

***NATIONAL WEATHER SERVICE CENTRAL REGION SUPPLEMENT 02-2003  
APPLICABLE TO NWSI 10-513  
OCTOBER 5, 2023***

***Operations and Services  
Public Weather Services, NWSPD 10-5  
WFO Winter Weather Products Specification, NWSI 10-513***

***CENTRAL REGION WINTER WEATHER PRODUCTS SPECIFICATION***

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***SUMMARY OF REVISIONS:*** This supplement issuance replaces National Weather Service (NWS) Central Region Supplement 02-2003, dated February 25, 2010.

1. Added wording in section 2.1 to include the use of other supplemental messaging products.
2. Removed Winter Weather Warning and Watch criteria as they are in NWSI 10-513.
3. Updated Winter Weather Advisory criteria for multiple Central Region offices and added impact-based wording to allow for alternative messaging.
4. Added Wind Chill Warning Criteria for WFO Grand Rapids and WFO Rapid City.
5. Updated wind chill advisory criteria for WFO Sioux Falls.

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Acting Director, NWS Central Region

Date

## WFO Winter Weather Products Specification

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### 1. Introduction

This supplement codifies regional snow criteria for winter weather advisories, wind chill warnings and wind chill advisories.

### 2. Winter Storm Outlook (product category HWO).

#### 2.1 Issuance Guidelines

In Central Region, the Hazardous Weather Outlook (product category HWO) is the product used to convey the potential for a winter weather event. Other supplemental messaging products may also be used to convey the potential for a winter weather event to the general public and Core Partners.

##### 2.1.1 Issuance Criteria

Hazardous Weather Outlooks are described in the Central Region Supplement with NWSI 10-517 (Multi-Purpose Weather Products Specification).

3. **Winter Weather Advisories** (product category WSW)

3.1 **Issuance Guidelines.** See NWSI 10-513

3.1.1 **Issuance Criteria**

Winter Weather Advisory criteria should be established locally based on a thorough assessment of customer requirements. The forecaster may issue winter weather advisories based on locally defined impacts through core partner feedback, and coordinate with surrounding WFOs for a consistent message. The map and table contained in Appendix A serves as a baseline for consistency but forecasters have discretion to issue winter weather advisories for impacts if/when those differ from this baseline criteria.

3.1.2 **Winter Weather Advisory Products**

Refer to Appendix A for WFO-specific winter weather advisory criteria for snow. Winter weather advisories may also be issued for a combination of winter weather hazards (i.e. snow, snow and blowing snow, snow and ice, snow and sleet, snow, ice and sleet, freezing rain, or lake effect snow) meeting or exceeding locally defined 12 and/or 24 hour advisory criteria for at least one of the precipitation elements.

4. **Wind Chill Advisories and Warning**

4.1 **Wind Chill Warning Issuance Guidelines**

WFOs should issue a Wind Chill Warning (WSW) whenever wind chill values are forecast to be at or below the warning thresholds as depicted in Appendix B for more than one hour. Forecasters should also consider other factors when making a warning decision. Examples of these factors include consistency with surrounding WFOs, time of year, longevity of event, and areal coverage of expected hazardous weather. Forecast wind chill values and the coincidental frostbite times will be mentioned in the warning product to ensure our customers' understanding of the threat.

4.1.1 **Issuance Criteria**

Refer to Appendix B for regional Wind Chill Warning criteria.

