

National Severe Weather Warning Service: Met Office Weather Warnings style guide for developers

V1.3 (Jan 2026)





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1. Introduction

1.1 Document purpose

The Met Office Weather Warnings style guide for developers provides guidance for any organisation wishing to carry Met Office Weather Warnings on a digital platform or channel, including, but not limited to; websites, mobile applications and social media channels with desktop, smart phones, tablet and mobile accessibility.

This document explains the following:

- What are Met Office Weather Warnings?
- Guiding principles for developers
- Design guidance including:
 - Attribution
 - Timeliness and formatting
 - Push notifications
 - Social media
 - Educational material



1.2 What are Met Office Weather Warnings?

The National Severe Weather Warning Service (NSWWS), which delivers Met Office Weather Warnings, was established in 1988 as a result of the widespread impacts experienced during the Great Storm of October 1987. Following the introduction of the Civil Contingencies Act (2004) and consultation with emergency responders and members of the public, NSWWS developed to become a warning service based on the impact of the weather rather than a threshold of the weather itself.

Met Office Weather Warnings are exclusive to the Met Office, the National Meteorological Service of the United Kingdom. Met Office Weather Warnings are recognised by UK government as the weather warning service for the UK. We issue weather warnings to warn the public and emergency responders of impacts associated with severe or hazardous weather, which have the potential to cause disruption, damage to infrastructure or a danger to life.



The warning service is designed to allow users to plan and prepare for the event of severe weather impacts and make informed decisions to mitigate the forecast impacts. Met Office Weather Warnings provide consistent and robust severe weather messaging when it matters most.



Met Office Weather Warnings are issued up to seven days ahead for eight different weather types: Rain, Thunderstorm, Wind, Snow, Lightning, Ice, Extreme Heat and Fog. Warnings can be issued for any one of the eight weather types and any combination of two weather types, with the exception of Thunderstorm and Lightning; Rain and Thunderstorm; Rain and Lightning. When warnings are issued for two types of weather they are called dual warnings.

All warnings are given a colour (Yellow, Amber or Red) depending on a combination of both the impact the weather will have and the likelihood of those impacts occurring.

All warnings appear on the Met Office channels, including the website (www.metoffice.gov.uk), mobile app, Met Office social media channels and through third party weather information providers. Warnings are also communicated via electronic and broadcast media.

1.3 Guiding principles for developers

Met Office Weather Warnings are the UK Government's officially recognised weather warnings for the United Kingdom. Developers are expected to adhere to this set of guiding principles when displaying Met Office Weather Warnings. This is essential to ensure that warning messages are always delivered in a consistent, prompt, and effective manner.

The guiding principles are:

- **Public safety**

Met Office Weather Warnings are generated on behalf of UK government to minimise the loss of life and damage to property and infrastructure.

- **Authoritative voice**

The Met Office is designated by the UK Government to be the official source of UK weather-related warnings, and the associated weather story.

- **Reach**

Developers and the Met Office should work together in the interests of the public, seeking to ensure that during periods of impactful weather, the UK population has the best information possible to make decisions on how to protect themselves, their families, property and members of the wider community.

Key principles behind our terms and conditions, including the Met Office Weather Warnings style guide:

- **Consistency**

Forecasts must be consistent with warnings. Consistency of information provided to the public is vital to minimise confusion and drive action to minimise the impacts of severe weather.

- **Exclusive**

Met Office Weather Warnings must be issued without exception or modification. No other weather warning sources should be used to avoid public confusion.

- **Attribution**

Met Office Weather Warnings must always be referred to as 'Met Office Weather Warnings'. Specific attribution requirements apply to Met Office Weather Warnings redistributed in the UK, and outside of the UK. These requirements are included within section 3.1 of this style guide and within Open Licence (Version 1) - National Severe Weather Warning Service- granted to third parties.

