

## Storm Data and Unusual Weather Phenomena - January 2012

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
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### WISCONSIN, Southeast

(WI-Z046) MARQUETTE, (WI-Z047) GREEN LAKE, (WI-Z051) FOND DU LAC, (WI-Z052) SHEBOYGAN, (WI-Z056) SAUK, (WI-Z057) COLUMBIA, (WI-Z058) DODGE, (WI-Z059) WASHINGTON, (WI-Z060) OZAUKEE, (WI-Z062) IOWA, (WI-Z063) DANE, (WI-Z064) JEFFERSON, (WI-Z065) WAUKESHA, (WI-Z066) MILWAUKEE, (WI-Z067) LAFAYETTE, (WI-Z068) GREEN, (WI-Z069) ROCK, (WI-Z070) WALWORTH, (WI-Z071) RACINE, (WI-Z072) KENOSHA	01/01/12 07:00 CST		27K	Strong Wind (MAX 45 kt)
	01/01/12 20:30 CST		0	

The New Year started off with strong winds that developed in the wake of deepening low pressure as it crossed east-northeast over far southern Wisconsin and northern Illinois to Lake Huron by the afternoon of January 1st. Three-hourly pressure rises of 6-8mb, along with the tight pressure gradient and steepening lapse rates behind the departing low produced sustained northwest to west winds of 30 to 35 mph, and wind gusts of 45 to 50 mph over all of South Central and Southeast Wisconsin during the morning into the early afternoon hours. Scattered power outages were noted by the media due to broken tree branches impacting power-lines.

(WI-Z046) MARQUETTE, (WI-Z047) GREEN LAKE, (WI-Z051) FOND DU LAC, (WI-Z052) SHEBOYGAN, (WI-Z056) SAUK, (WI-Z057) COLUMBIA, (WI-Z058) DODGE, (WI-Z059) WASHINGTON, (WI-Z060) OZAUKEE, (WI-Z062) IOWA, (WI-Z063) DANE, (WI-Z064) JEFFERSON, (WI-Z065) WAUKESHA, (WI-Z066) MILWAUKEE, (WI-Z067) LAFAYETTE, (WI-Z068) GREEN, (WI-Z069) ROCK, (WI-Z070) WALWORTH, (WI-Z071) RACINE, (WI-Z072) KENOSHA	01/12/12 06:00 CST		0	Winter Weather
	01/13/12 03:00 CST		0	

A long-duration light snow event affected South-central and Southeast Wisconsin from Jan 12 into early Jan 13th. It began in the late morning west of Madison, and in the mid to late afternoon toward Lake Michigan. Snow to liquid ratios of 13:1 acted on 0.3 to 0.4 inch of liquid to produce widespread 4 to 6 inch snow totals. The snow was generated by a closed 500 mb low that strengthened as it moved over Illinois and became negatively tilted as it crossed Indiana into Ohio and interacted with an open short-wave trough that dropped southeast into Wisconsin during the day on January 12th. Moisture wrapping into the southern closed low was pulled up over southern Wisconsin ahead of the short wave trough and into an inverted trough of surface low pressure that extended back to the northwest from the main surface low on the Indiana/Ohio border. The development of a secondary area of surface low pressure over Lower Michigan produced an area of low-level convergence across eastern sections of Southeast Wisconsin that kept the snow going from the late evening until after midnight. This added to snow totals in portions of Sheboygan...Fond Du Lac...Washington and Dodge counties, as well as Waukesha...Milwaukee...Racine and Kenosha counties, bringing total accumulations of 6.5 inches to 8 inches in these counties. The greatest total was 8.1 inches in the city of Kenosha. There were some spin-outs and vehicle accidents with a few minor injuries reported across southern Wisconsin. Because of the long-duration of snowfall, road crews were able to keep roads clear and minimize the impact on society. Therefore, this event was not classified as a winter storm event.

(WI-Z046) MARQUETTE, (WI-Z047) GREEN LAKE, (WI-Z051) FOND DU LAC, (WI-Z052) SHEBOYGAN, (WI-Z056) SAUK, (WI-Z057) COLUMBIA, (WI-Z058) DODGE, (WI-Z059) WASHINGTON, (WI-Z060) OZAUKEE, (WI-Z062) IOWA, (WI-Z063) DANE, (WI-Z064) JEFFERSON, (WI-Z065) WAUKESHA, (WI-Z066) MILWAUKEE, (WI-Z067) LAFAYETTE, (WI-Z068) GREEN, (WI-Z069) ROCK, (WI-Z070) WALWORTH, (WI-Z071) RACINE, (WI-Z072) KENOSHA	01/17/12 04:00 CST		0	Winter Weather
	01/17/12 14:00 CST		0	