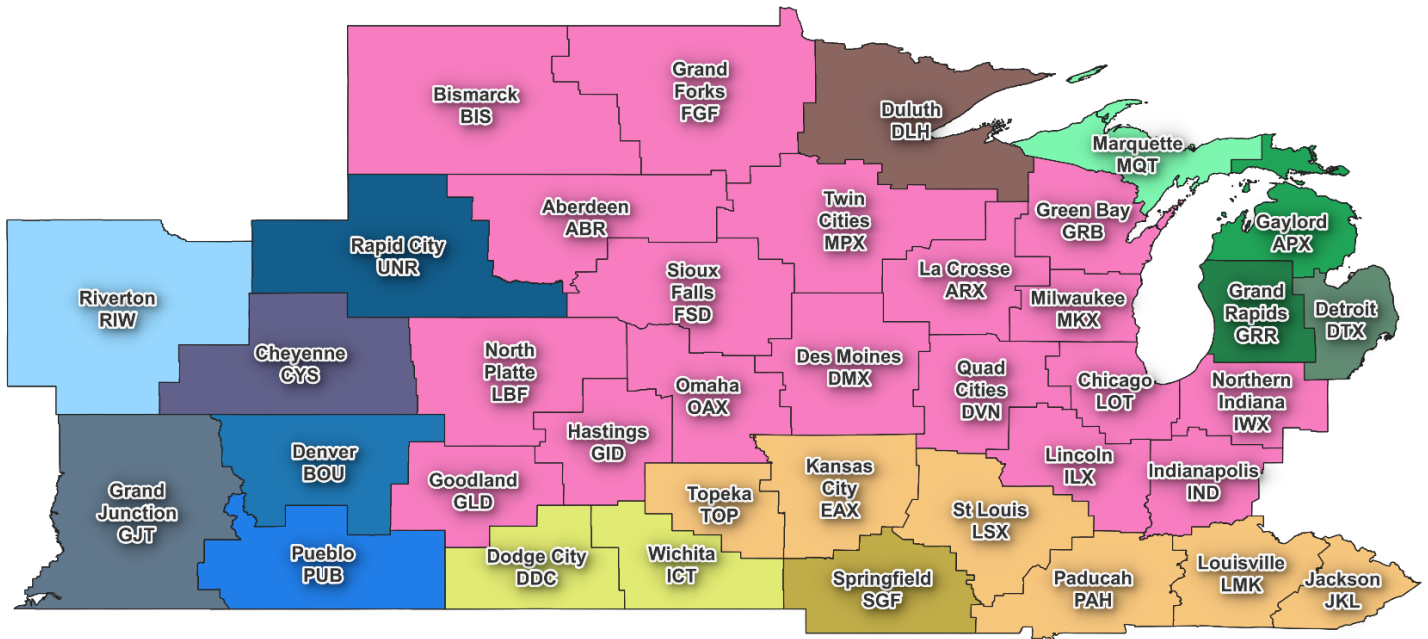
4.2 **Wind Chill Advisory Issuance Guidelines**

WFOs should issue a Wind Chill Advisory (WSW) when wind chill values are forecast to be at or below the advisory thresholds as depicted in Appendix C for more than one hour. Forecasters should consider other factors when making a decision on issuing an advisory. Examples of these factors include consistency with surrounding WFOs, time of year, longevity of event, and areal coverage of expected hazardous weather. Forecast wind chill values and the coincidental frostbite times will be mentioned in the advisory product to ensure our customers' understanding of the threat.

4.2.1 **Issuance Criteria**

Refer to Appendix C for regional Wind Chill Advisory criteria.

