

Was It ... Lightning ?

Search the Kattron Database to Know

When

Most storms pass an area in less than one hour. Strokes are located, and displayed, with GPS satellite time accuracy of 100 nanoseconds. Data is immediately available in Real Time if required.

Where

The system provides accurate stroke data over the major population area of South Eastern Australia. High intensity strokes at much greater range are also detected. Accuracy has been checked with the NZ system, also manufactured by Global Atmospherics Inc.

What

Data includes the Latitude, Longitude, time and date, polarity, intensity and type of each detected stroke. More than 80% of all cloud to ground strokes are detected within the major area, with accuracy better than 500 meters. Some cloud strokes are also detected.

How

Data may be displayed from a large area to very small. Time frame may be from 1 minute to 24 hours. The system locates every stroke in a flash. Strokes vary from one or two per day to 12,000 in an hour. On some days we have detected over 100,000 strokes across Australia. Data was first recorded in December 1991.

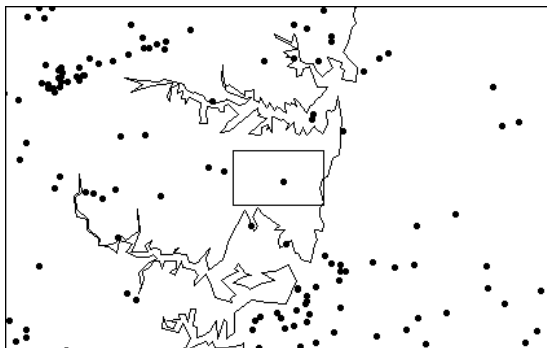


SEARCH REQUEST
(Copy this form for your request)

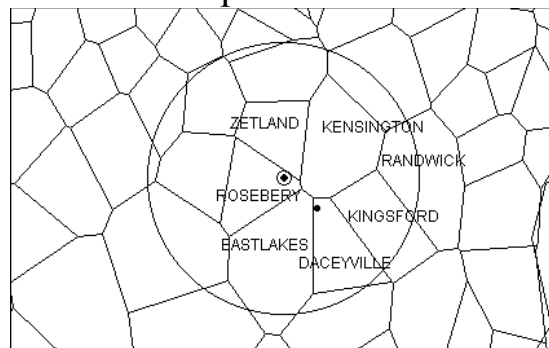
INCIDENT DETAILS			
Incident Date: / /	Time	Hours (If Known)	
Location Suburb Town/City	Latitude	Longitude	
Your Reference:			
Company:		Requested By:	
Address:		Phone:	
		Fax:	
Remarks:			

Data Supplied (Extract from an actual report)

1. Area View



2. Close Up



3. Stroke Details

Date	Time	Lat	Lon	(kA)	Distance km
27/10/1997	15:31:18.250	-33.9082	151.127	39	7.736
27/10/1997	15:36:38.933	-33.9121	151.146	13	5.988
27/10/1997	15:42:43.292	-33.9229	151.217	62	0.831
27/10/1997	15:46:01.382	-33.873	151.288	42	8.775
27/10/1997	16:11:10.958	-33.8564	151.252	12	7.871
27/10/1997	17:04:57.375	-33.8613	151.25	-19	7.306
27/10/1997	18:46:28.142	-33.9658	151.179	-13	6.0487

← Closest stroke 831 meters & 62,000 amps
(average is 25/30 kA)

The graphics show a wide and zoom view of lightning activity over a time period passing through an area. Storms do not necessarily produce lightning in all areas. Lightning may "skip" various locations as shown in the wide view. In this particular case the close up show that there was high intensity lightning near the claimants location.

Note: Lightning Data is copyright and the property of Katron and may not be copied or distributed in any form without the express permission of Katron.



Disclaimer:

1. LIMITATIONS OF LIGHTNING DATA. DUE TO THE INHERENT IDIOSYNCRASIES OF LIGHTNING AND OTHER RELATED NATURAL PHENOMENA, CLIENT ACKNOWLEDGES, WARRANTS AND REPRESENTS THAT THE LIGHTNING DATA WILL NOT BE RELIED ON, OR REFERENCE MADE TO, IN DETERMINING GEOGRAPHICAL AREAS THAT ARE, OR WILL BE, EITHER FREE FROM OR SUBJECT TO, LIGHTNING STROKES. KATTRON ASSUMES NO RESPONSIBILITY FOR, AND CLIENT RELEASES AND DISCHARGES KATTRON FROM ANY AND ALL LIABILITY, DIRECT OR INDIRECT, EXPRESSED OR IMPLIED, FOR PREDICTING OR REPORTING ACTUAL LIGHTNING STRIKES, OR ANY RESULTANT INJURY, DEATH OR DAMAGE TO ANY PERSON OR PROPERTY AS A RESULT OF ANY LIGHTNING STROKE.

