

APPENDIX 1

North Dakota Winter Season 2022-2023 Snowfall Data for NDDDES (through January 12th, 2023)

Prepared: January 13, 2023 16:00 CST

Overview

Through January 12, for the 2022-2023 winter season, North Dakota's snowfall was running above what is normal to date. In some areas it was much above normal. In fact, in some locations, the amount of snow that has fallen so far this season exceeds the normal amount received over an entire season. For example, Bismarck has received 51.9 inches so far this season (through January 12). The normal amount to date is 24.5 inches. The normal amount for an entire snow season is 50.5 inches.

Many of the storms that brought the snow were accompanied by gusty winds, and in most cases, it remained windy for several days after the snow had ended. This resulted in snow drifting back into areas that had already been cleared. The same snow was having to be moved or removed multiple times.

Tables of Data

Location	Normal Snowfall (entire season)	Snowfall this Season (through Jan 12, 2023)	Normal to date (Jan 12)	Departure
Dickinson	44.0 inches	54.0 inches	19.2 inches	+ 34.8 inches
Bismarck	50.5	51.9	24.5	+ 27.4
Jamestown	46.1	54.5	24.3	+ 30.2
Grand Forks	48.4	38.3	24.8	+ 13.5
Fargo	51.4	28.1	24.2	+ 3.9

Data for October 1, 2022 through January 12, 2023

Click column heading to sort ascending, click again to sort descending.

Name	Station Type	Total Snowfall
STREETER 5 NW	COOP	62.0
ELGIN	COOP	58.0
MC CLUSKY	COOP	55.0
CARRINGTON 4 N	COOP	54.5
JAMESTOWN 0.8 WSW	CoCoRaHS	54.5
DICKINSON RANCH HQ	COOP	54.0
BISMARCK MUNICIPAL AP	WBAN	51.9
Bismarck Area	ThreadEx	51.9
BISMARCK WFO	COOP	51.8
HEBRON	COOP	50.5
SYKESTON	COOP	49.8
CATHAY 6.5 N	CoCoRaHS	49.0
LISBON	COOP	48.8
NAPOLEON	COOP	48.5
BISMARCK 1.3 WNW	CoCoRaHS	48.2
MC HENRY 3W	COOP	48.0
FORT YATES	COOP	48.0
NEW SALEM 5NW	COOP	46.8
GRASSY BUTTE 2ENE	COOP	46.5
DICKINSON	COOP	46.1
HAZEN 0.4 ESE	CoCoRaHS	46.1
PRETTY ROCK	COOP	45.8
HAZELTON 4NW	WBAN	45.4
PETERSBURG 2 N	COOP	44.8
HEART BUTTE DAM	COOP	44.7
MONTPELIER	COOP	43.5
MANDAN 1.7 SSE	CoCoRaHS	42.9
UNDERWOOD	COOP	42.2
GARRISON	WBAN	42.0
BEACH 0.3 SSE	CoCoRaHS	41.8
TURTLE LAKE	COOP	41.0
BOWMAN	COOP	40.9
JAMESTOWN STATE HOSP	COOP	40.5
COURTENAY 1 NW	COOP	40.5
CASSELTON AGRONOMY FARM	COOP	40.2
SHIELDS	COOP	39.0

Data for October 1, 2022 through January 12, 2023

[Click column heading to sort ascending, click again to sort descending.](#)

Name	Station Type	Total Snowfall
DUNN CENTER 1E	COOP	38.6
GRAND FORKS UNIV (NWS)	COOP	38.3
LA MOURE 4.6 ESE	CoCoRaHS	38.2
KEENE 3S	COOP	37.0
LARIMORE 0.4 SE	CoCoRaHS	36.9
BOTTINEAU	COOP	36.4
HAZEN 0.4 SW	CoCoRaHS	36.2
CENTER 4SE	COOP	36.0
LAKE METIGOSHE STATE PARK MAX	COOP	35.8
DICKINSON 1.1 WNW	CoCoRaHS	34.0
CROSBY	COOP	33.5
GRAND FORKS 3.9 N	CoCoRaHS	33.3
FARGO 3.6 NNE	CoCoRaHS	33.0
PINGREE 5.4 NW	CoCoRaHS	32.6
FARGO 2.1 N	CoCoRaHS	31.6
MC LEOD 3 E	COOP	31.5
MONTPELIER 3.3 ESE	CoCoRaHS	31.3
VELVA	COOP	30.7
GRAND FORKS 3.4 SSE	CoCoRaHS	30.1
MAYVILLE	COOP	30.0
TOWNER 11.9 SE	CoCoRaHS	30.0
FARGO 4.4 NNE	CoCoRaHS	29.9
WILLISTON	COOP	29.7
PEMBINA	WBAN	29.5
DICKINSON 2.4 NW	CoCoRaHS	29.5
KILLDEER	COOP	29.0
RHAME 1.9 E	CoCoRaHS	29.0
EDGELEY 5.2 NW	CoCoRaHS	28.9
WATFORD CITY	COOP	28.8
ELLENDALE 7.3 NW	CoCoRaHS	28.4
HAZEN 6.5 SSE	CoCoRaHS	28.3
FARGO HECTOR INTL AP	WBAN	28.1
Fargo Area	ThreadEx	28.1
LANSFORD	COOP	27.9
COOPERSTOWN 0.4 WNW	CoCoRaHS	27.5
BOTTINEAU 6.4 ENE	CoCoRaHS	27.3

