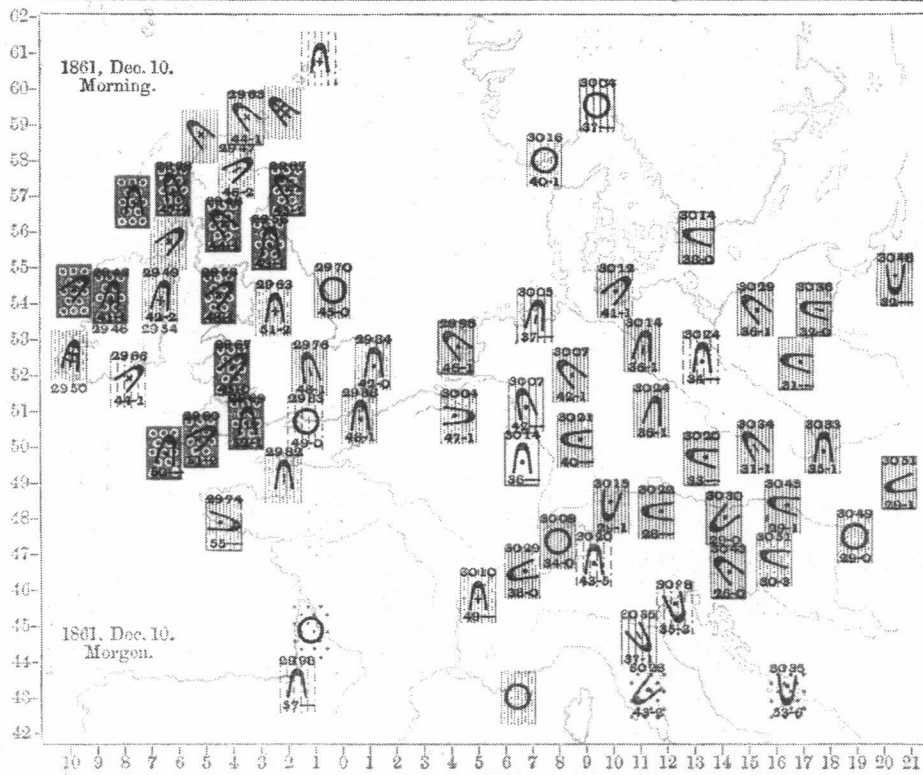
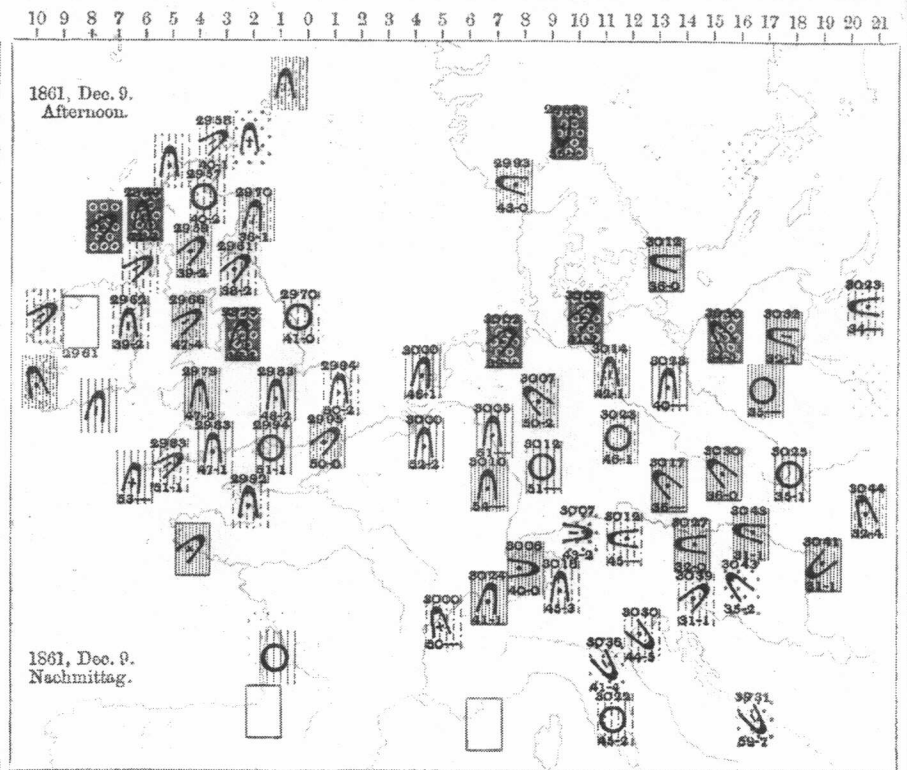
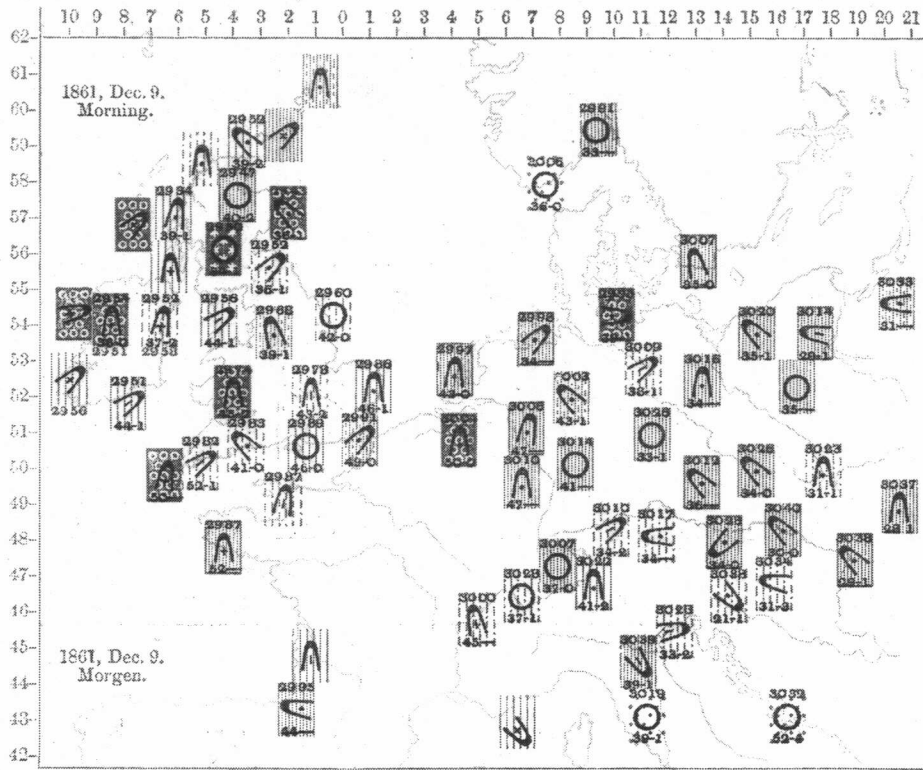