Appendix A – WFO Winter Weather Advisory for Snow Criteria

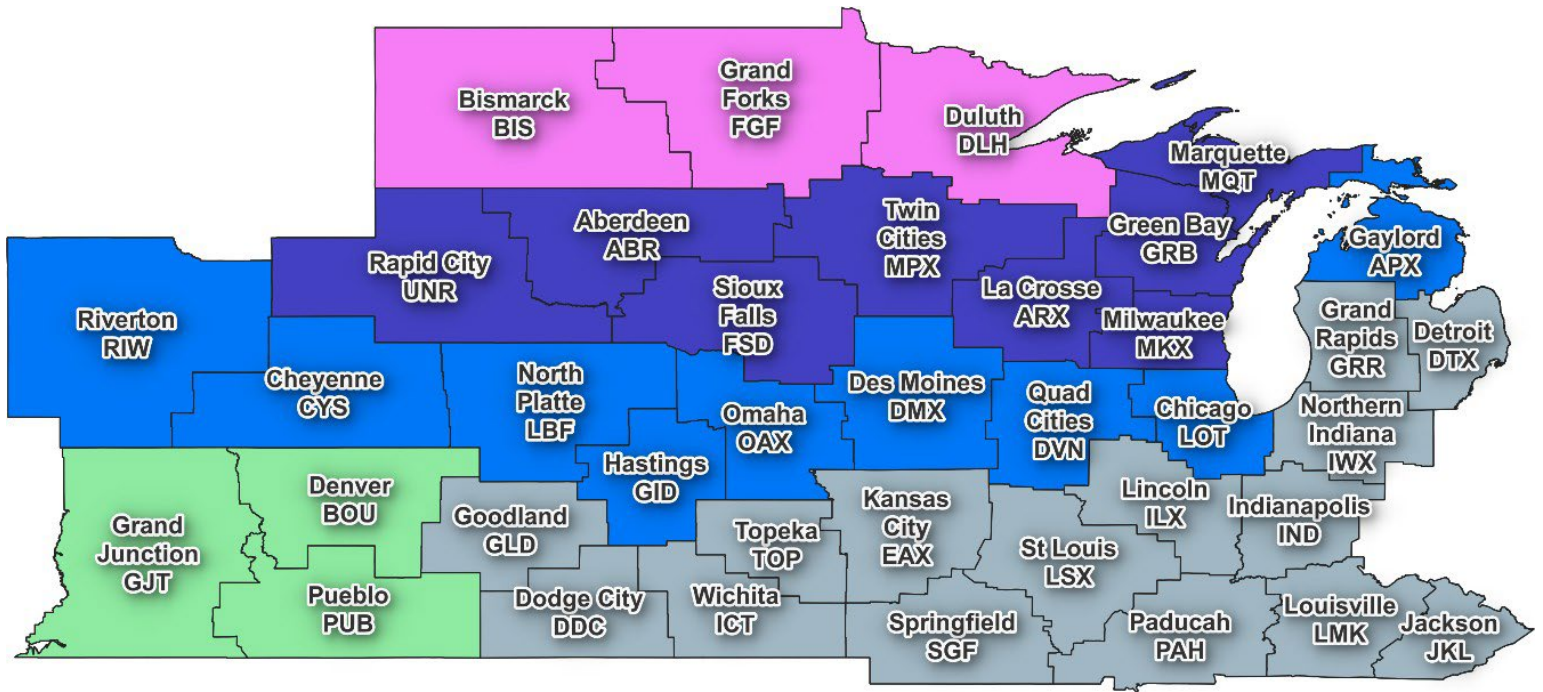


1-4" in 12 hrs	3-7" in 12 hrs
2-4" in 12-24 hrs	3-7" in per event (plains, I25, Mtn Vlys)/5-11" in per event (Mtns/Ft Hills)
2-4" in 3 hrs/3-5" in 6 hrs/4-6" in 9 hrs/4-7" in 12+ hrs	3-7" in 12 hrs north/3-6" in 12 hrs south
Less than 5" in per event	4-8" in 12 hrs
2-6" in 8 hrs/3-8" in 18 hrs	6-12" in 24 hrs (Mtns, Co Zones 005 (Steamboat Springs), 014 (Gunnison))
3-5" in 12 hrs	3-6" in 12 hrs/4-8" in 24 hrs (Vlys)
3-6" in per event, 3-7" in per event (SDZ025, SDZ028, SDZ072, WYZ057)	4-7" in 12 hrs/6-11" in 24 hrs (Mtns), 3-5" in 12 hrs/4-7" in 24 hrs (Vlys)
3-9" in per event (SDZ024)	6-12" in per event (Mtns)
3-5" in 12 hrs/5-7" in 24 hrs	4-8" in per event (West WY Vlys), 3-6" in per event (Vlys)
3-6" in per event (Vlys)/6-12" in per event (Mtns)	