Developers may highlight or emphasise weather of relevance to the public. If a warning has not been issued then messaging to be used by the developer should not infer a warning has been issued or will be issued around the weather being highlighted.

If you require any support interpreting the following requirements, please seek guidance from your Met Office point of contact or account manager. Alternatively you can contact us via email: enquiries@metoffice.gov.uk

2. Guidance for re-use of Met Office Weather Warnings

This section provides guidance to developers when implementing Met Office Weather Warnings across web, application and other digital channels.

This document also includes attribution requirements expected of third parties which are specified within Open Licence (Version 1) - National Severe Weather Warning Service. These requirements are clearly marked in this document as “Required by the Licence” and must be applied as defined within the terms and conditions of the licence.

There are two versions of the NSWWS API (v1.0 and v1.1). The guidance differs slightly depending on the version being used. The differences are described in this document.

The Met Office is committed to delivering a warning service that is fit for use and fulfils user requirements. Therefore this style guide is subject to change. Feedback from organisations displaying Met Office warnings, and their users, is encouraged to improve the communication of warnings. Where the style guide terms and conditions prove challenging, developers are encouraged to discuss these with the Met Office to identify solutions (**See section 3.2 - Timeliness and formatting requirements**).



2.1 Weather warning parameters

The parameters detailed below should be read alongside the static service information available which details the Met Office Weather Warnings API and data structure.

For v1.0 this is in the NSWWS API Guide <https://metoffice.github.io/nswws-public-api/> and for v1.1 documentation is available on Weather Data Hub <https://datahub.metoffice.gov.uk/docs/g/category/warnings/overview>.

Parameters are grouped to reflect elements within warnings that can be visualised together, guidance is provided in line where applicable.

2.1.1 Date and time

Guidance for date and time parameters	
- Met Office Weather Warnings must be displayed in UK local time. Additional BST / GMT / UK suffixes are permitted. - All dates and times conform to ISO6801 and must be converted to UK local time by the consuming application	
Parameters	Guidance
<i>validFromDate</i>	Example of use on the Met Office website, see below
<i>validToDate</i>	Example of use on the Met Office website, see below
Example of use on the Met Office website	
 Amber warning Rain & wind Between 14:00 Fri 5 and 17:35 Fri 5 Jan 	
Guidance for use of other date and time parameters	
Where included, optional date and time parameters must still follow guidance listed above	
Other parameters	Guidance
<i>issuedDate</i>	The issue time and date of the warning may be included. Note: The modifiedDate and issuedDate will be the same for the first issued version of the warning.
<i>modifiedDate</i>	The modified time and date of the warning may be included Note: The modifiedDate and issuedDate will be the same for the first issued version of the warning.

2.1.2 Warning status and severity

Guidance for warning status and severity parameters

- All Met Office warnings must clearly show the current status (issued, updated or cancelled) of the warning and the severity.
- All warnings displayed must use the right colour to denote the severity level: Yellow, Amber or Red. Whenever Yellow, Amber or Red colouring is prescribed within this style guide, the following colour palette is recommended:
 - #CC0033: RED
 - #FF9900: AMBER
 - #FFE923: YELLOW

Note: Alternative colour palettes may not be used without prior agreement from the Met Office

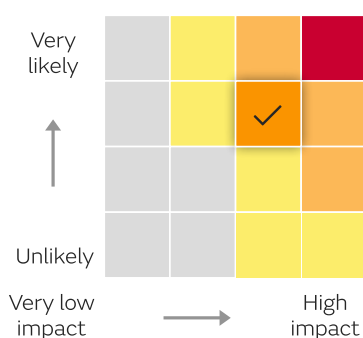
- The warning colour (level) must also be stated in text.

Parameters	Guidance
<i>warningStatus</i>	Warning status will either be “Issued”, “Cancelled” or “Expired”. An updated warning will have a warning status of “Issued” and the warning version will be greater than or equal to ‘2.0’. (For warning updates, refer to optional parameters within section 2.1.3 Warning text content below)
<i>warningLevel</i>	Refer to guidance listed above.