Evening. Abend. Dec. 8.

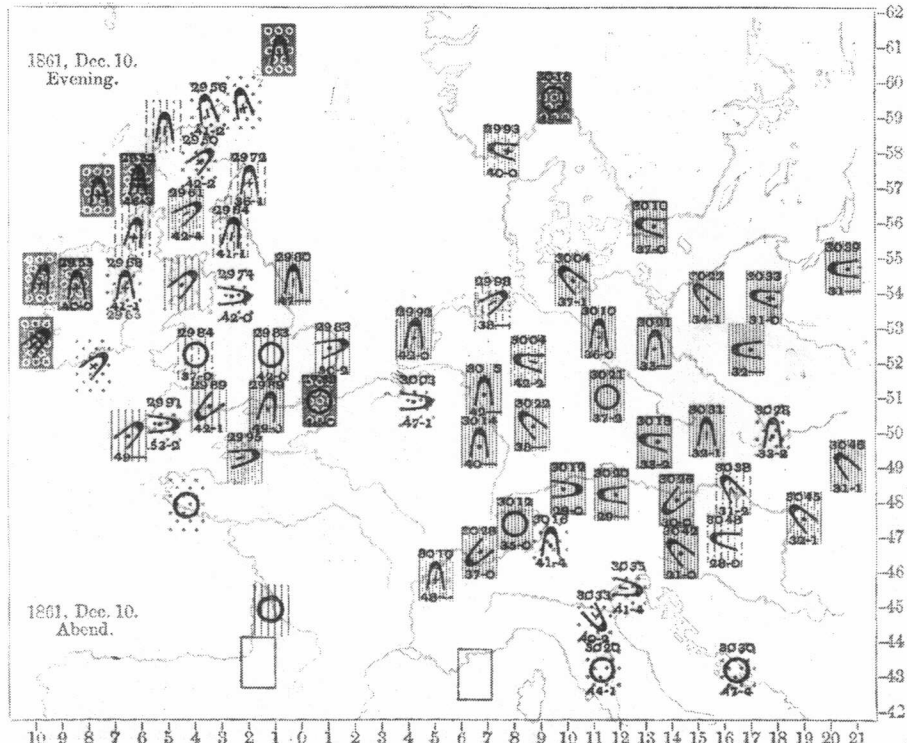
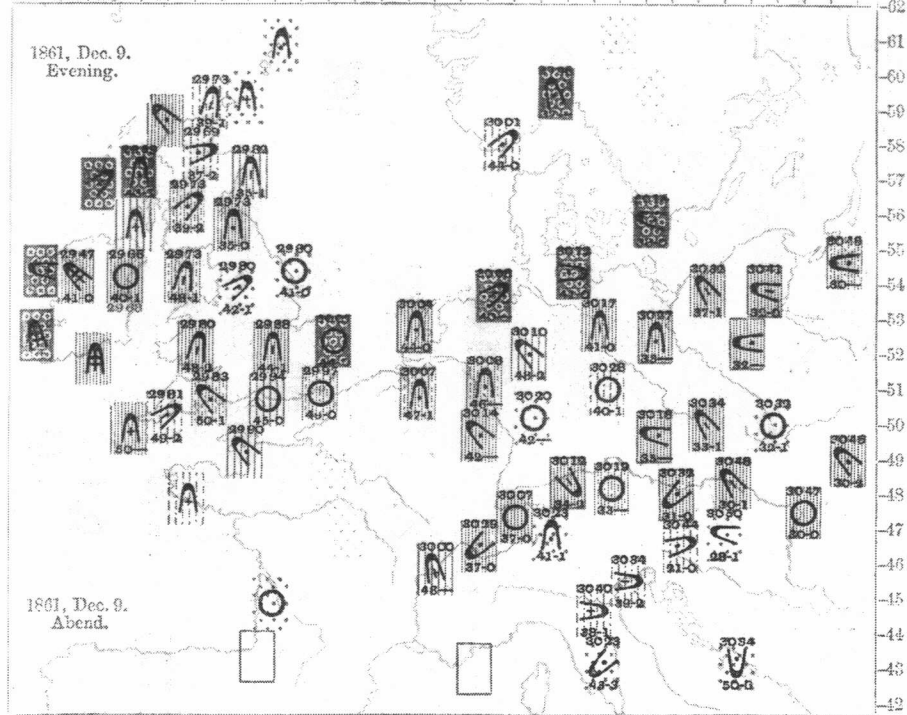


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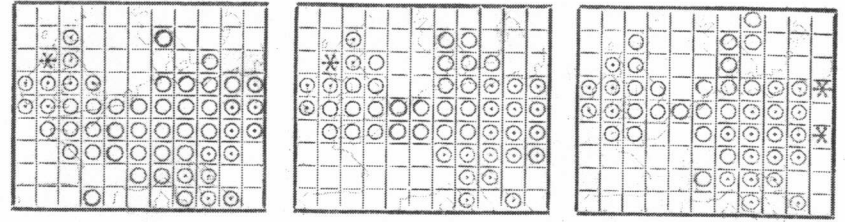