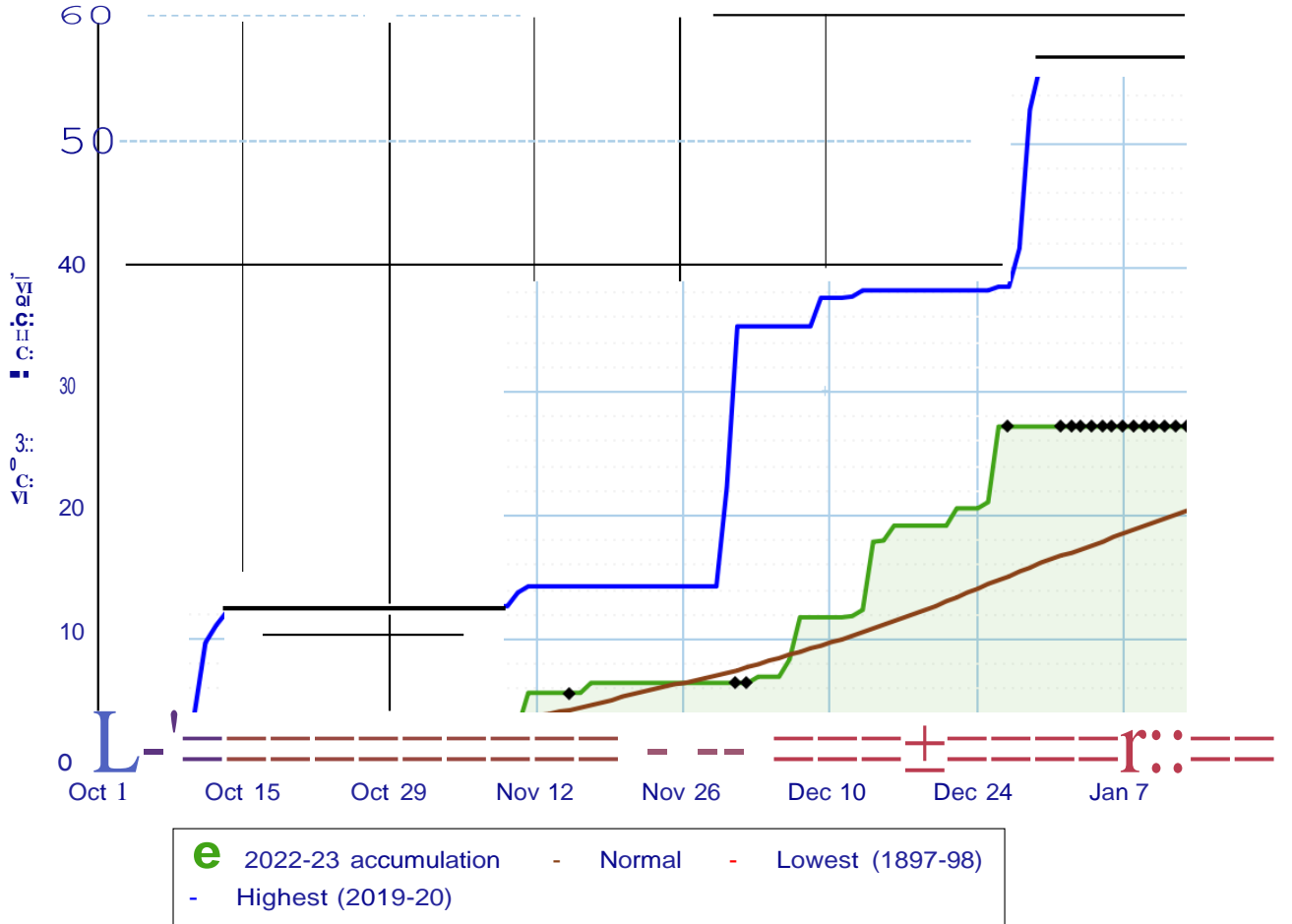
Data for October 1, 2022 through January 12, 2023

[Click column heading to sort ascending, click again to sort descending.](#)

Name	Station Type	Total Snowfall
ASHLEY	WBAN	27.1
KULM 4.0 NNE	CoCoRaHS	27.0
WESTHOPE 0.1 N	CoCoRaHS	27.0
CAVALIER 7.9 WNW	CoCoRaHS	26.8
MINOT EXP STATION	COOP	26.7
WEST FARGO 3.8 SSE	CoCoRaHS	26.7
FARGO 3S	COOP	26.4
WATFORD CITY 1.3 NNW	CoCoRaHS	26.1
TOWNER 2 NE	COOP	25.9
LISBON 0.5 ENE	CoCoRaHS	25.9
MAXBASS 4.9 ENE	CoCoRaHS	25.9
SOUTH HEART 4.9 WNW	CoCoRaHS	25.6
GRANDIN 7.1 ENE	CoCoRaHS	25.4
SHARON 7.9 ENE	CoCoRaHS	25.0

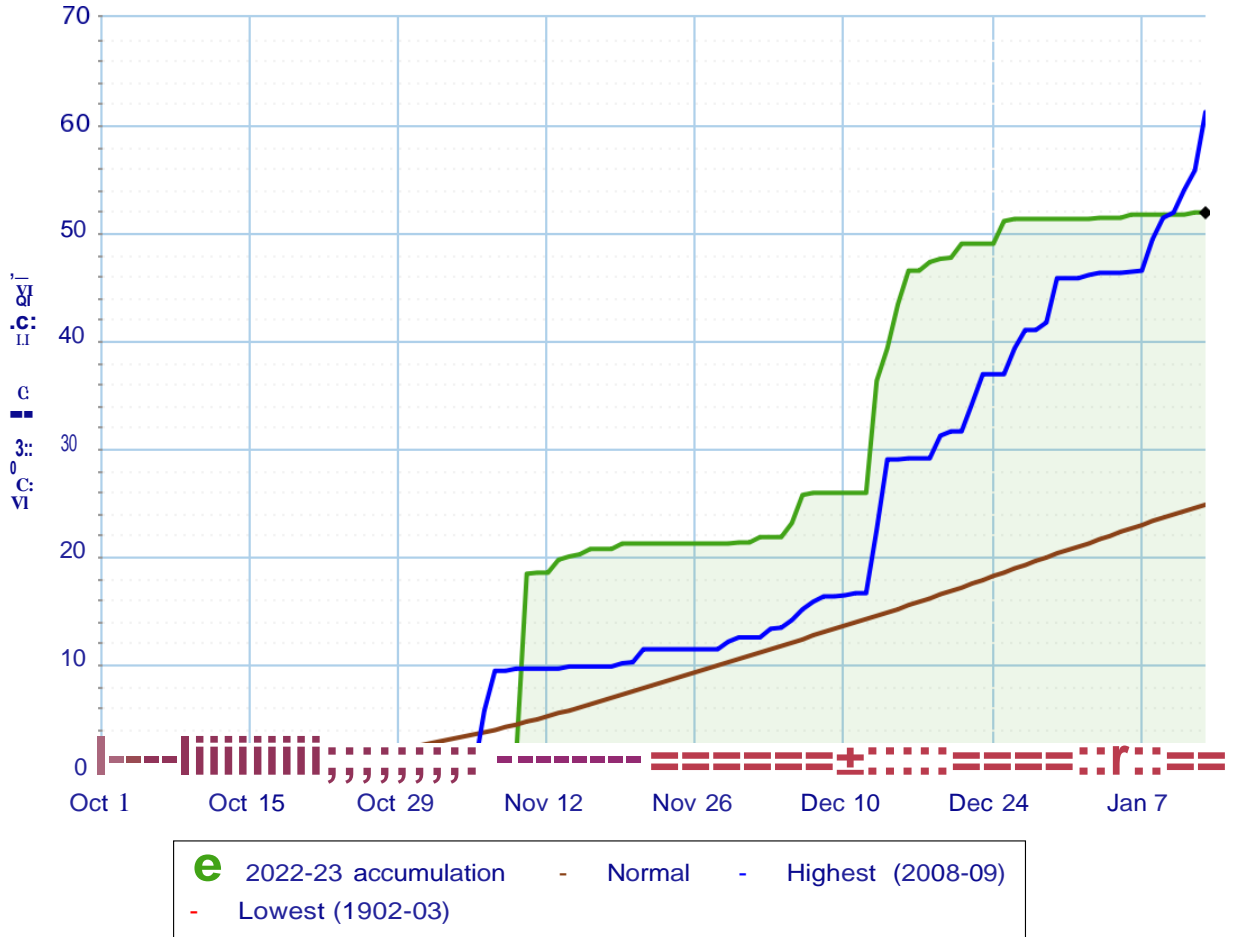
Accumulated Snowfall - ASHLEY, ND

Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



Accumulated Snowfall - Bismarck Area, ND (ThreadEx)