WFO	Advisory Criteria	WFO	Advisory Criteria
Aberdeen (ABR)	3-5" in 12 hrs	Wichita (ICT)	2-4" in 12-24 hrs
Gaylord (APX)	3-7"/12h for the following counties: Chippewa Mackinac Emmet Cheboygan Charlevoix Leelanau Antrim Otsego Benzie Grand Traverse Kalkaska Crawford Manistee Wexford 3-6"/12h for the following counties: Presque Isle Montmorency Alpena Oscoda Alcona Missaukee Roscommon Ogemaw Iosco Gladwin Arenac	Central Illinois (ILX)	3-5" in 12 hrs
LaCrosse (ARX)	3-5" in 12 hrs	Indianapolis (IND)	3-5" in 12 hrs
Bismarck (BIS)	3-5" in 12 hrs	Northern Indiana (IWX)	3-5" in 12 hrs
Denver/Boulder (BOU)	3-7"/event (plains, I-25 Corridor, and mountain valleys). 5-11"/event (mountains and foothills)	Jackson, KY (JKL)	1-4" in 12 hrs
Cheyenne (CYS)	6-12" per event (Mountains) 3-6" per event (Valleys/Foothills & High Plains)	North Platte (LBF)	3-5" in 12 hrs
Dodge City (DDC)	2-4" in 12-24 hrs	Louisville (LMK)	1-4" in 12 hrs
Duluth (DLH)	3-5" in 12 hrs 5-7" in 24 hrs	Chicago (LOT)	3-5" in 12 hrs
Des Moines (DMX)	3-5" in 12 hrs	St. Louis (LSX)	1-4" per event
Detroit (DTX)	2-4 in 3 hrs 3-5 in 6 hrs 4-6 in 9 hrs 4-7 in 12+ hrs	Milwaukee (MKX)	3-5" in 12 hrs

Quad Cities (DVN)	3-5" in 12 hrs	Minneapolis/Twin Cities (MPX)	3-5" in 12 hrs
Kansas City/Pleasant Hill (EAX)	1-4" in <= 12 hrs	Marquette (MQT)	3-7" in 12 hrs
Grand Forks (FGF)	3-5" in 12 hrs	Omaha (OAX)	3-5" in 12 hrs
Sioux Falls (FSD)	3-5" in 12 hrs	Paducah (PAH)	1- 4" in 12 hrs
Hastings (GID)	3-5" in 12 hrs	Pueblo (PUB)	4-7" in 12 hrs/6-11" in 24 hrs (Mountains) 3-5" in 12 hrs/4-7" in 24 hrs (Valleys)
Grand Junction (GJT)	4-8" in 12 hrs/6-12" in 24 hrs for Mountains & Colorado Zones 005 (Steamboat Springs) and 014 (Gunnison). 3-6" in 12 hrs/4-8" in 24 hours for Valleys	Riverton (RIW)	6-12" per event (Mountains) 4-8" per event (W WY Valleys) 3-6" per event (Other Valleys)
Goodland (GLD)	3-5" in 12 hrs	Springfield (SGF)	< 6" per event
Green Bay (GRB)	3-5" in 12 hrs	Topeka (TOP)	1-4" in <= 12 hrs
Grand Rapids (GRR)	2-6" in 8 hours 3-8" in 18 hours	Rapid City (UNR)	3-6"/event 3-7"/event (SDZ025, SDZ028, SDZ072, & WYZ057) 3-9"/event (SDZ024)