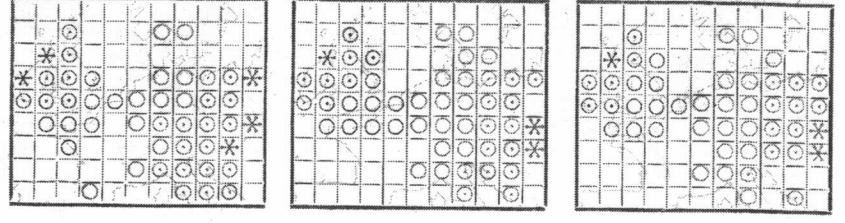
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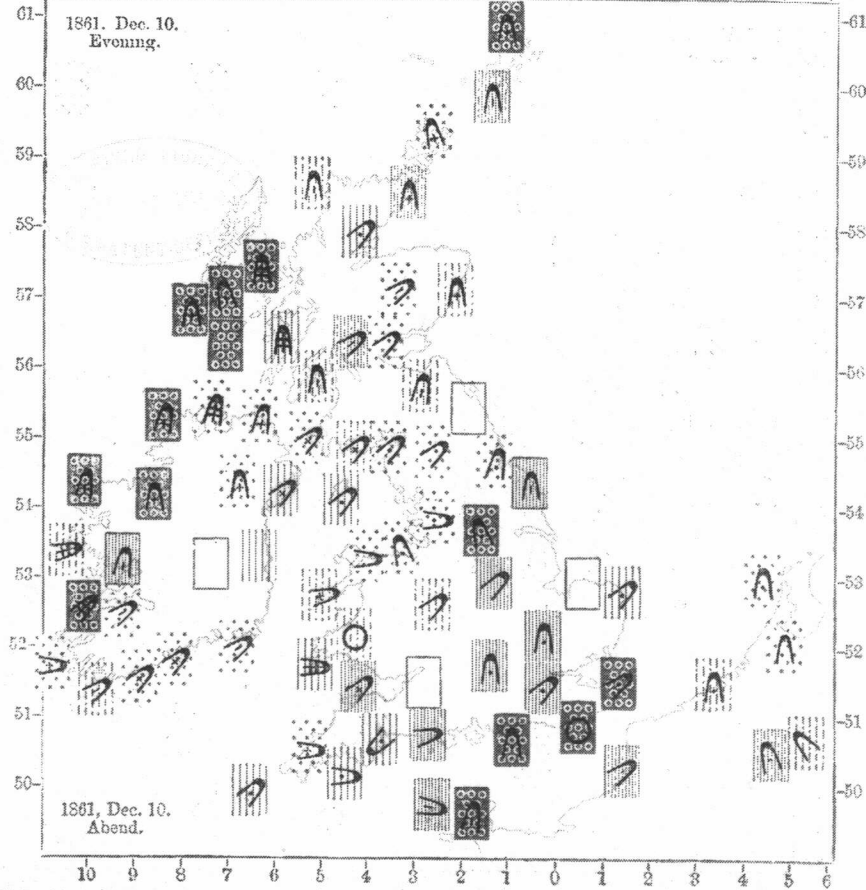
Dec. 9. Morning. Morgen. Afternoon. Nachmittag. Evening. Abend. Dec. 9