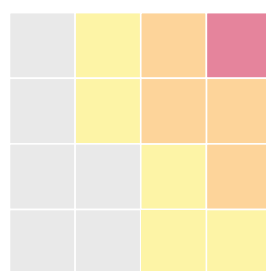
Other guidance for warning status and severity parameters

- Where used, the impact and likelihood level of the warning may be included in the form of the optional matrix issued by the Met Office, see below:

Weather Impact Matrix



Simple Base Matrix



Where the matrix is used, the colour palette (see above) must be consistent with that used to display the warnings and the labels for the matrix must be consistent with Met Office labels

- #DCDCDC: GREY
(applies to matrix only)

Other parameters	Guidance
<i>warningImpact</i>	Refer to guidance listed above.
<i>warningLikelihood</i>	Refer to guidance listed above.

2.1.3 Warning text content

Guidance for warning text content parameters

- The following parameters must be included in full to assemble the warning text:
 - Weather type/s (single or dual)
 - Warning headline
 - What to expect
 - What should I do?*
- If coloured text is used, it must either match the warning colour or be a neutral colour not associated with warning levels. (E.g. the text describing a yellow warning must not be amber or red).

Parameters	Guidance
<i>weatherType</i>	▪ The weather type of all warnings, including overlapping warnings, must be clearly visible when a user first accesses Met Office warnings on a digital channel. ▪ Warning weather type must be clearly stated using text. ▪ Weather icons are optional when displaying Met Office Weather Warnings. Please consult the Met Office to agree design if you intend to use icons. ▪ Dual warning weather types must be listed in the order received; priority: Rain, Thunderstorm, Wind, Snow, Lightning, Ice, Extreme Heat, Fog. Example of use on the Met Office website: Red Ice Amber Rain & wind Yellow Thunderstorm – #CC0033: RED (recommendation: white text) – #FF9900: AMBER (recommendation: black text) – #FFE923: YELLOW (recommendation: black text)
<i>warningHeadline</i>	Refer to guidance listed above.
<i>whatToExpect</i>	Refer to guidance listed above.
<i>whatShouldIDo</i>	Refer to guidance listed above.

*This parameter is provided as guidance only for those using v1.1.

Guidance for warning text content parameters

Refer to guidance warning text content requirements above.

For public channels only, a link may be provided to the Met Office website to advise the public of actions they can take to protect themselves against severe weather. Note: this parameter is not included within v1.0 of the API. For users of v1.1 of the API, provision of a link is strongly encouraged to increase the likelihood that action is taken.

Where included, the link should be prefixed with the statement **‘What should I do’**

The following text is recommended:

‘If you would like further advice and guidance on what to do in severe weather, click here’.

The link must go to:

<https://www.metoffice.gov.uk/weather/warnings-and-advice/seasonal-advice>

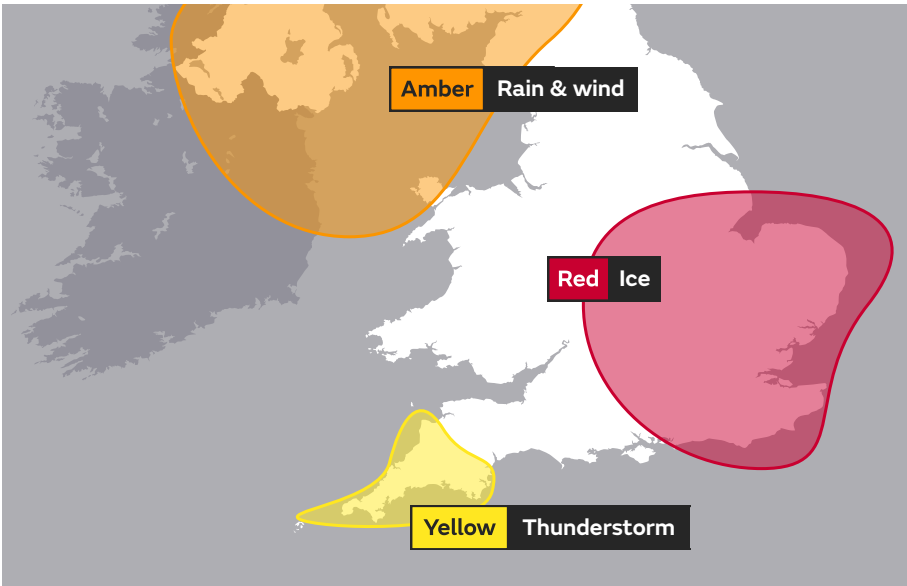
Other parameters	Guidance
<i>warningFurtherDetails</i>	The warning further details may be included. Where included, it must be headed by the phrase ‘further details’.
<i>warningUpdateDescription</i>	The warning update description details may be included. When warningStatus=ISSUED the warningUpdateDescription will contain a warning update reason (for warning versions > 2.0). When warningStatus=CANCELLED the warningUpdateDescription will contain a warning cancellation reason .

2.1.4 Geographical warning area

Guidance for geographical warning area parameters	
The geographical area the warning applies to must be defined.	
Parameters	Guidance
<i>affectedAreas</i>	Refer to guidance listed above. This may be done by displaying the shape co-ordinates on a map and / or the list of unitary authorities affected. Example of use on the Met Office mobile app: 

Other guidance for geographical warning area parameters

- The geographical warning area must be labelled effectively. Met Office recommends text; however, icons may be used if prior design agreement with the Met Office has been met.

Other parameters	Guidance
geometry	The shape data is not explicitly required when hosting Met Office Weather Warning information, if used then the following must be adhered to: ▪ The warning area must be displayed on a meaningful map (If a map of the UK is used it must include: England, Northern Ireland, Scotland, Wales, and the islands of the UK including: the Orkney Islands, the Shetland Islands and the Isles of Scilly). ▪ The warning area must clearly show the weather type (Met Office recommends text, however, icons may be used if prior design agreement with the Met Office has been met). ▪ When warnings displayed on maps are zoomed in so that warning boundaries are not visible, the label must be clearly visible indicating warning type and severity (Red, Amber, Yellow). ▪ The warning area must clearly depict warning severity. Each warning area must be colour filled with the appropriate warning colour (Yellow, Amber, Red). ▪ Met Office Weather Warnings must not be overlaid with any other information, including meteorological. ▪ Land areas where Met Office Weather Warnings do not apply must be differentiated from the UK, inclusive of the Isle of Man, the Channel Islands, Republic of Ireland, sea areas or any part of continental Europe. For example a greyed-out section on the map could be used. 

2.1.5 Overlapping warning areas

Guidance for overlapping warning areas

Guidance

The shape data is not explicitly required when hosting NSWWS information. However, if used then the following must be adhered to in accordance to the guidance set out in geographical warning area above.