Appendix B – Wind Chill Warning Criteria



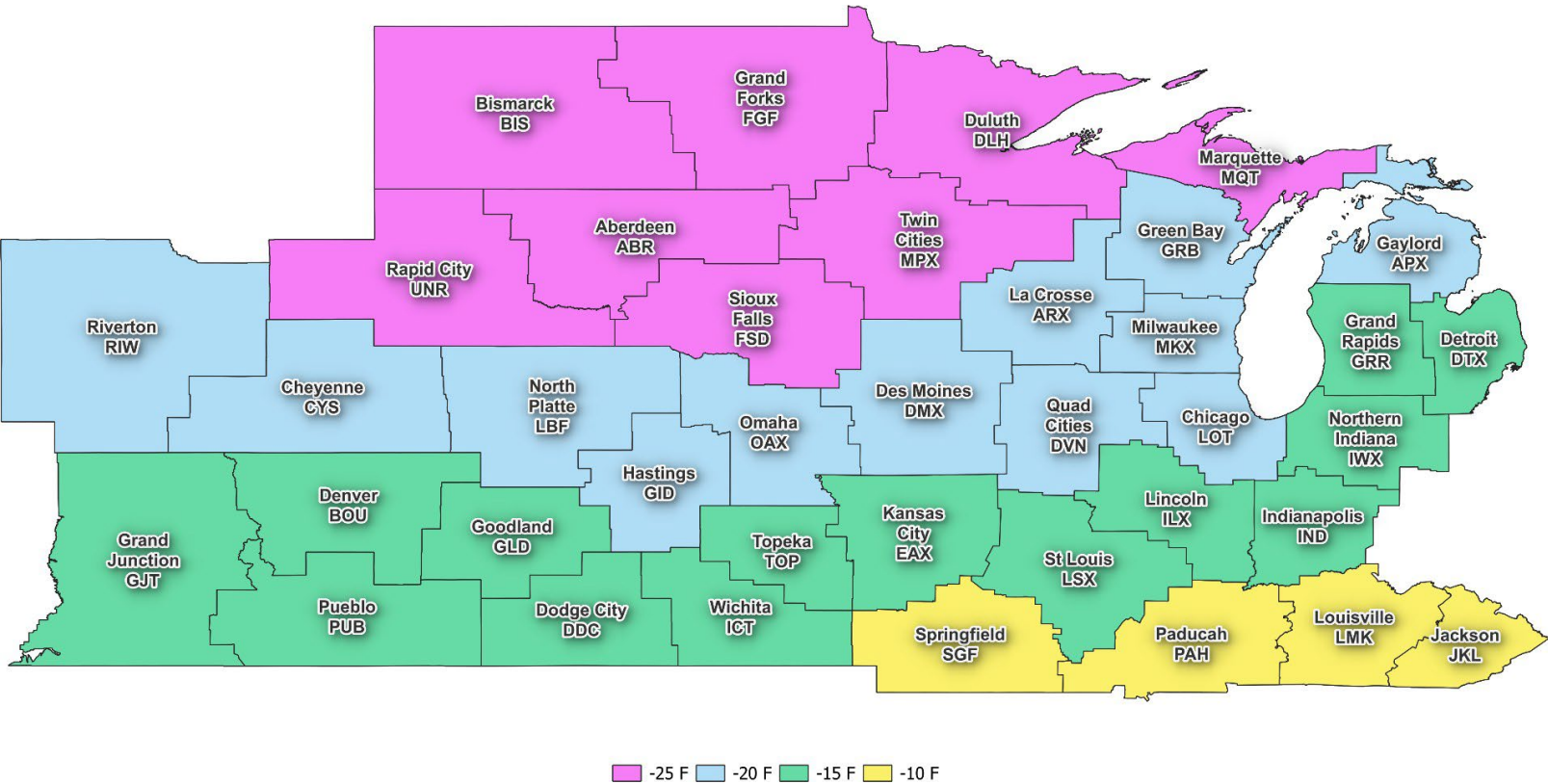
-40 F
  -35 F
  -30 F
  -25 F
  -35 F (Mtns) / -25 F (Vlys)

