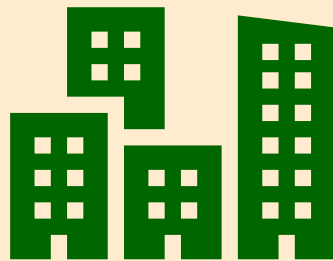




Guidebook for Performing Forecasting Services



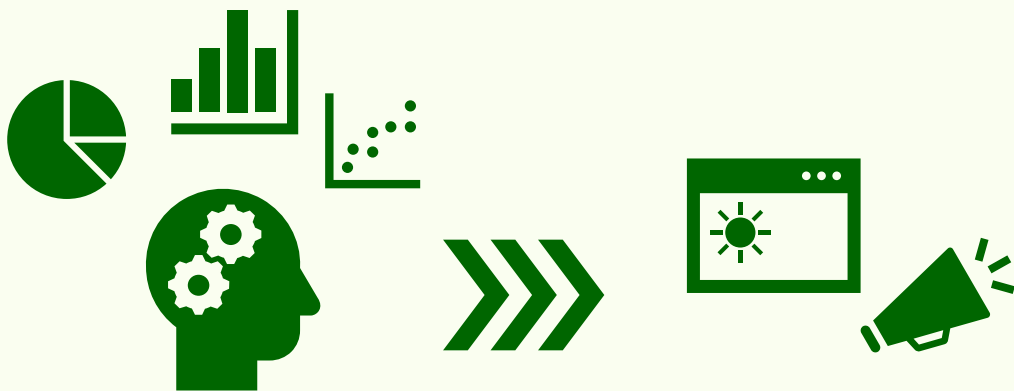
Public-Private Engagement Division,
Information Infrastructure Department,
Japan Meteorological Agency

What are forecasting services?

"Forecast" means an announcement of the prediction of a phenomenon based on the results of observation.

"Services" are "repeated or continuous acts performed on a regular or non-regular basis."

In other words, forecasting services refers to the repeated or continuous announcement of predictions of results for temperature, weather, and other factors on a regular or non-regular basis.



Examples of companies performing forecasting services with a license



Private meteorological companies



Broadcasting stations



Research institutes



Mobile content companies

Etc.

A license is required to perform forecasting services.

It is necessary to obtain a license from the Japan Meteorological Agency in order to perform forecasting services.

This license is hereinafter referred to as "forecasting service licensing."

For example, since weather forecasts are deeply related to people's lives, it is necessary to use forecasts with technical support.

Given that, it is necessary for individuals, companies, and other entities to obtain a license for forecasting services by undergoing an examination by the Japan Meteorological Agency in advance.

Obtaining a license for forecasting services* means that the forecasting services are technically supported.

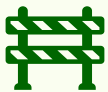


What can be done with a license for forecasting services?

To give an example, by obtaining a license for forecasting services for a certain region, it is possible to provide forecasts to tourists visiting that region, local tourism businesses, and organizers of events such as concerts, or provide forecasts to business operators handling products that are strongly affected by weather for them to use in predicting demand. In this way, obtaining a license links to a variety of business.



Examples of services performed with a license



Provision of forecasts conveying meteorological conditions conducive to safe work for construction sites.



Announcement of self-produced prefectural weather forecasts on TV programs.



Provision of forecasts conveying meteorological conditions suitable for leisure (mountain-climbing, surfing, flower-viewing, etc.) for holiday resorts.



Provision of forecasts of earthquake ground motions at individual points to railway operators for slowing and stopping trains.



Provision of forecasts for predicting the sales of goods whose sales depend on weather conditions (ice cream, etc.).

Etc.

[Click here for a list of licensed business operators for forecasting services.](#)

List of Licensed Business Operators for Forecasting Services



*Performing forecasting services without a license is subject to penalties under the Meteorological Service Act.

Coverage of forecasting service licensing

Phenomena

[Covered]



Phenomena in the atmosphere
(Weather, temperature, precipitation, etc.)