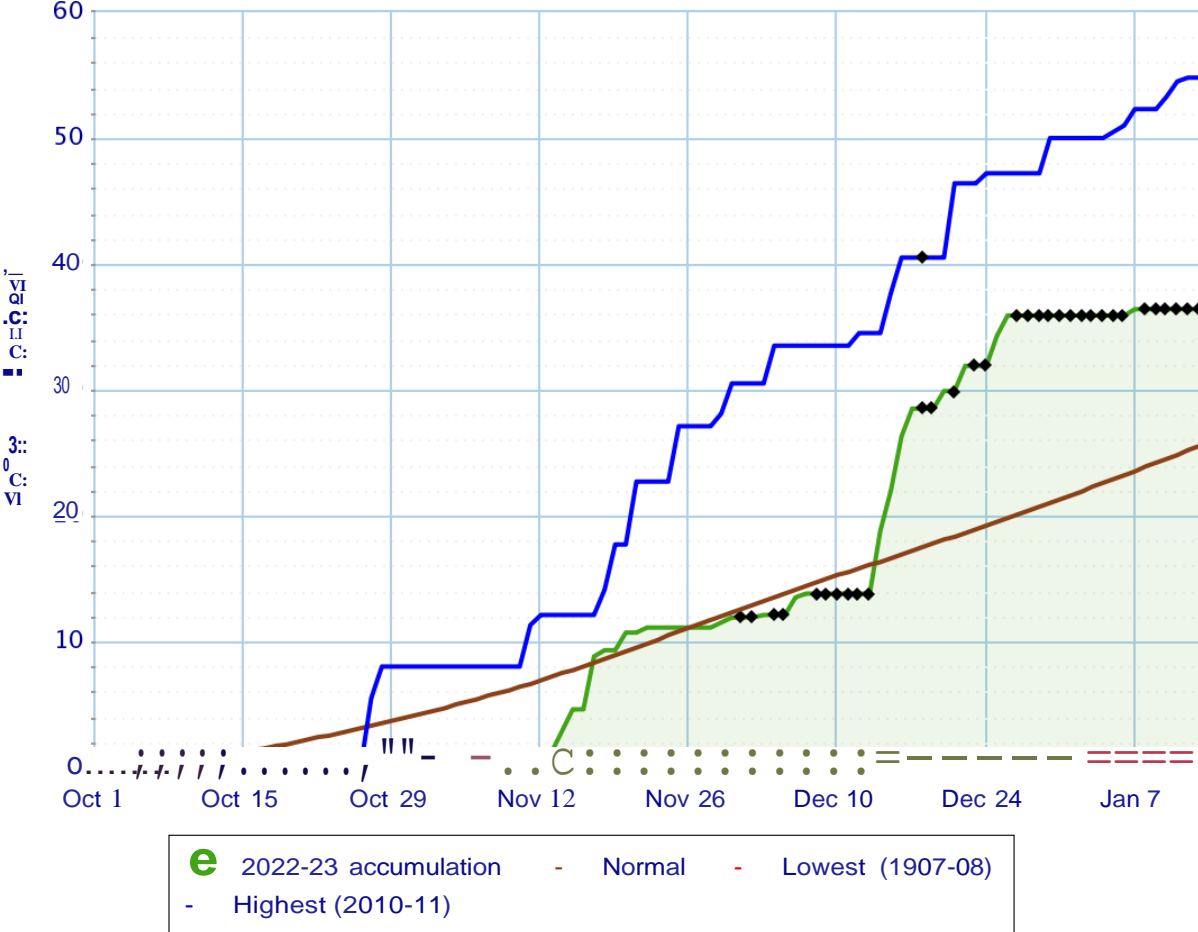
Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