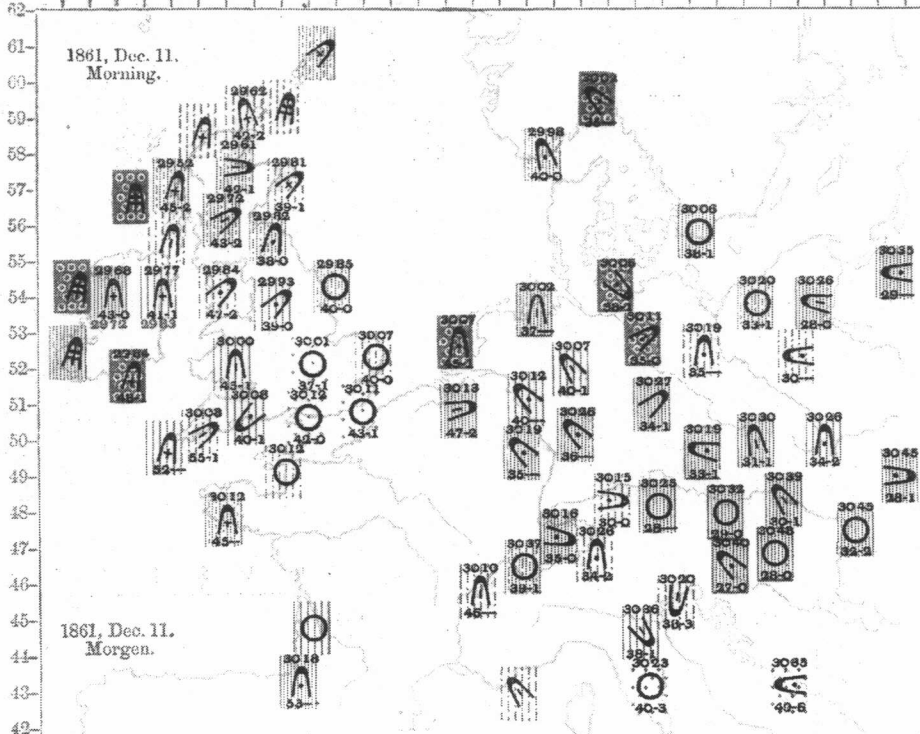
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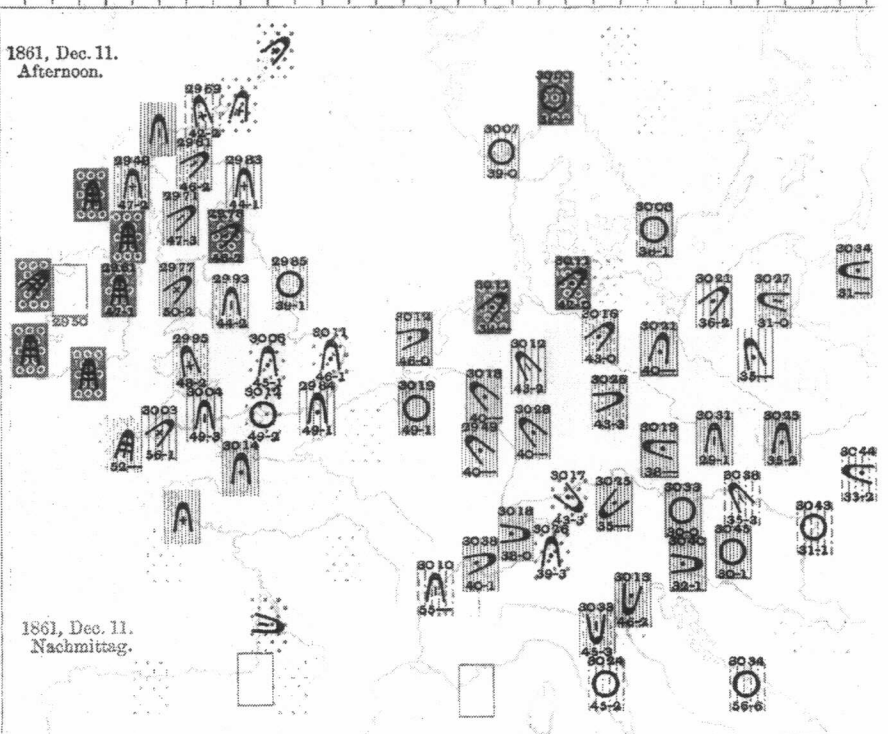
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