Earthquake ground motions
(Limited to "earthquake ground motions" caused by faulting motion)



Volcanic phenomena



Landslides



Tsunamis



Storm surges



High waves



Floods

[Not covered]



Pollen



Flowering predictions for plants

Content of and method of transmitting forecasts

[Covered]

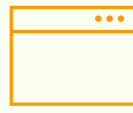


Publicly releasing self-produced forecasts for Shibuya Ward, Tokyo widely on a blog and social media.

[Not covered]



Using self-produced forecasts in one's company or home.



Publishing or transmitting forecasts issued by the Japan Meteorological Agency or licensed business operators as is, or providing explanations thereof.



Publicly releasing self-produced forecasts (past ones at the time they are announced) widely on a website.

(Excluding forecasts related to "specified forecasting services" on page 4)

How does one obtain a license for forecasting services?

To be granted a license for forecasting services, **please submit the written application for license and attached documents to the Japan Meteorological Agency for examination.**

The standards for license are set forth in Article 18 of the Meteorological Service Act.

Specific examinations for licenses for forecasting services are conducted based on the "Examination Standards for Forecasting Service Licensing" set forth by the Director-General of the Japan Meteorological Agency in accordance with the Administrative Procedure Act.

As a result of this examination, if it is recognized that the standards for license mentioned above are met, the Director-General of the Japan Meteorological Agency will grant a license.

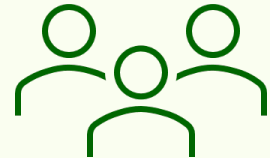


What are specified forecasting services?

"Specified forecasting services" are services that issue forecasts of phenomena closely linked to disasters that, if used by people who do not understand the characteristics of forecasts, may cause confusion in disaster prevention.



For this reason, Article 19-3 of the Meteorological Service Act **makes it mandatory to provide users with prior explanations**, and Article 17 stipulates that **only persons who have received such explanations are allowed to use the services**.



In the examination for a license for specified forecasting services, it is also confirmed that applicants conform to standards for a license regarding explanations, such as matters to be explained to users and measures to allow only persons who have received explanations to use the services.

Phenomena covered



Volcanic phenomena

(limited to volcanic eruptions and volcanic gas emissions)



Landslides



Tsunamis



Storm surges



Floods

Requirements for a license for specified forecasting services

In addition to the technical requirements for predictions, the following must be met.

01 ▶▶

Must be equipped with **facilities** that conduct explanations regarding specified forecasting services



Facilities for providing explanations to users are required.

With regard to facilities, it will be confirmed whether there are facilities that can provide explanations in a way that can confirm the status of users, such as meeting rooms if in person, or conference systems or personal computers with cameras if online.

02 ▶▶

Must be staffed with **staff members** that conduct explanations regarding specified forecasting services



Staff members for providing explanations to users are required.

It will be confirmed whether there are staff members who can properly explain points to bear in mind when using forecasts to users. For outsourcing, it will be confirmed whether staff members provide explanations based on contracts, etc.

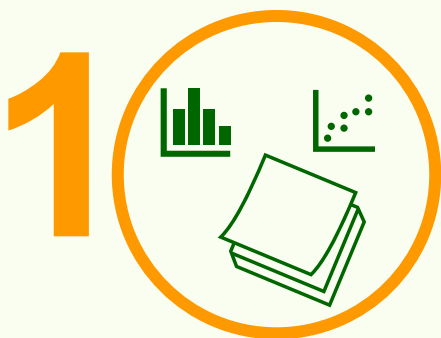
03 ▶▶

Measures to prevent the forecast matters from being communicated to any person other than users must be taken



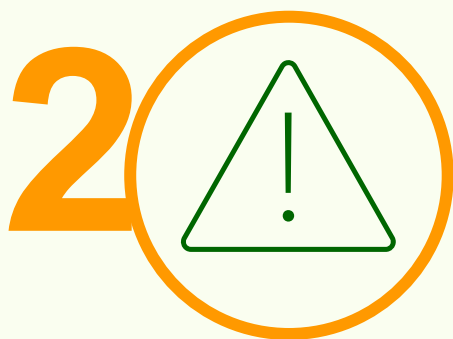
The forecasting items for specified forecasting services shall be provided only to users who have received an explanation in advance. It will be confirmed whether appropriate measures are being taken to prevent the transmission of forecast matters to persons other than users who have received an explanation.