Powered by ACIS

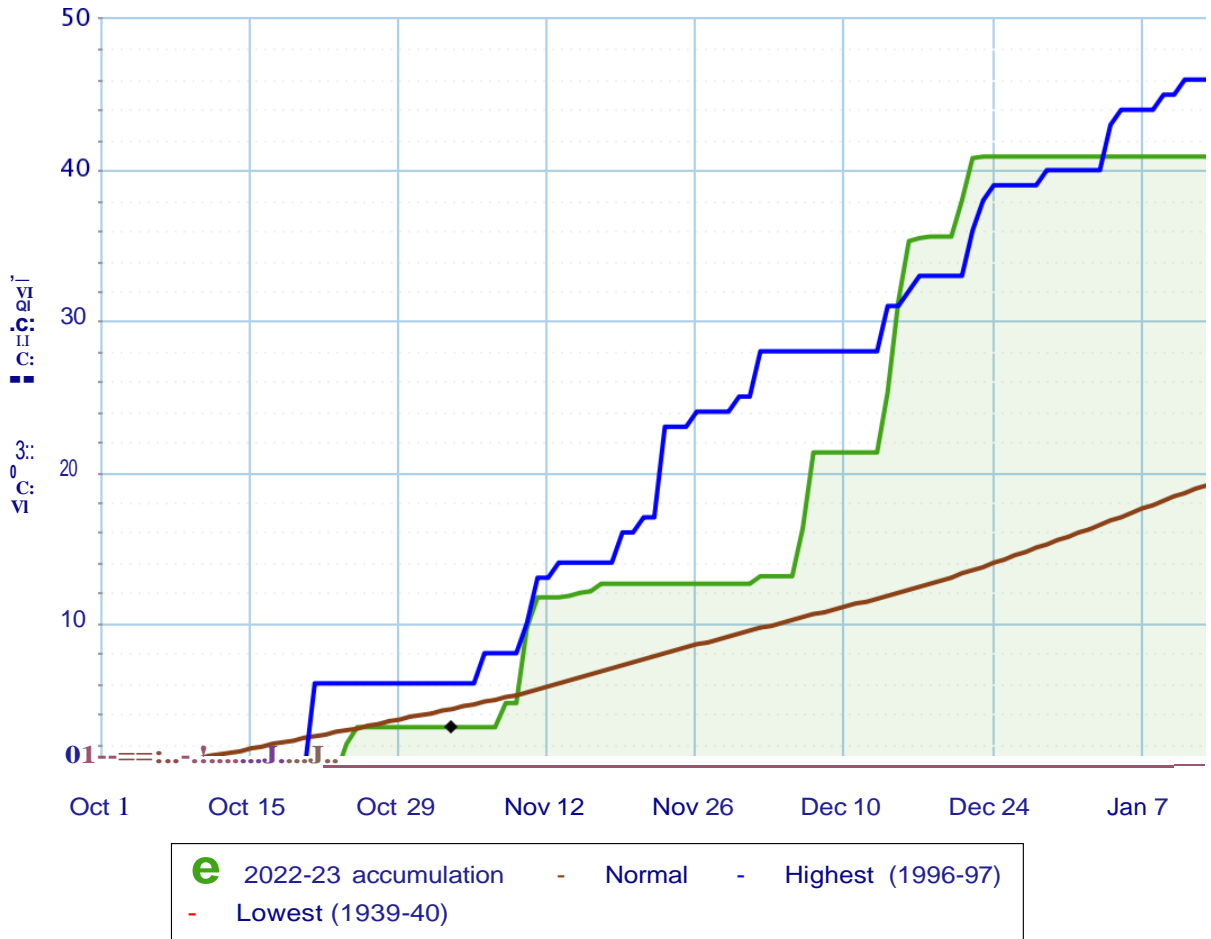
Accumulated Snowfall - BOTTINEAU, ND

Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



Accumulated Snowfall - BOWMAN, ND

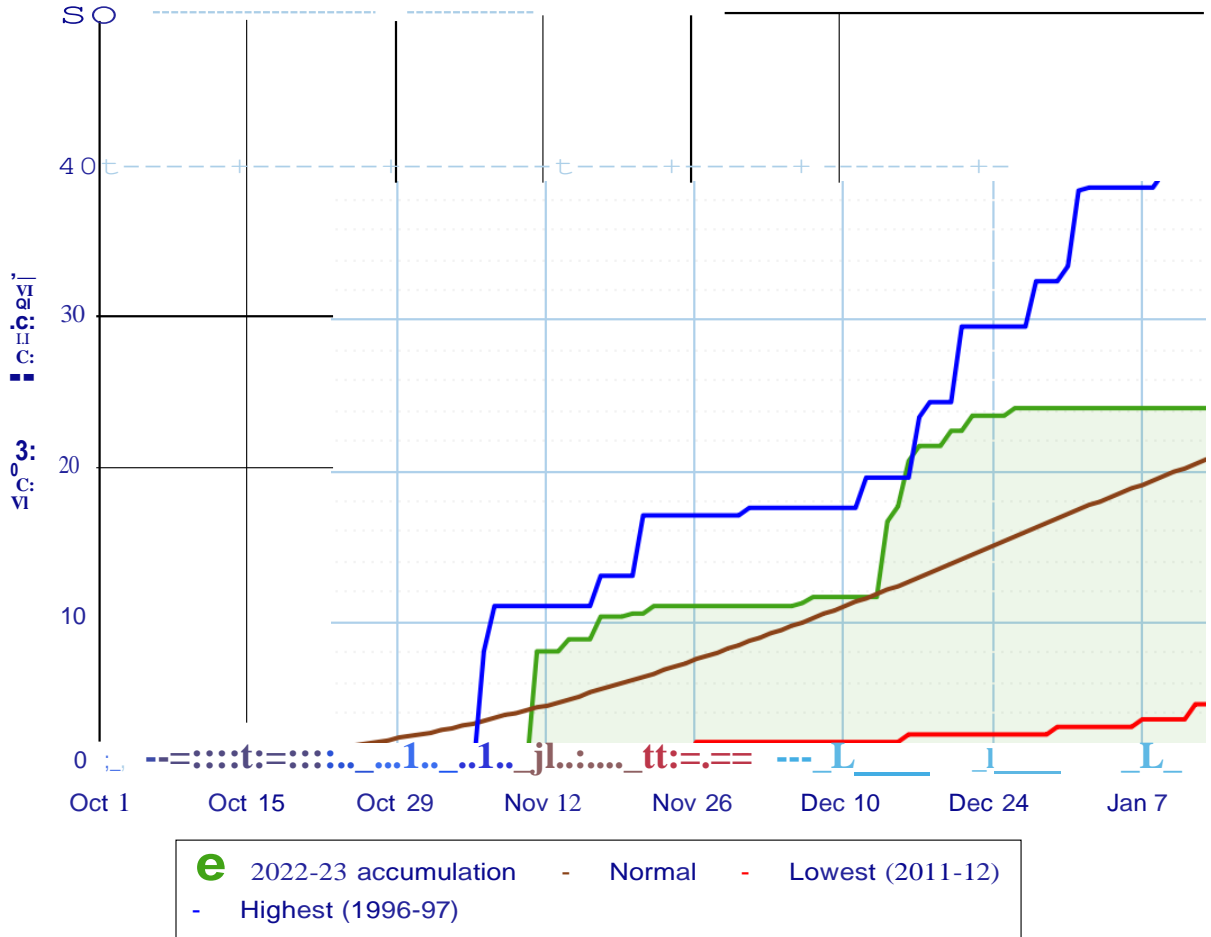
Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