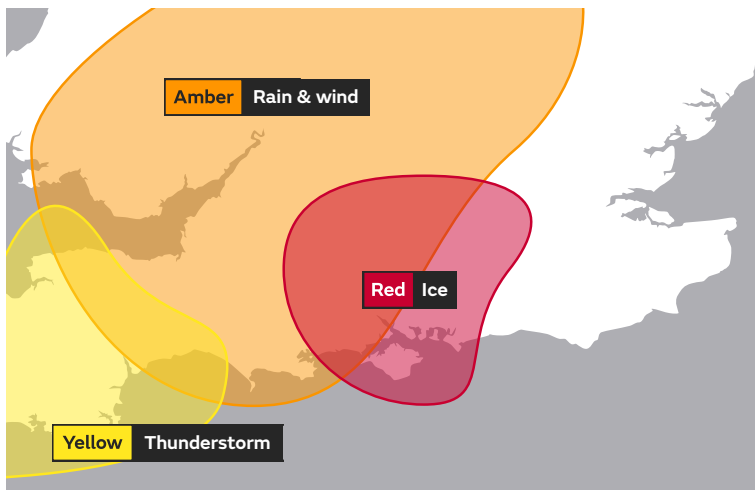
- Warning labels for all overlapped warnings must be visible at all times, displayed using the colour appropriate to the level of warning
 - The Met Office recommends text; however, icons may be used if prior design agreement with the Met Office has been met.
- The weather type of all warnings, including overlapping warnings, must be clearly visible when a user first accesses Met Office warnings on a digital channel.
- Opacity may be used to enable distinction between overlapping warnings
- Where warning areas overlap, the warnings must be displayed in priority order, this must match the order in which warnings are received within the API so that warnings of greatest risk are clearly visible to users
 - Results are ordered primarily by Risk (Highest risk first) and then chronologically by validFrom date. The risk order looks primarily at warningLevel (RED > AMBER > YELLOW) then by warningImpact and finally by warningLikelihood

Risk priority mapped to Impact Matrix

	9	4	1
	10	5	2
		7	3
		8	6

Note: If warnings are not visually displayed, warnings must be presented in priority order of start time, severity and then warning type.

Example of use on the Met Office website



Note: The labels for each warning area must be visible, even if the warnings overlap throughout the area displayed.

3. Further guidance

This section details guidance for implementing Met Office Weather Warnings across digital channels. Requirements which are included within the terms and conditions of Open Licence (Version 1) - National Severe Weather Warning Service are marked within this document as “**Required by the Licence**”.

3.1 Attribution requirements

	Guidance
3.1a	Correct attribution of Met Office Weather Warnings must be used at all times. It must be clear to users that the warnings are from the Met Office (Required by the Licence - included within the terms and conditions of Open Licence (Version 1) - National Severe Weather Warning Service
3.1b	Attribution must be provided at all times using the text “Met Office Weather Warning/s © Crown Copyright [year of publication]” when re-distributing in the UK; Or, “Met Office Weather Warning/s, British Crown [year of publication]” when re-distributing outside of the UK The Met Office logo may be displayed in addition to either attribution statement above, or replace the text (Required by the Licence - included within the terms and conditions of Open Licence (Version 1) - National Severe Weather Warning Service
3.1c	Red and Amber warnings must not be displayed with/ alongside any inconsistent visual messaging. If Yellow Met Office Weather Warnings are displayed, which is recommended, all reasonable and practicable measures should be taken to avoid displaying any inconsistent visual messaging with/alongside
3.1d	Where the logo is used our brand guidelines must be followed. Details on the Met Office logo guidelines can be requested through enquiries@metoffice.gov.uk (Required by the Licence - included within the terms and conditions of Open Licence (Version 1) - National Severe Weather Warning Service
3.1e	A link to the Met Office UK warnings overview page may be provided to allow users to access more information related to Met Office Weather Warnings. https://www.metoffice.gov.uk/public/weather/warnings/ (Required by the Licence - included within the terms and conditions of Open Licence (Version 1) - National Severe Weather Warning Service