Requirements for a license for forecasting services



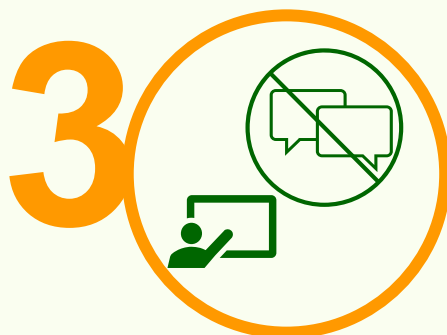
Must have the **facilities and staff members** necessary for the collection and analysis of forecasting data sufficient for the accurate performance of forecasting services

There must be facilities and staff members to collect observations and other forecasting data and analyze forecasting data sufficient to properly perform such forecasting services.



Must have **facilities and staff members** capable of receiving warning matters promptly

There must be facilities and staff members capable of quickly receiving Japan Meteorological Agency warning matters pertaining to the purposes and scope of such forecasting services.



When providing specified forecasting services, there must be **facilities and staff members** capable of properly providing explanations to users.

When the applicant intends to perform specified forecasting services, the applicant has facilities and staff members capable of properly providing the explanation under Article 19-3 and has taken necessary measures to prevent the forecast matters from being communicated to any person other than those who have received the referenced explanation.



Must staff **certified weather forecasters** when forecasting meteorological phenomena, etc.*

*Meteorological phenomena, etc. = Meteorological phenomena or terrestrial phenomena (excluding earthquake ground motions, volcanic phenomena and landslides)

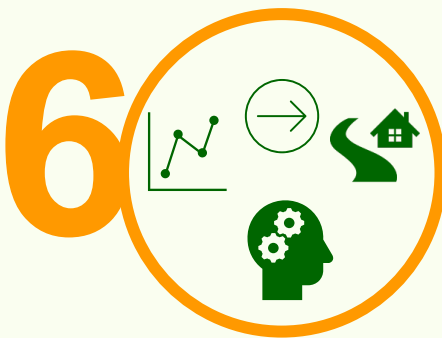
In cases where the intent is to perform forecasting services for meteorological phenomena or terrestrial phenomena (excluding earthquake ground motions, volcanic phenomena and landslides), the business office that predicts meteorological phenomena or terrestrial phenomena pertaining to such services must meet the requirements set forth in the first part of Article 19-2 of the Meteorological Service Act ("requirement set forth in the first part of Article 19-2: Staffing of certified weather forecasters).



The methods of predicting earthquake ground motions, volcanic phenomena, or tsunamis **must conform to the technical standards.**

In cases where the intent is to perform forecasting services for earthquake ground motions, volcanic phenomena, or tsunamis, the methods of predicting earthquake ground motions, volcanic phenomena, or tsunamis pertaining to such services must respectively conform to the technical standards specified by Ordinance of the Ministry of Land, Infrastructure, Transport and Tourism.

When predictions of meteorological phenomena for forecasting services involving phenomena related to meteorological phenomena* are not performed:



The methods of predicting landslides, storm surges, high waves, or floods **must conform to the technical standards.**

The methods of predicting landslides, storm surges, high waves, or floods pertaining to such forecasting services involving phenomena related to meteorological phenomena must respectively conform to the technical standards specified by Order of the Ministry of Land, Infrastructure, Transport and Tourism.

When predictions of meteorological phenomena for forecasting services involving phenomena related to meteorological phenomena* are performed:

The staffing of certified weather forecasters and the methods of predicting landslides, storm surges, high waves, or floods must conform to the technical standards.