Powered by ACIS

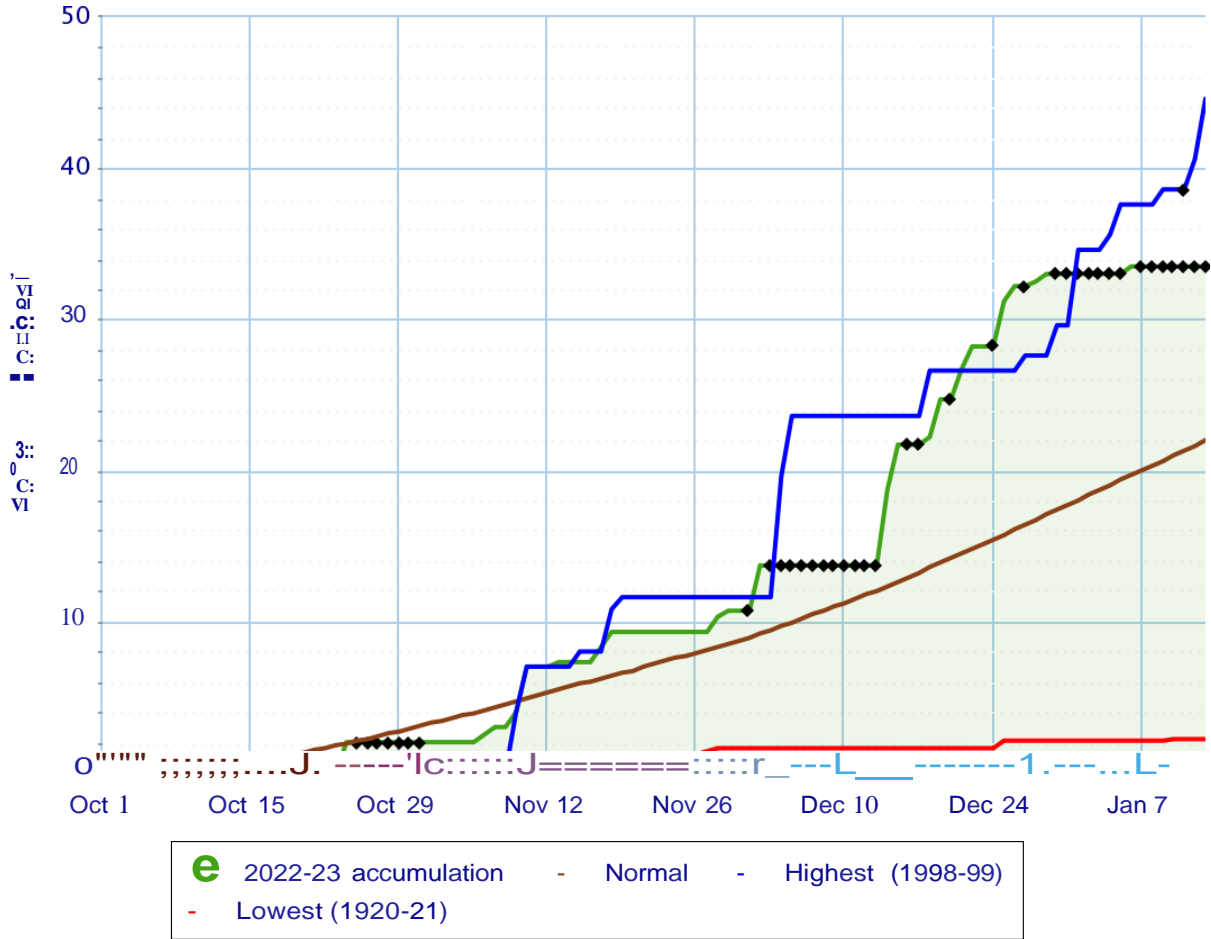
Accumulated Snowfall - CAVALIER ?NW, ND

Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



Accumulated Snowfall - CROSBY, ND

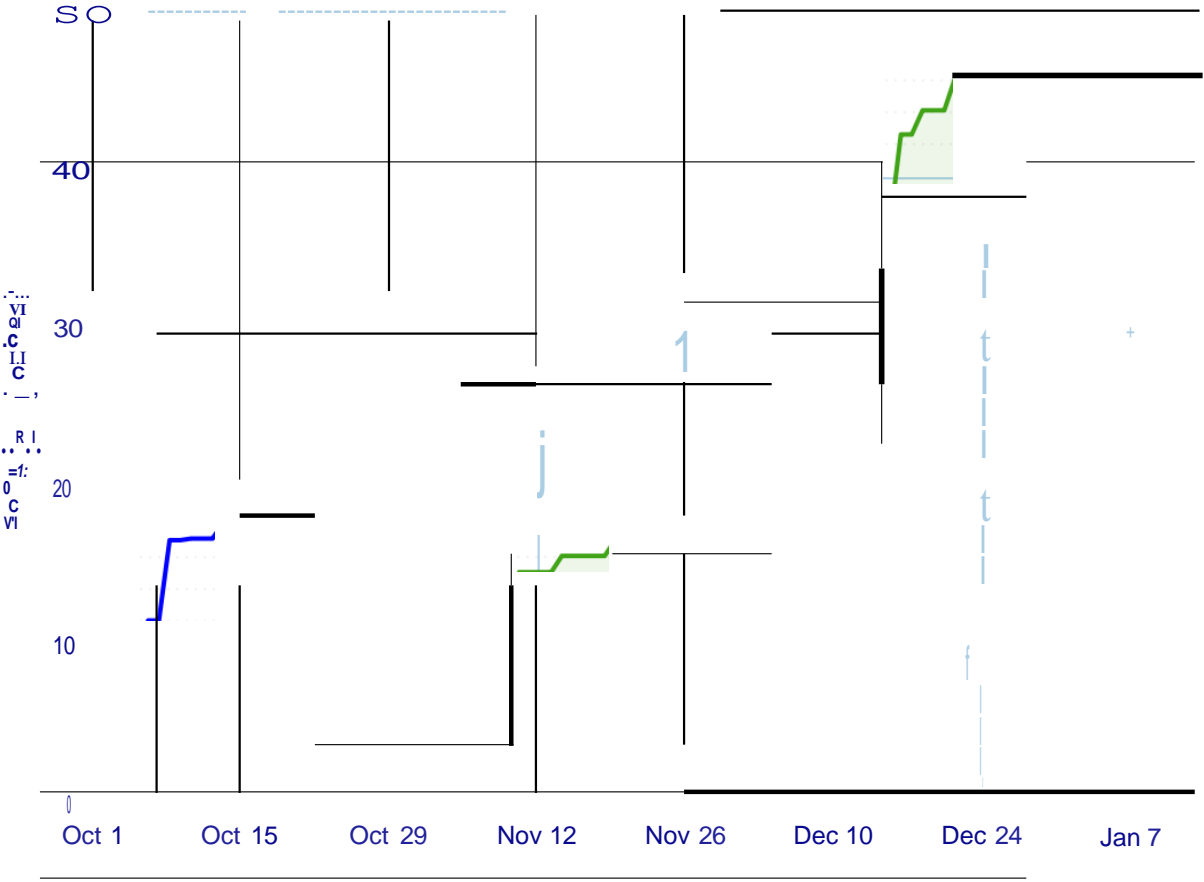
Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