3.2 Timeliness and formatting guidance

	Guidance
3.2a	Unless specifically agreed with the Met Office, the forward propagation of any Met Office Weather Warnings is not acceptable, for example sharing data feeds or warnings with other organisations. However, push notifications (refer to section 3.3, Push Notifications) are permitted.
3.2b	All issued, currently valid Met Office Weather Warnings shall be viewable on average within 5 minutes of the data being available from the Met Office, and never more than 10 minutes from the time displayed on the Met Office website (Required by the Licence - included within the terms and conditions of Open Licence (Version 1) - National Severe Weather Warning Service
3.2c	All expired Met Office Weather Warnings shall be removed within 5 minutes of the expiry time and never more than 10 minutes from the expiry date. (Required by the Licence - included within the terms and conditions of Open Licence (Version 1) - National Severe Weather Warning Service
3.2d	All updates to Met Office Weather Warnings shall on average replace the previous issue within 5 minutes of the update being made available and never more than 10 minutes from the time of the update displayed on the Met Office website. All updated warnings must be clearly labelled as such. (Required by the Licence - included within the terms and conditions of Open Licence (Version 1) - National Severe Weather Warning Service
3.2e	All cancelled Met Office Weather Warnings shall be removed on average within 5 minutes of the warning being cancelled by the Met Office, and never more than 10 minutes from the time of cancellation. (Required by the Licence - included within the terms and conditions of Open Licence (Version 1) - National Severe Weather Warning Service.
3.2f	Any changes to NSWWS must be applied. This will be conducted through a change management process which will include the opportunity to discuss the proposed changes ahead of implementation.
3.2g	Where warnings are displayed in a dedicated warnings page, a warnings overview showing the status of warnings issued (Yellow, Amber, Red) over the seven-day period must be provided so that all active warnings can be seen.
3.2h	Distinction to show when there are or aren't warnings in force over the individual seven days is desirable.

3.3 Push notifications

Push notifications can be used to inform users that warnings have been issued, updated or cancelled.

	Guidance
3.3a	Push notifications are not explicitly required, however where push notifications are used the following must be adhered to.
3.3b	Push notifications must be issued for all Amber and Red warnings, irrespective of weather type.
3.3c	Push notifications may be issued for all Yellow warnings. Developers may wish to consider allowing users to select the impact levels, likelihood levels and/or weather types for Yellow warnings of interest to them.
3.3d	Push notifications must be issued for all updated warnings where there is a significant change to the original warning. A significant change is: Any increase in the likelihood level and/or a change in the impact level when the initial warning is Amber, and the change will result in the colour remaining Amber or changing to Red; Any increase in the likelihood or impact level which turns a Yellow warning into an Amber or Red warning; Any decrease in likelihood or impact level that will turn the warning from Red to Amber, Amber to Yellow, or Red to Yellow; When a warning is cancelled.

3.4 Social media

	Guidance
3.4a	Met Office warnings shall not be modified, edited or changed in any way unless requested by the Met Office.
3.4b	Weather warning content must be referred to as “Met Office Weather Warning/s © Crown Copyright [year of publication]” when re-distributing in the UK; Or, “Met Office Weather Warning/s, British Crown [year of publication]” when re-distributing outside of the UK (Required by the Licence - included within the terms and conditions of Open Licence (Version 1) - National Severe Weather Warning Service
3.4c	Images of Met Office warnings must be taken from a Met Office source; such as Met Office warnings webpage, Met Office X, Met Office Facebook
3.4d	The warning colour (Yellow, Amber or Red) must be stated in any text.
3.4e	When sharing Met Office warnings, only forecast warning or active warnings shall be shared. Expired warnings or warnings about to expire shall not be shared.
3.4f	A link to the Met Office warnings webpage may be provided to allow users to access more information related to Met Office Weather Warnings. https://www.metoffice.gov.uk/public/weather/warnings/ (Required by the Licence - included within the terms and conditions of Open Licence (Version 1) - National Severe Weather Warning Service
3.4g	All warnings must be displayed, although they do not have to be on the same image.

3.5 Educational material

	Guidance
3.5a	A link to the Met Office website https://www.metoffice.gov.uk/weather/guides/warnings is to be used when there is a need to include educational material to explain Met Office Weather Warnings. (Required by the Licence - included within the terms and conditions of Open Licence (Version 1) - National Severe Weather Warning Service
3.5b	Where a developer wishes to provide educational material to explain Met Office Weather Warnings, the proposed content must be signed off by the Met Office.