WFO	Wind Chill Warning Criteria (degrees F)	WFO	Wind Chill Warning Criteria (degrees F)
Aberdeen (ABR)	-35 or colder	Wichita (ICT)	-25 or colder
Gaylord (APX)	-35 or colder Chippewa and Mackinac Counties -30 or colder all other counties in area	Central Illinois (ILX)	-25 or colder
LaCrosse (ARX)	-35 or colder	Indianapolis (IND)	-25 or colder
Bismarck (BIS)	-40 or colder	Northern Indiana (IWX)	-25 or colder

Denver/Boulder (BOU)	-35 or colder mountains -25 or colder valleys	Jackson, KY (JKL)	-25 or colder
Cheyenne (CYS)	-30 or colder	North Platte (LBF)	-30 or colder
Dodge City (DDC)	-25 or colder	Louisville (LMK)	-25 or colder
Duluth (DLH)	-40 or colder	Chicago (LOT)	-30 or colder
Des Moines (DMX)	-30 or colder	St. Louis (LSX)	-25 or colder
Detroit (DTX)	-25 or colder	Milwaukee (MKX)	-35 or colder
Quad Cities (DVN)	-30 or colder	Minneapolis/Twin Cities (MPX)	-35 or colder
Kansas City/Pleasant Hill (EAX)	-25 or colder	Marquette (MQT)	-35 or colder
Grand Forks (FGF)	-40 or colder	Omaha (OAX)	-30 or colder
Sioux Falls (FSD)	-35 or colder	Paducah (PAH)	-25 or colder
Hastings (GID)	-30 or colder	Pueblo (PUB)	-35 or colder mountains -25 or colder valleys
Grand Junction (GJT)	-35 or colder mountains -25 or colder valleys	Riverton (RIW)	-30 or colder
Goodland (GLD)	-25 or colder	Springfield (SGF)	-25 or colder
Green Bay (GRB)	-35 or colder	Topeka (TOP)	-25 or colder
Grand Rapids (GRR)	-25 or colder	Rapid City (UNR)	-35 or colder



Appendix C – Wind Chill Advisory Criteria



WFO	Wind Chill Advisory Criteria (degrees F)	WFO	Wind Chill Advisory Criteria (degrees F)
Aberdeen (ABR)	-25 to -34	Wichita (ICT)	-15 to -24
Gaylord (APX)	-25 to -34 Chippewa and Mackinac Counties -20 to -29 all other counties in area	Central Illinois (ILX)	-15 to -24
LaCrosse (ARX)	-20 to -34	Indianapolis (IND)	-15 to -24
Bismarck (BIS)	-25 to -39	Northern Indiana (IWX)	-15 to -24
Denver/Boulder (BOU)	-15 to -24 No advisories for mountains	Jackson, KY (JKL)	-10 to -24
Cheyenne (CYS)	-20 to -29	North Platte (LBF)	-20 to -29

Dodge City (DDC)	-15 to -24	Louisville (LMK)	-10 to -24
Duluth (DLH)	-25 to -39	Chicago (LOT)	-20 to -29
Des Moines (DMX)	-20 to -29	St. Louis (LSX)	-15 to -24
Detroit (DTX)	-15 to -24	Milwaukee (MKX)	-20 to -34
Quad Cities (DVN)	-20 to -29	Minneapolis/Twin Cities (MPX)	-25 to -34
Kansas City/Pleasant Hill (EAX)	-15 to -24	Marquette (MQT)	-25 to -34
Grand Forks (FGF)	-25 to -39	Omaha (OAX)	-20 to -29
Sioux Falls (FSD)	-25 to -34	Paducah (PAH)	-10 to -24
Hastings (GID)	-20 to -29	Pueblo (PUB)	-15 to -24 No advisories for mountains
Grand Junction (GJT)	-15 to -24 No advisories for mountains	Riverton (RIW)	-20 to -29
Goodland (GLD)	-15 to -24	Springfield (SGF)	-10 to -24
Green Bay (GRB)	-20 to -34	Topeka (TOP)	-15 to -24
Grand Rapids (GRR)	-15 to -24	Rapid City (UNR)	-25 to -34