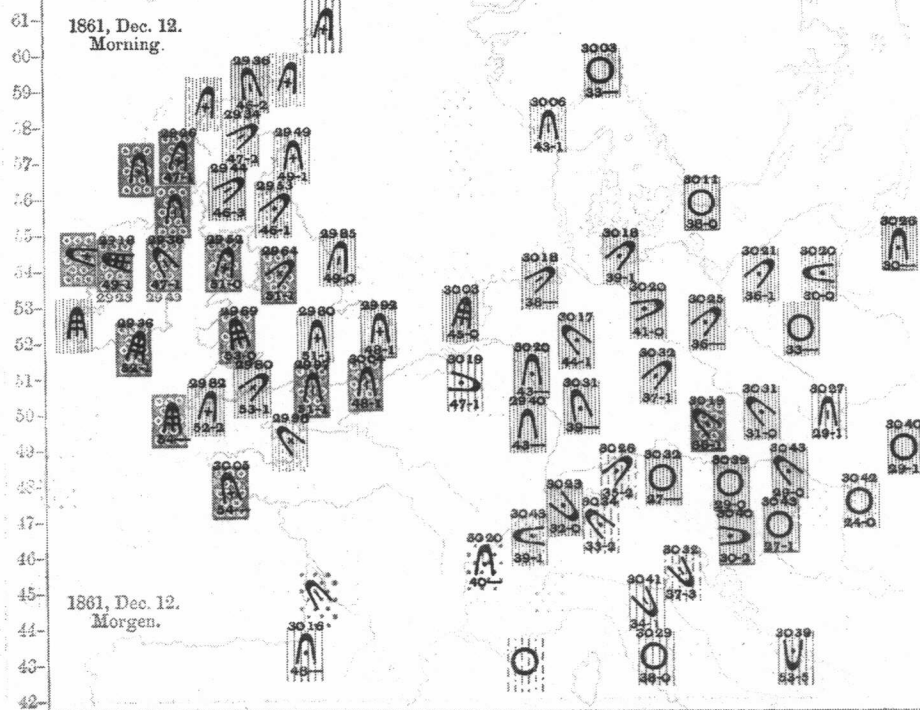
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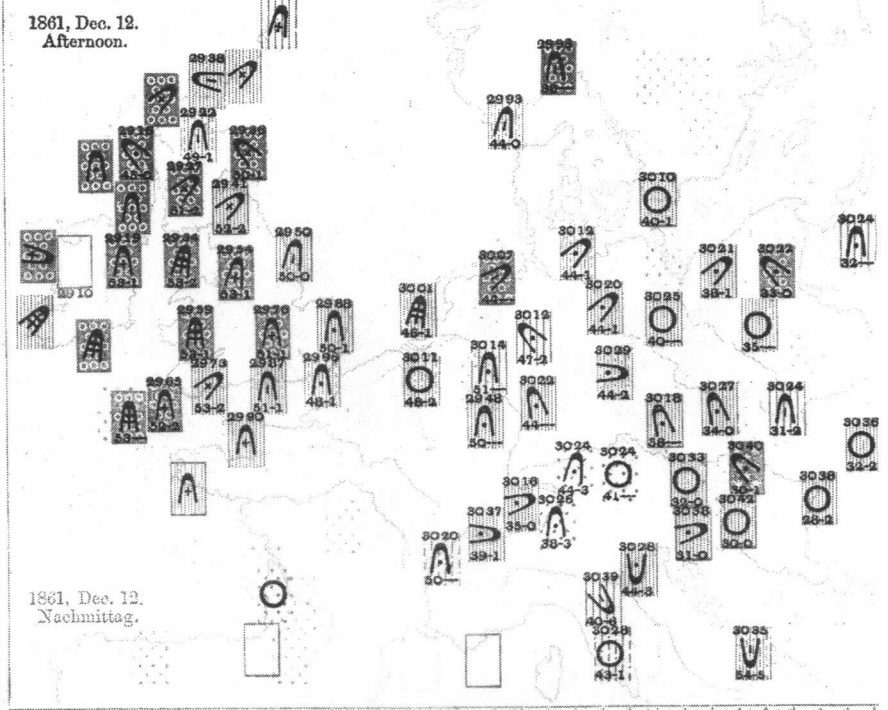
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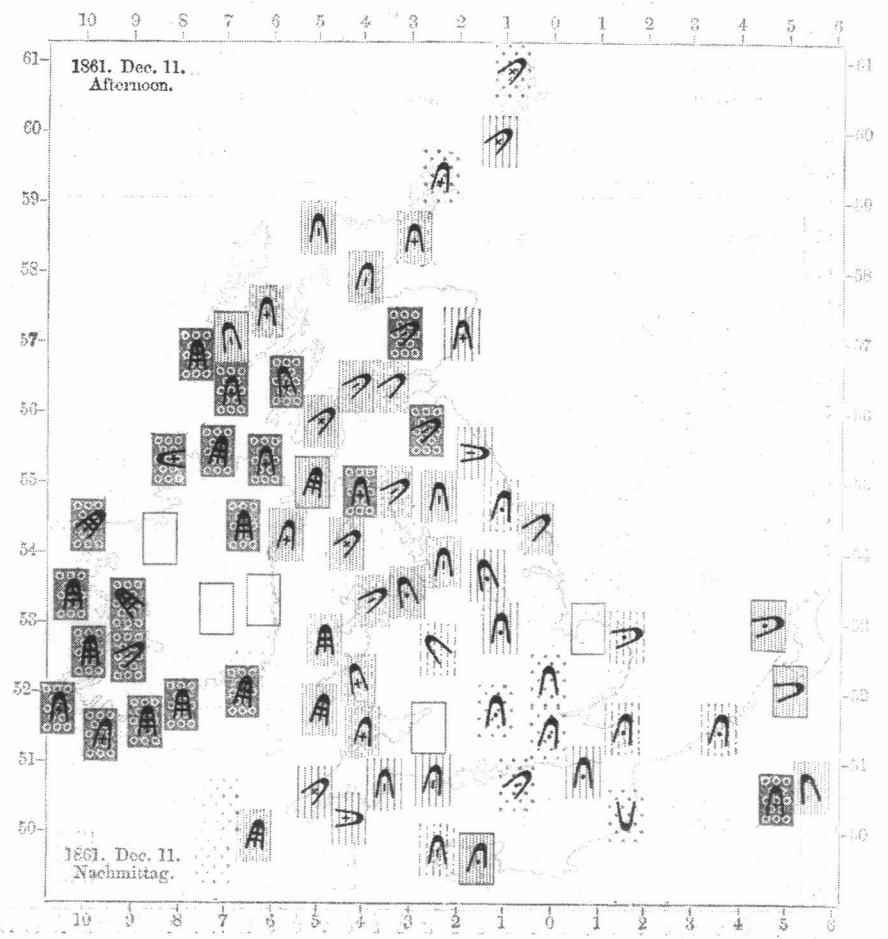
