



25 November 2024

Chris McCashin

**By email**

Tēnā koe Chris,

**Official Information Act request Doppler Radars.**

I refer to your request for information under the Official Information Act 1982 (OIA) dated 25 October 2024 where you requested:

1. *A list of all Doppler radar locations across New Zealand, including specific geographic coordinates.*

<b>MetService Weather Radar</b>	<b>Location Latitude (Deg. South)</b>	<b>Location Longitude (Deg. East)</b>
Northland	35.0806	173.8053
Auckland	36.3003	174.7114
Bay of Plenty	38.0657	176.0620
New Plymouth *	39.0107	174.1764
Mahia	39.1681	177.8882
Wellington	41.3113	174.6463
Westland	42.7378	171.0611
Canterbury	43.7848	172.0231
Otago	45.6895	170.4187
Invercargill *	46.4181	168.3306



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2. *The areas or regions that each radar system serves.*

Please find attached below a map of the radars and the areas/regions that they serve.

3. *Information regarding installation and upgrades including dates when each radar was installed, and dates of any upgrades or replacements made to the radar system.*

<b>MetService Weather Radar</b>	<b>Original installation date (* or weather radar conversion date)</b>	<b>Last Updated</b>	<b>Comments</b>
Northland	6/10/2014	-	
Auckland	17/10/1989	9/02/2012	Installed digital Rx and solid state Tx - Scheduled for Vaisala WRM200 upgrade in 2025
Bay of Plenty	8/09/2010	-	
New Plymouth *	21/05/2008	8/04/2014	Installed digital Rx (2008) and solid-state Tx (2014)
Mahia	18/09/2009	-	
Wellington	17/03/1991	23/04/2023	Vaisala WRM200 upgrade and earthquake strengthen tower
Westland	9/11/2011	-	
Canterbury	21/03/1992	30/11/2024	Upgrading to Vaisala WRM200 on a new steel tower in Nov 2024
Otago	12/11/2020	-	
Invercargill *	15/12/2005	25/07/2016	Installed digital Rx (2008) and solid-state Tx (2016)



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4. *Radar Specifications including, type and model of each radar, names of suppliers for these radar systems, and purchase costs associated with each radar system.*

<b>MetService Weather Radar</b>	<b>Equipment manufacturer and model (Antenna &amp; Transmitter)</b>	<b>Equipment manufacturer and model (Radar Control Server)</b>
Northland	Vaisala WRM200	Vaisala RVP9
Auckland	Ericsson/Pulse Systems	Vaisala RVP8
Bay of Plenty	Vaisala WRM200	Vaisala RVP8
New Plymouth	EG&G WF100C/Pulse Systems	Vaisala RVP8
Mahia	Vaisala WRM200	Vaisala RVP8
Wellington	Vaisala WRM200	Vaisala RVP9
Westland	Vaisala WRM200	Vaisala RVP9
Canterbury	Vaisala WRM200	Vaisala RVP9
Otago	Vaisala WRM200	Vaisala RVP9
Invercargill	EG&G WF100C/Pulse Systems	Vaisala RVP8

Your request for purchase costs associated with each radar system has been declined under Section 9(2)(i) of the Official Information Act on commercial grounds. This is because the cost MetService pays for radar systems is commercially sensitive. If this information were revealed it could prejudice MetService's ability to freely negotiate for the procurement of future radar systems.

Similarly, your request for the specific suppliers of the radars has been declined under Section 9(2)(i) of the Official Information Act as this information is commercially sensitive.

5. *Daily estimated power usage for each radar, broken down by month and day since 2019.*

This aspect of your request has been declined under Section 18(e) and Section 18(f) of the Official Information Act. After conducting a search for this information, no document exists with daily estimated power usage for each radar broken down by month and day since 2019. Further, to create this document would require substantial collation and research. However, we have attached power usage data over a six-month period. Please note that data for the Invercargill radar has not been provided. This is because the power meter is





shared with the onsite contractor. Because of this, we can not extrapolate out the power usage for this site.

6. *Information on any additional users of the radar data or partnerships for data sharing with other organizations or agencies.*

This aspect of your request has been declined under Section 9(2)(i) of the Official Information Act on commercial grounds. This is because use of the radar data outside of MetService's Open Access Data policy is on a strictly commercial basis. Therefore, the release of information on additional users and partnerships would likely prejudice MetService's commercial position.

7. *Any other information that you believe may be pertinent to understanding the operations and impact of the Doppler radar systems.*

We note that more information can be found on our [website](#) about the work we are currently undertaking on our weather radar network.

You have the right to seek an investigation and review by the Ombudsman of this decision. Information about how to make a complaint is available at [www.ombudsman.parliament.nz](http://www.ombudsman.parliament.nz) or freephone 0800 802 602.

If you wish to discuss this decision with us, please feel free to get in touch.

Ngā mihi

Nick Fagerlund  
Legal Counsel and Company Secretary



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**Key**

- Weather Radar (10)
- Planned (0)



Non-Doppler mode range 300km radius  
 Doppler mode range (high resolution) 120km radius

Meteorological Service of New Zealand Ltd  
 Weather Radar and Upper Air Networks