Moderate snow over all of South-central and Southeast Wisconsin during the morning rush hour. Snowfall rates of 1/2 inch to 1 inch per hour combined with north winds that increased to 15 to 20 mph...with gusts between 30 and 35 mph. This combination reduced visibilities to 1/2 to 1/4 mile due to blowing and drifting snow. A coop observer in Beaver Dam in Dodge County reported 2.7 inches of snow fell in the 2.5 hours from 710 am to 940 am. Total snow accumulations of 2 to 4 inches were reported across the area with most of it falling during the morning rush hour, slowing and snarling traffic. The snow was generated by a surface low pressure which rapidly developed under the left front quadrant of a 100-knot upper jet-streak and ahead of an associated short wave trough. The low deepened as it moved from Illinois into Lower Michigan during the morning hours of January 17th...reaching eastern Ontario Canada by mid-afternoon. Strong surface to 850-mb frontogenetic forcing along with lift from the aforementioned upper level dynamics aided in the snow production.

(WI-Z056) SAUK, (WI-Z057) COLUMBIA, (WI-Z058) DODGE, (WI-Z059) WASHINGTON, (WI-Z060) OZAUKEE, (WI-Z062) IOWA, (WI-Z063) DANE, (WI-Z064) JEFFERSON, (WI-Z065) WAUKESHA, (WI-Z067) LAFAYETTE, (WI-Z068) GREEN, (WI-Z069) ROCK, (WI-Z070) WALWORTH, (WI-Z071) RACINE, (WI-Z072) KENOSHA	01/20/12 11:00 CST		0	Winter Weather
	01/20/12 21:00 CST		0	

Strong frontogenetic forcing associated with mid-level warm-air advection ahead of a short-wave trough produced a shield of steady light...to at times moderate...snow that spread over southern Wisconsin during the late morning hours of January 20th...which continued into the evening hours. Cold temperatures that remained in the single digits above zero during the majority of the snowfall reduced the effectiveness of melting chemicals on area roads, resulting in slippery conditions. Numerous reports of spin-outs and crashes were received from law enforcement agencies across the region. Snowfall totals ranged from around 3 inches from Sauk County to Ozaukee County...generally along a Wisconsin Dells...Portage to Mequon line...rising to 5 to 6 inches from Lafayette County east into southern

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Rock County. The strip of counties from Marquette east to Sheboygan received 2 inches or less.

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01/22/12 10:00 CST		0	Winter Weather
01/23/12 09:00 CST		0	

A surge of moisture and isentropic lift ahead of a negatively-tilted short wave trough spread freezing drizzle and areas of freezing fog across all of South Central and Southeast Wisconsin during the morning hours of January 22nd. The freezing precipitation put down a glaze between 1/8 inch to just under 1/4 inch thick on surfaces across southern Wisconsin. Warm air at the surface moved into most of Southeast and South Central Wisconsin during the evening hours...changing the freezing drizzle over to drizzle. Locations in the counties of Iowa...Sauk...Columbia..and Marquette continued to get freezing drizzle and freezing fog during the overnight...with light snow falling on top of the glazed surfaces as the precipitation came to the end during the early morning hours of the 23rd. The icy surfaces created hazardous travel conditions that produced numerous spin-outs and accidents, including an accident on westbound I-94 at County Highway F in Waukesha County that involved a semi-trailer truck and a county snowplow.

(WI-Z067) LAFAYETTE, (WI-Z068) GREEN, (WI-Z069) ROCK

01/23/12 02:30 CST		0	Dense Fog
01/23/12 09:00 CST		0	

Abundant low-level moisture...light winds and a cool air mass accompanying a low pressure led to the formation of dense fog over far southern sections of South-central Wisconsin. The dense fog reduced visibilities to 1/4 mile or less. Aloft, a negatively-tilted mid-level short-wave trough crossed southern Wisconsin during the overnight and early daylight hours of January 23rd.

(WI-Z062) IOWA, (WI-Z063) DANE, (WI-Z067) LAFAYETTE, (WI-Z068) GREEN, (WI-Z069) ROCK

01/26/12 03:00 CST		0	Dense Fog
01/26/12 14:00 CST		0	

A light southerly flow ahead of a weak trough of low pressure brought increasing low-level moisture into southern Wisconsin during the overnight hours...with dense fog developing in the southwest third of the Milwaukee/Sullivan forecast area. Visibilities fell to between 1/4 and 1/8 of a mile.