The business office that performs meteorological predictions for such forecasting services involving phenomena related to meteorological phenomena must meet the requirements set forth in the first part of Article 19-2 (Staffing of Certified Weather Forecasters). The methods of predicting landslides, storm surges, high waves, or floods pertaining to such forecasting services involving phenomena related to meteorological phenomena must respectively conform to the technical standards specified by Ordinance of the Ministry of Land, Infrastructure, Transport and Tourism.

(*: Forecasting services involving phenomena related to meteorological phenomena refer to forecasting services for landslides, storm surges, high waves, or floods.)

What is a certified weather forecaster?

Certified Weather Forecaster is a national qualification granted to a person who is recognized as having the knowledge and skills necessary to perform forecasting services for meteorological phenomena. To qualify as a certified weather forecaster, it is necessary to pass the certified weather forecaster examination and register with the Japan Meteorological Agency.

In the examination subjects held twice a year, there are academic tests such as expert knowledge on forecasting services and practical tests such as meteorological forecasting.

In addition, certified weather forecasters are expected to be active in a wide range of disaster prevention and business fields as "Weather Disaster Risk Reduction Advisors" who interpret and give advice on meteorological information at disaster prevention sites and as "Weather Data Analysts" who take separate "Weather Data Analysts" training programs" and analyze meteorological data together with other data.



Frequently asked questions

Regarding certified weather forecasters

Q1.

Can certified weather forecasters assigned to each business office make predictions in locations other than that business office?

A1.

Certified weather forecasters can make predictions through a remote access environment from a location other than a business office, such as at home or out of the office, if the business office where forecasting services are to be performed is appropriately specified in the forecasting service plan submitted at the time of applying for forecasting service licensing.



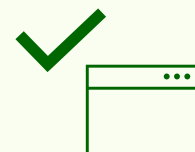
Q2.

Regarding the staffing of certified weather forecasters, do they need to be stationed at the business office 24 hours a day?

A2.

As the prediction of phenomena must be performed by a certified weather forecaster, it is necessary for certified weather forecasters to perform services at the business office during the times of day that they perform forecasting. At the same time, if forecasting is not being performed 24 hours a day, it is not necessary to staff the business office with certified weather forecasters 24 hours a day.

However, if certified weather forecasters confirm the analysis method and the quality of the calculation results in advance, and the certified weather forecasters perform a verification, etc. of the forecast after it is made, the standards for the staffing of certified weather forecasters may be satisfied even if the certified weather forecasters are not performing services at the business office during the times of day that they perform forecasting.



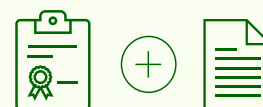
Regarding the forecasting of meteorological phenomena

Q3.

Is the use of numerical forecasts and other forecasting data for performing forecasting services for meteorological phenomena limited to that prepared by the Japan Meteorological Agency?

A3.

It is also possible to use forecasting data produced by a party other than the Japan Meteorological Agency. However, upon applying for a license, it is necessary to attach materials showing that forecasting data was produced by natural scientific methods based on observation results.



Q4.

Is a license for forecasting services also needed when providing data that draws grid point values from the Japan Meteorological Agency's numerical forecast data?

A4.

The Japan Meteorological Agency's numerical forecast data is basic data for forecasting, and it is not a forecast in itself. As such, when providing that data as is, a license for forecasting services is not needed. However, a license is required to perform independent processing or provide the data as a forecast.



Regarding specified forecasting services

Q5.

Is it possible to post forecasts of landslides and other phenomena classified as specified forecasting services on public websites or social media?

A5.

Since specified forecasting services are forecasts of phenomena closely linked to disasters, it is stipulated by law that they cannot be provided to users other than those who have received prior explanations of points to bear in mind upon use of such services. Websites and other forms of provision that can be accessed by anyone are not permitted, as they may be used by persons who have not received an explanation and may cause confusion in disaster prevention.



Q6.

When providing forecasts positioned as specified forecasting services to a client company, is it possible for all employees to use the forecast if one employee of the client company receives an explanation on behalf of the client company?