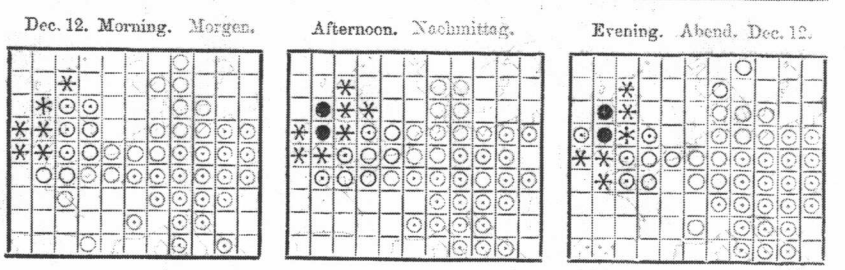
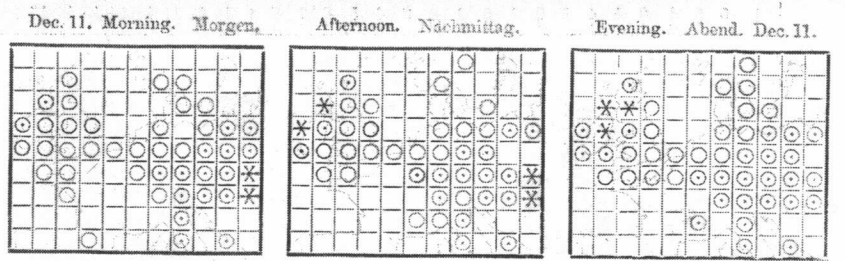
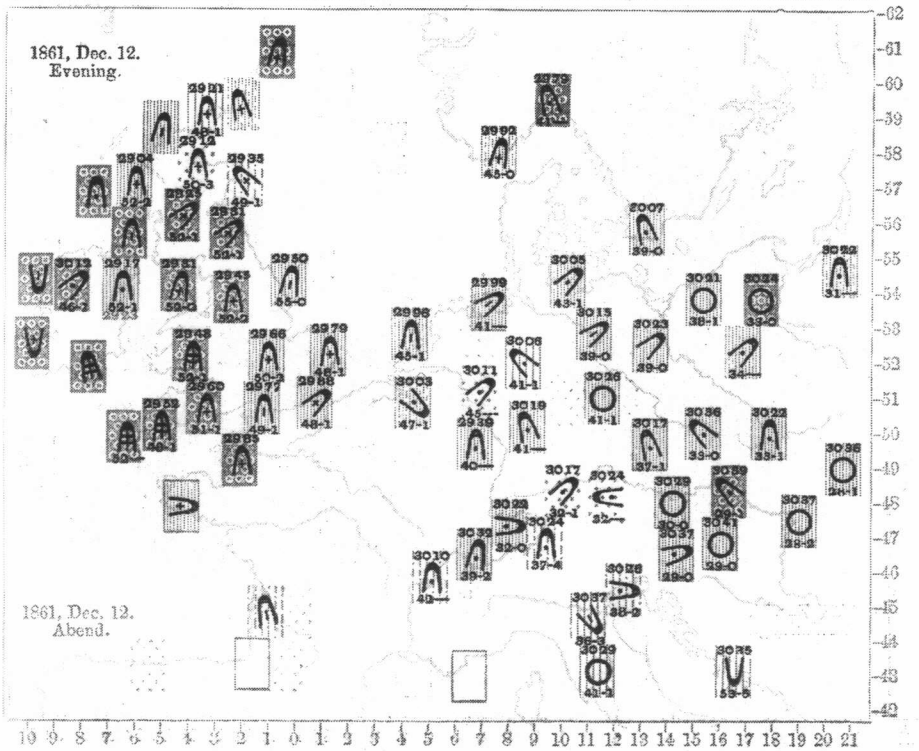
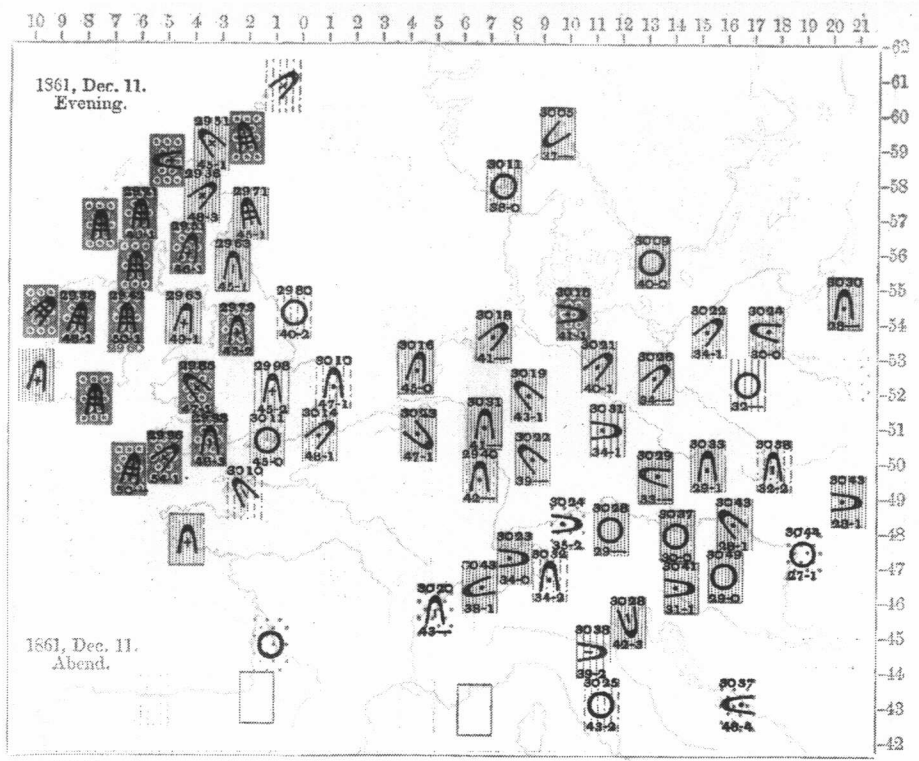