Powered by ACIS

Accumulated Snowfall - DICKINSON, ND

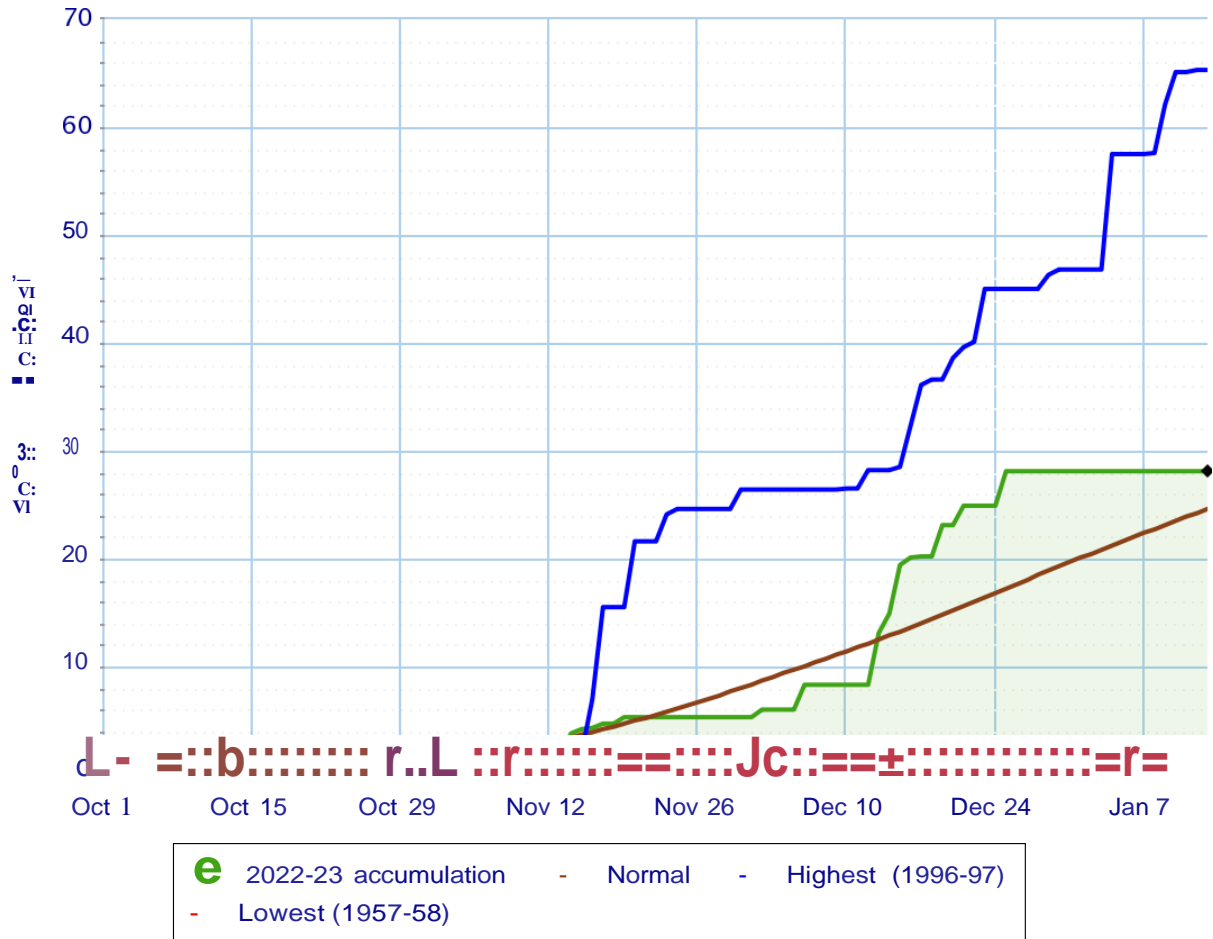
Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



● 2022-23 accumulation - Lowest (1952-53) - Highest (1946-47) Powered by ACIS

Accumulated Snowfall - Fargo Area, ND (ThreadEx)

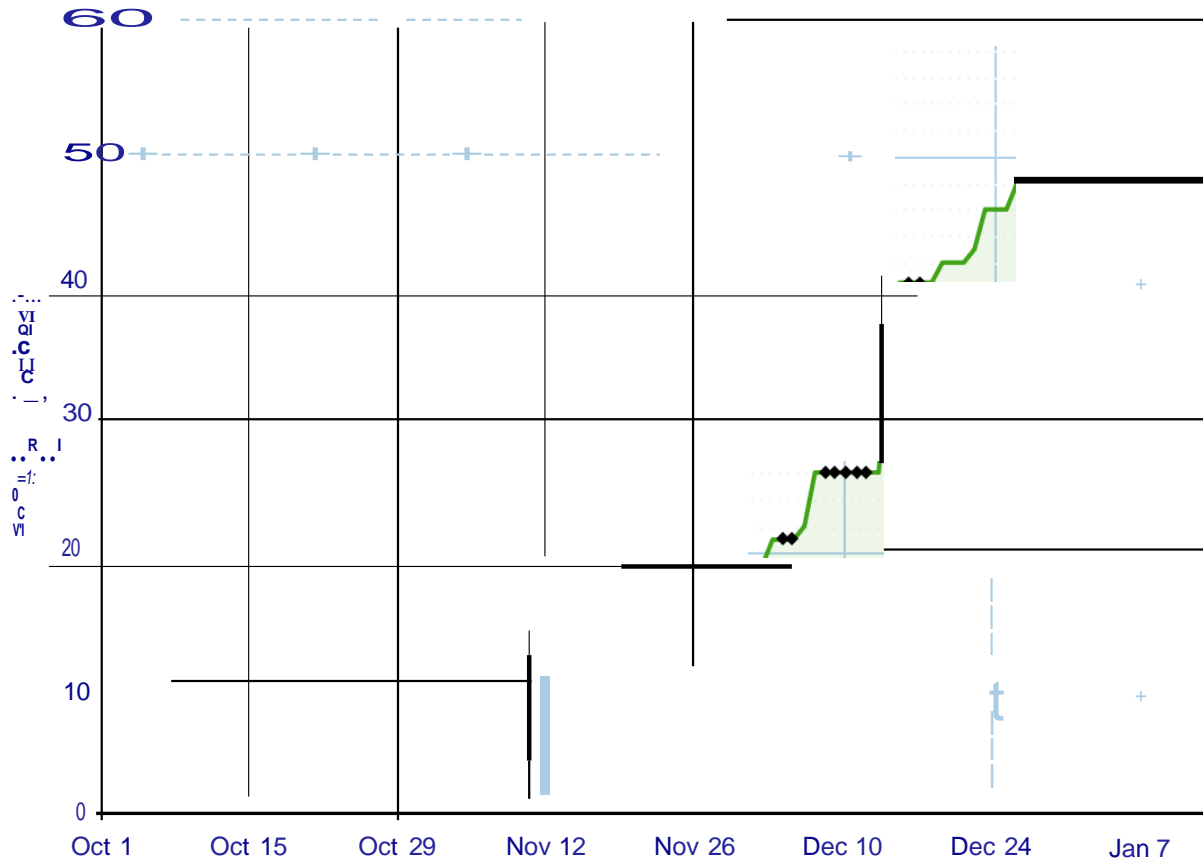
Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