A6.

Forecasts cannot be used by persons who have not received a direct explanation from a licensed business operator (or an explainer entrusted by a licensed business operator). Additionally, if an explanation is indirectly received from an employee who participated in a briefing, or if the employee reads materials used in the explanation, it is not assumed that the employee has correctly understood the points to bear in mind regarding specified forecasting services, etc., and it is not considered that the employee has received the explanation.



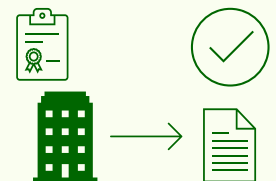
Regarding forecasting services involving phenomena related to meteorological phenomena

Q7.

I would like to perform forecasting services involving phenomena related to meteorological phenomena for floods, etc. Do I have to use Japan Meteorological Agency forecasts as the meteorological data to serve as input values?

A7.

When conducting forecasting services involving phenomena related to meteorological phenomena for floods, etc., it is acceptable to use forecasts issued by the Japan Meteorological Agency as well as forecasts by licensed business operators for meteorological phenomena as input data for precipitation and other meteorological phenomena required for forecasting. When preparing the meteorological data to serve as input values in your company, it is necessary for a certified weather forecaster to make predictions.



Q8.

I would like to perform forecasting services involving phenomena related to meteorological phenomena for storm surge, high waves, etc. However, there are no employees who are certified weather forecasters present. Is it still possible to obtain a license?

A8.

If there are no employees who are certified weather forecasters, forecasts issued by the Japan Meteorological Agency or forecasts by business operators licensed for meteorological forecasting services shall be used. Should the methods of predicting phenomena meet the technical standards, a license can be obtained.



Regarding the forecasting of earthquake ground motions

Q9.

When business operators, etc., who are not involved at all in the creation of devices, etc. to predict earthquake ground motions at individual sites provide (sell, etc.) such devices, etc. to users, or participate solely in the creation of a part of such device, etc. that is not related to the method of predicting earthquake ground motions, does this fall under forecasting services for earthquake ground motions?

A9.

Such cases do not apply to forecasting services for earthquake ground motions. However, when providing (selling, etc.) such device, etc. to users, it is necessary for the business operator responsible for creating the part of such device, etc. related to the method of predicting earthquake ground motions to obtain a license for forecasting services.



Regarding the forecasting of typhoons

Q10.

Can the forecasting of typhoons be performed?

A10.

It is possible to perform forecasting for typhoons by obtaining a license for forecasting services. However, a condition upon doing so is that "when transmitting information about typhoons (Includes low pressure systems expected to develop into typhoons.) to the public, such information shall be limited to the scope of the Japan Meteorological Agency's explanatory information." As such, it is not possible for business operators to provide their own typhoon forecasts in media that anyone can read freely. Note that simple drawings of numerical forecast data fall under explanations of meteorological phenomena and are not regarded as typhoon forecasts. Additionally, when explaining typhoon forecasts issued by overseas meteorological companies, it is necessary to follow the terms and conditions, etc. of each forecast, such as forecasts not intended for use in Japan. Further, in such explanations of typhoons, due consideration such as explaining it together with Japan Meteorological Agency typhoon information is recommended.



Other questions are also posted on the following website.

[Frequently asked questions about meteorological phenomena, etc.]

License for forecasting service Questions
Meteorological phenomena, etc.



[Frequently asked questions about earthquake ground motions]

Forecasting Service Licensing Questions
Earthquake ground motions



[Frequently asked questions about phenomena other than meteorological phenomena, etc. and earthquake ground motions]

Forecasting Service Licensing Questions
Other phenomena



For more information, please visit...

Please refer to the "Guide to Applications for Forecasting Service Licensing" on the Japan Meteorological Agency website. This guide contains explanations of the application procedures for forecasting service licensing and specific examples of application documents.

Forecasting Service Licensing
Guide



Contact point for consultations regarding a forecasting service licensing

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Information Infrastructure Department,
Japan Meteorological Agency



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