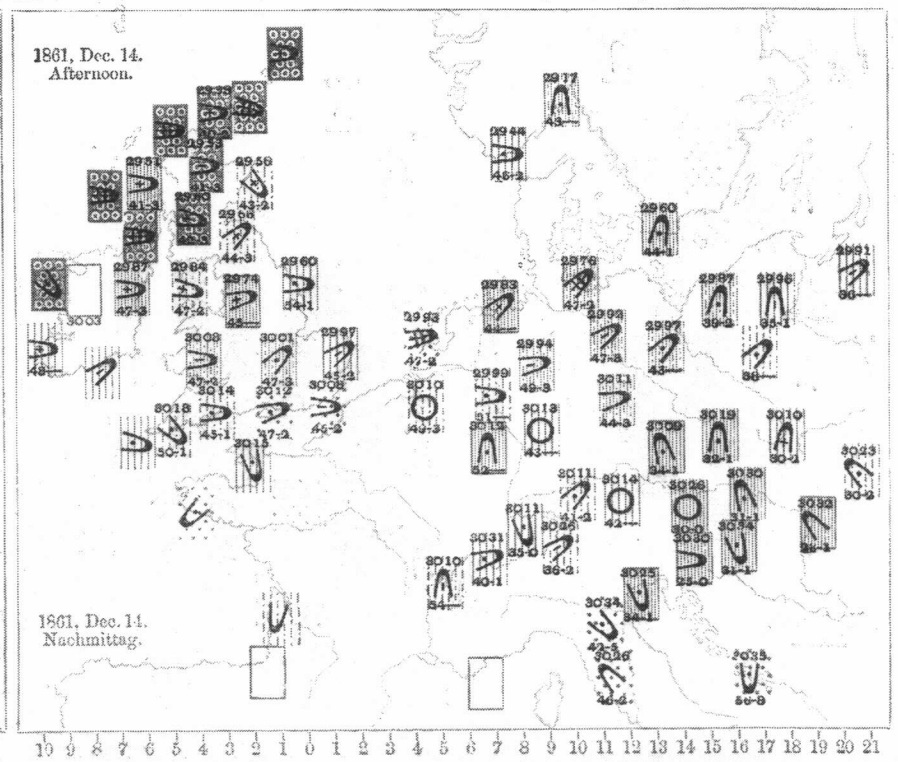
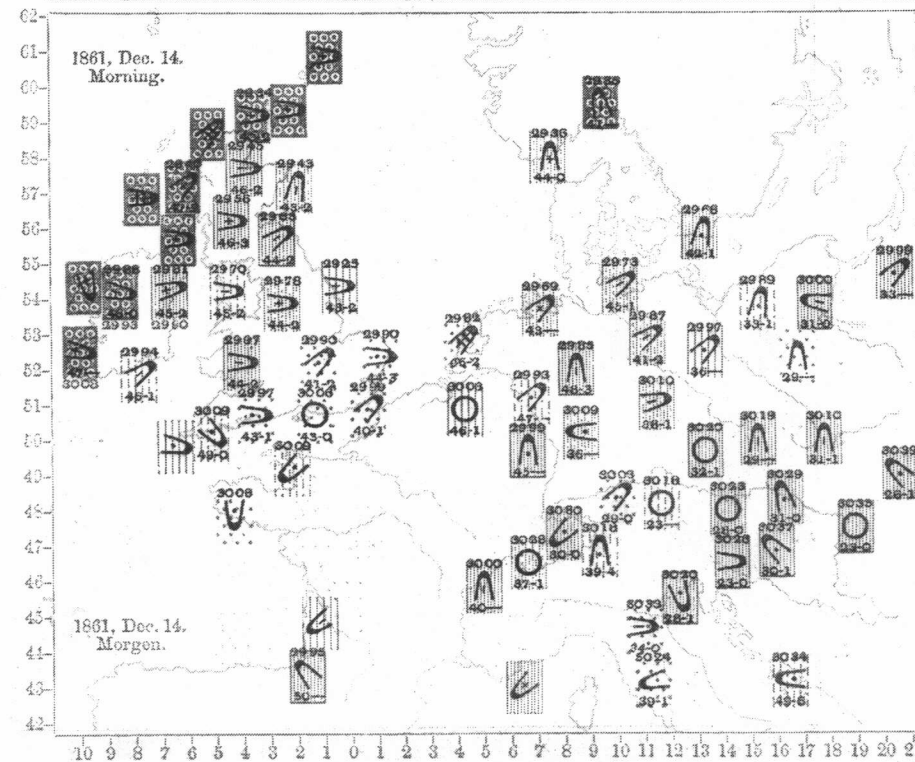
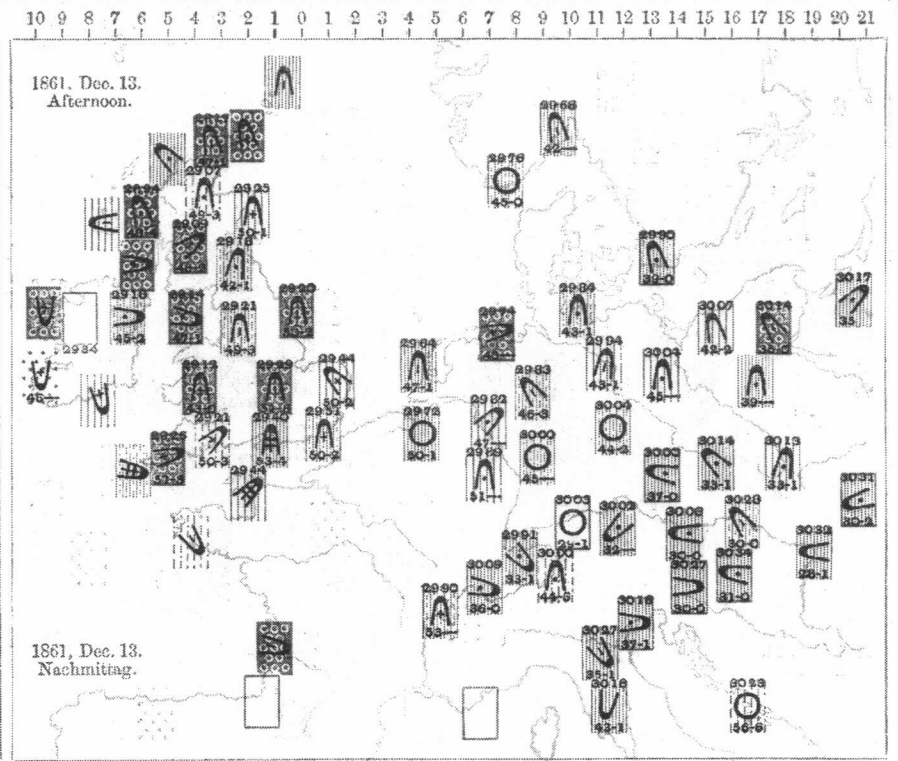
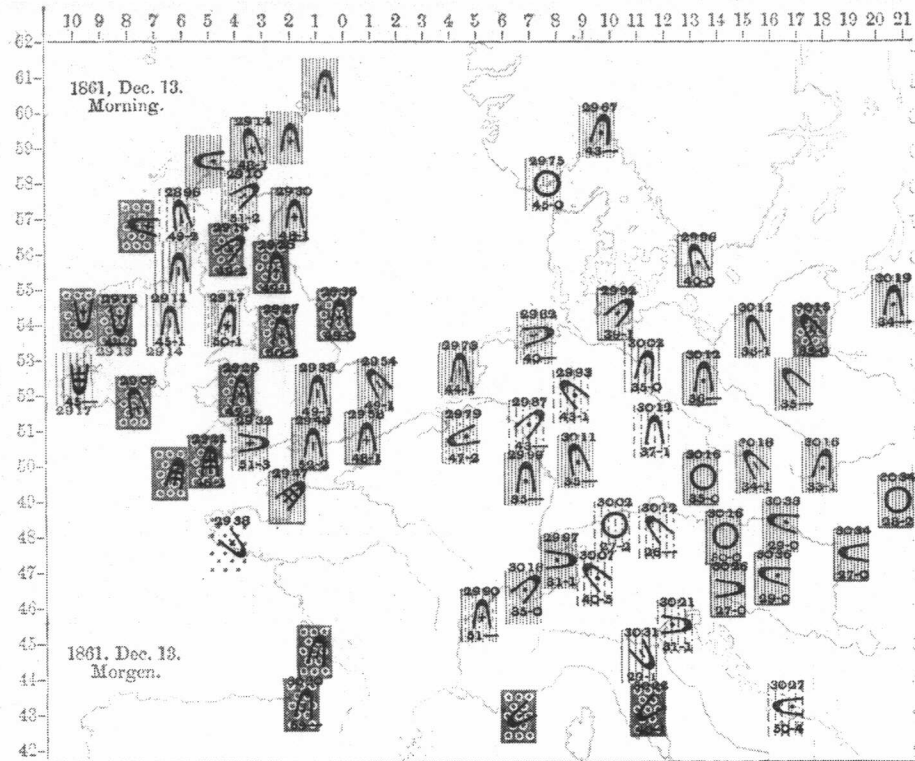
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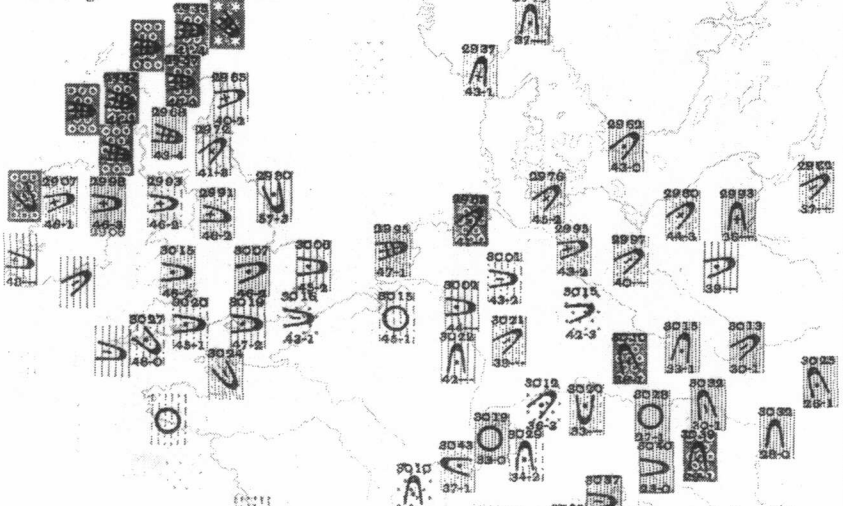
1861, Dec. 13.
Evening.