2. Disclaimer of Warranty. KATTRON MAKE NO WARRANTY OF ANY KIND, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE WITH RESPECT TO THE LIGHTNING DATA STREAM OR LIGHTNING DATA.

3. Limitation of Liability. To the full extent permitted by the Commonwealth, State, Territory or other law or laws applicable to this Agreement, any conditions or warranties imposed by such legislation are hereby excluded. Insofar as liability under or pursuant to any legislation, whether of Commonwealth, State, Territory or other government, may not be excluded. Client agrees that KATTRON's total liability hereunder, including but not limited to, any alleged negligence of Kattron, shall not exceed the Fee paid by the Client to KATTRON for the Lightning Data Incident Search or Analysis Report giving rise to any claim by Client. IN NO EVENT WILL KATTRON BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION, LOSS OF USE, LOSS OF DATA, LOSS OF PROFIT, OR LIABILITY TO THIRD PARTIES, HOWEVER CAUSED, WHETHER BY THE NEGLIGENCE OF KATTRON, OR OTHERWISE.

4. Indemnification. Client hereby agrees to indemnify, defend and hold harmless, KATTRON, their officers, employees and agents, or their successors, insurers or assigns, from and against any and all claims, demands, liabilities, or causes of action arising out of, resulting from, related to, or a consequence of, Client's use of the Lightning Data or the Lightning Data Stream.

Copyright:

Ownership and Use of Lightning Data. Client hereby acknowledges, warrants and agrees that Lightning Data is the property of Kattron. Client is granted a limited perpetual, non-exclusive and non transferable licence to use the Lightning Data solely for its own internal use, which internal use shall include the right to display or communicate the data, or information or graphics based on the data. Client is not otherwise permitted to redistribute or re-transmit the Lightning Data in any form or medium to any other person or entity. Programming for distribution on cable systems is prohibited. Client shall have no ownership rights in the Lightning Data. Client hereby agrees to reproduce and use Kattron's copyright and proprietary notices on all copies of Lightning Data made by Client in exercising its limited rights to internal use. Client acknowledges and warrants that Kattron's remedy at law is inadequate in the event of a breach or threatened breach hereof, and that Kattron shall be entitled to injunctive relief restraining Client, or any of its agents or employees, from breaching this Agreement. Client agrees to pay all costs of expenses of Kattron (including reasonable attorney's fees, including costs of appeal, whether suit be brought or not) incurred in connection with enforcing the terms of the Agreement. Client further agrees that Kattron's rights to injunctive relief shall not limit Kattron's rights to monetary damages in addition to or in substitution of injunctive relief.



About Lightning Searches

The Kattron Lightning Search Reports are produced with data from the Australian owned and operated Kattron Lightning Detection Network. The network consists of equipment supplied by Global Atmospherics Inc. who manufactured over 95% of the worlds installed lightning detection networks, and who own and operate the North American Lightning Detection Network.

The detection network can indicate the presence or absence of a lightning cell in a given area. Within the primary area, the current network can detect an average of 80-90% (or 8 to 9 out of 10) Cloud to Ground lightning strikes in these cells, with an average position accuracy of approx 500m. Our highest detection efficiency is within our primary area of SE Australia

The lightning detection system can detect strokes with an amplitude ranging from 5kA to 200kA. In general, storms may contain strokes throughout this range with the average current being 25 to 30 kA. Due to the inherent idiosyncrasies of lightning and other related natural phenomena less than 100% of strokes are recorded.

Lightning does not need to be a direct strike to cause damage. Due to the intense power of a lightning strike, currents can be carried hundreds or thousands of metres depending on the conducting surfaces. Electricity, Telephone and plumbing lines are some widely recognised conductors for carrying surges into facilities.

The distance of the closest strokes from a location is provided as part of the lightning search report. If the client supplies latitude and longitude co-ordinates for the lightning search location, these are used as the centre point when determining distance, otherwise, approx co-ordinates are taken from Kattron's available maps, or lists.

Lightning can travel a number of km from the point of origin to the point of contact, causing it to appear to eyewitnesses to be either closer or farther than it actually is. Hills may reflect the sound of thunder heard by eyewitnesses. The delay in the sound of thunder may also make it difficult for the observer to determine which stroke it came from, when estimating distance.

Lightning causes hundreds of millions of dollars in property damage each year around the world.

wil-als.doc