1861, Dec. 13.
Abend.



1861, Dec. 14.
Evening.

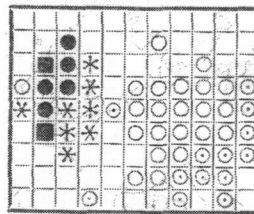


1861, Dec. 14.
Abend.

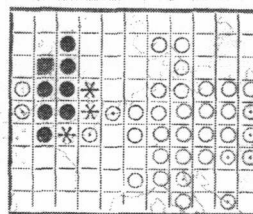


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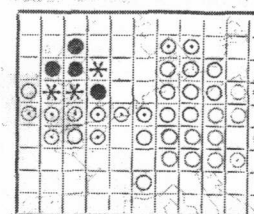
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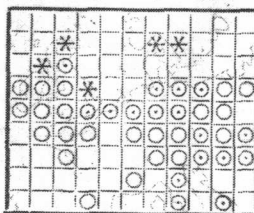
Afternoon. Nachmittag.



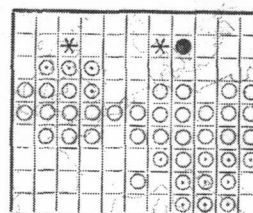
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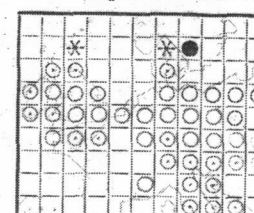
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Afternoon. Nachmittag.

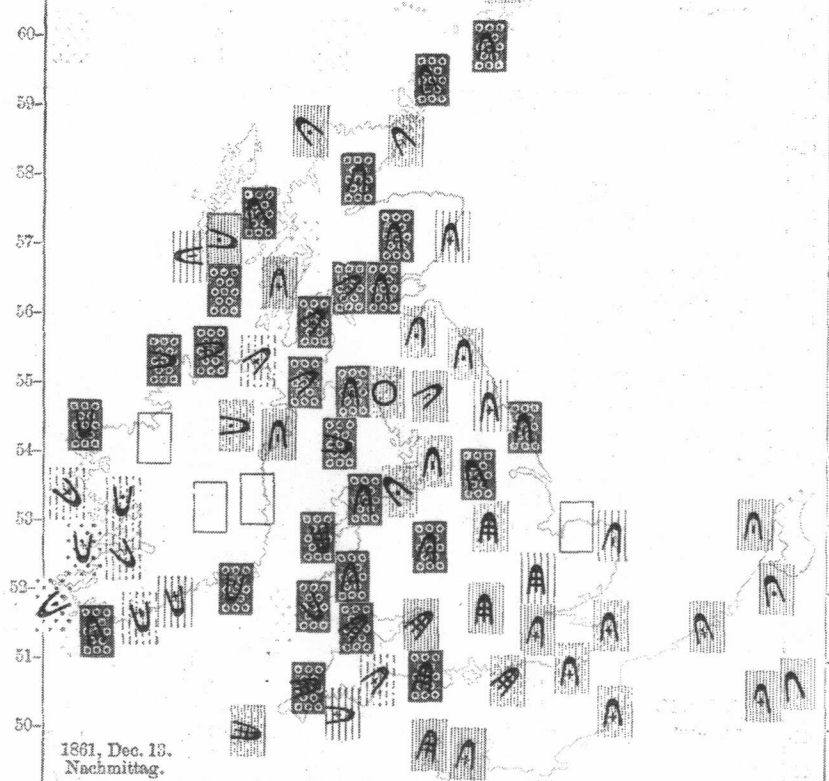


Evening. Abend. Dec. 14.



10 9 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6

1861, Dec. 13.
Afternoon.



1861, Dec. 13.
Nachmittag.

10 9 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6