Powered by ACIS

Accumulated Snowfall - FORT YATES, ND

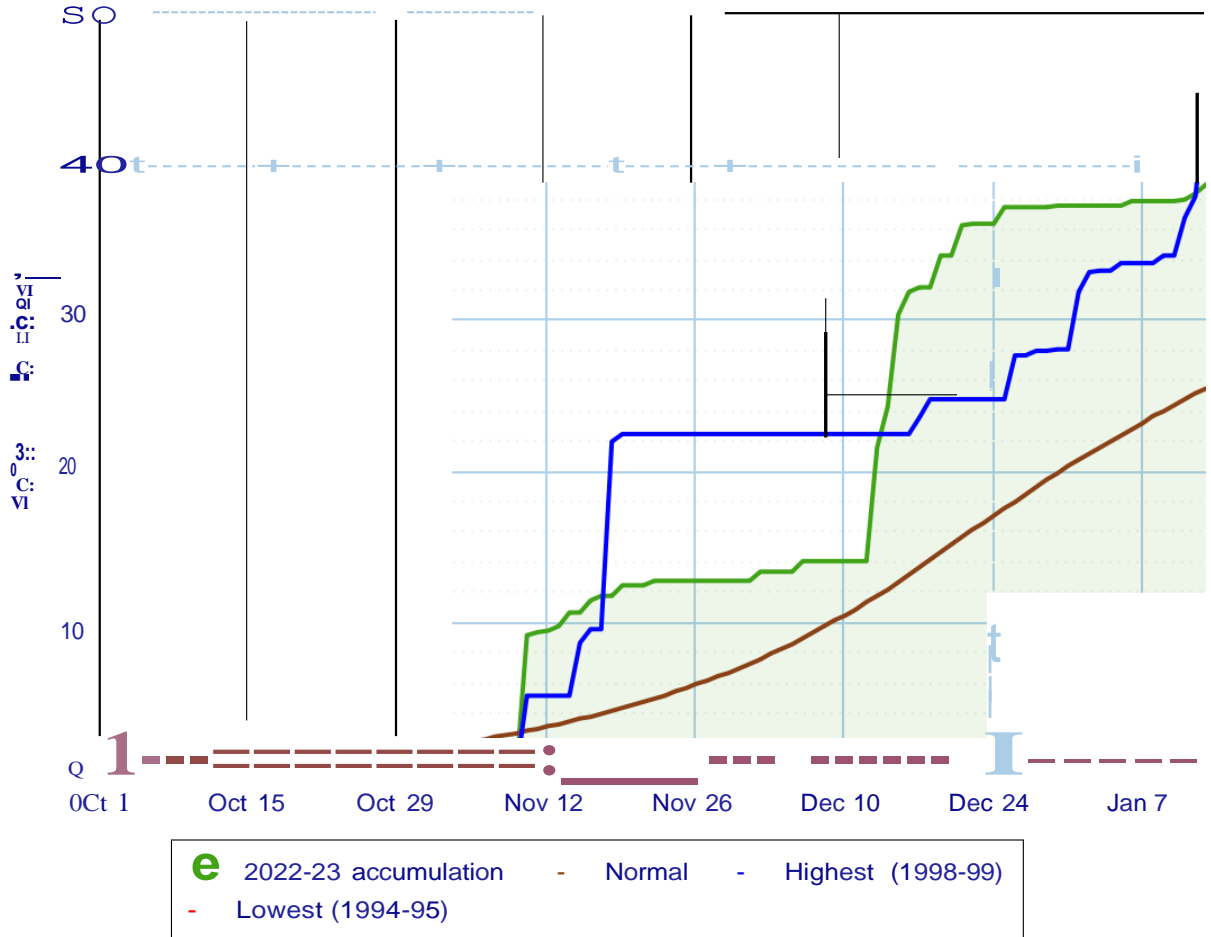
Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



(● 2022-23 accumulation)

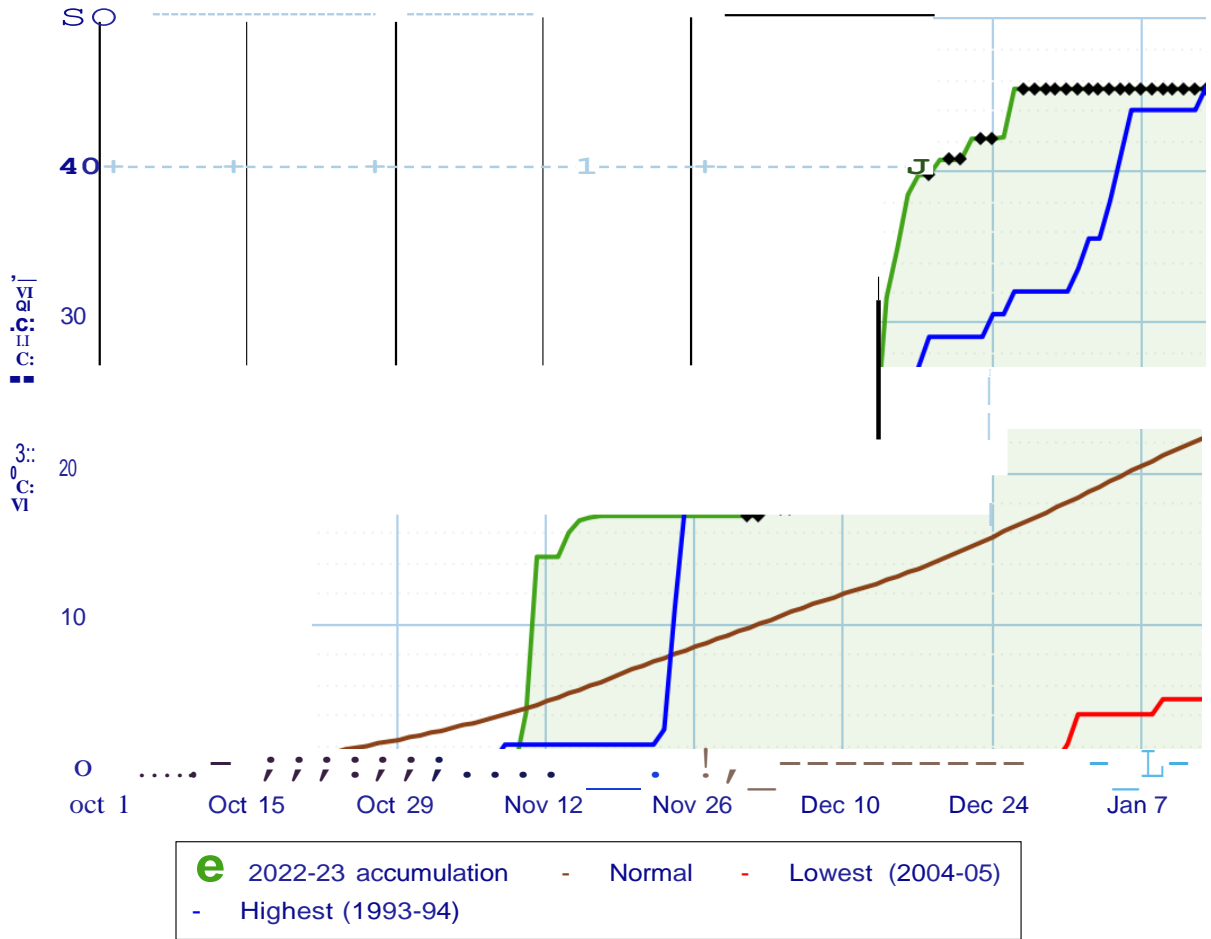
Accumulated Snowfall - GRAND FORKS UNIV (NWS), ND

Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



Accumulated Snowfall - HAZELTON 4NW, ND

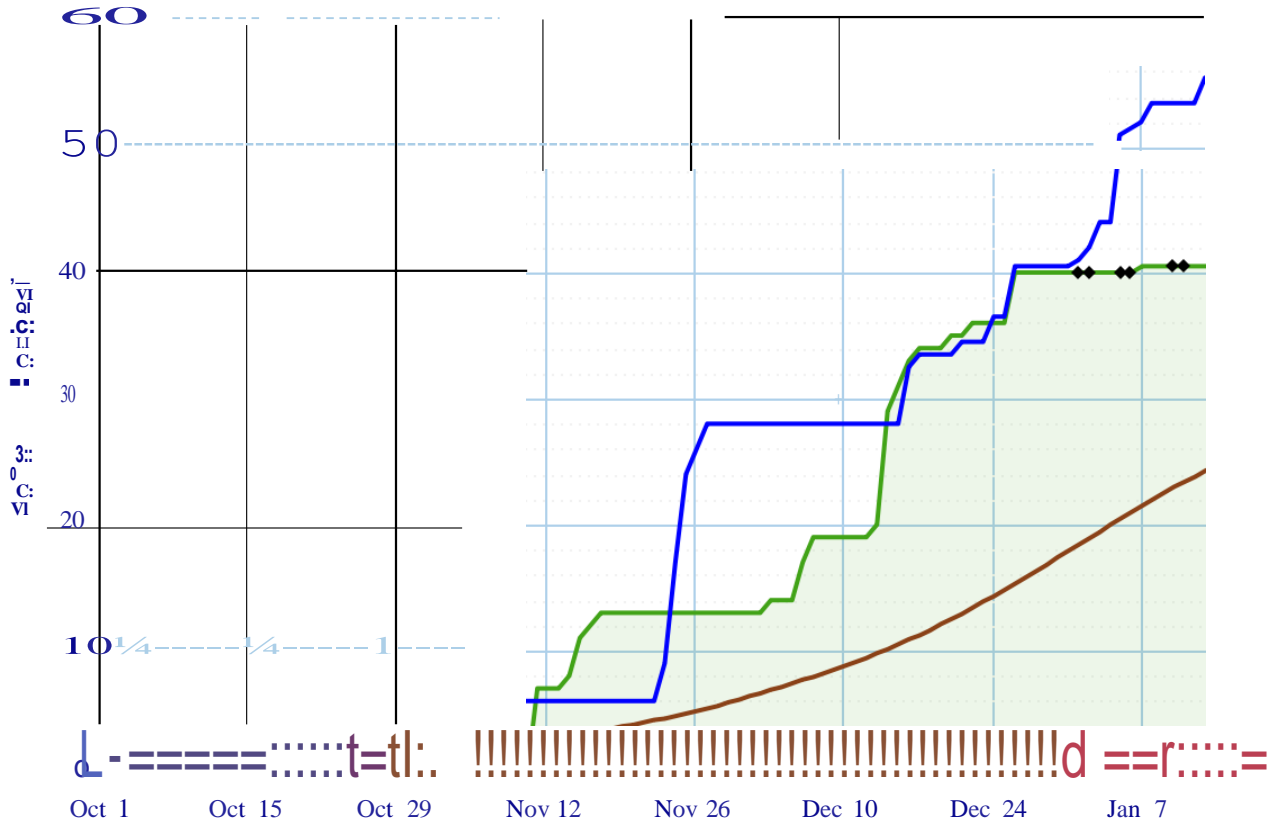
Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



Powered by ACIS

Accumulated Snowfall - JAMESTOWN STATE HOSP, ND

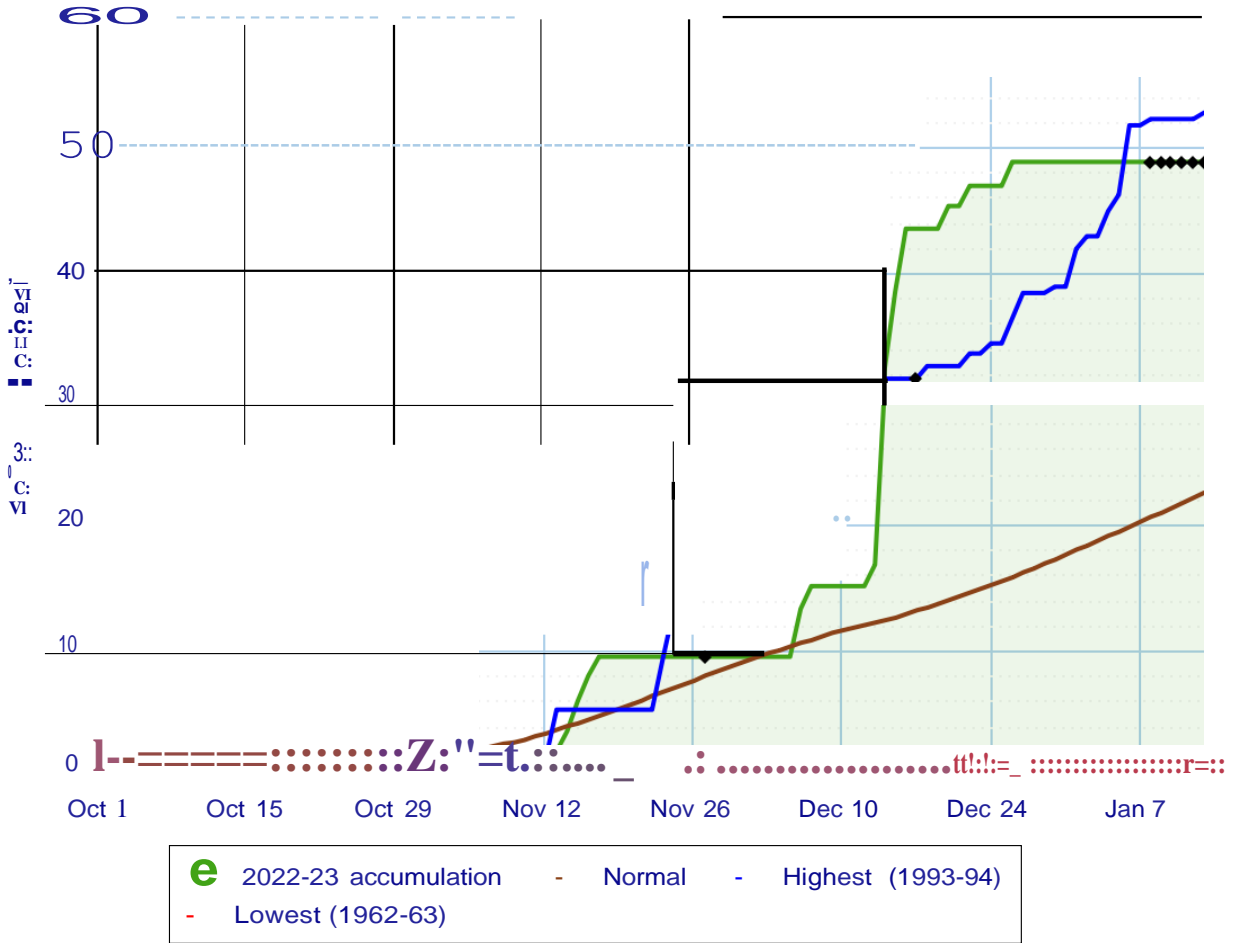
Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



■ 2022-23 accumulation - Normal - Lowest (1962-63)
■ Highest (1993-94)

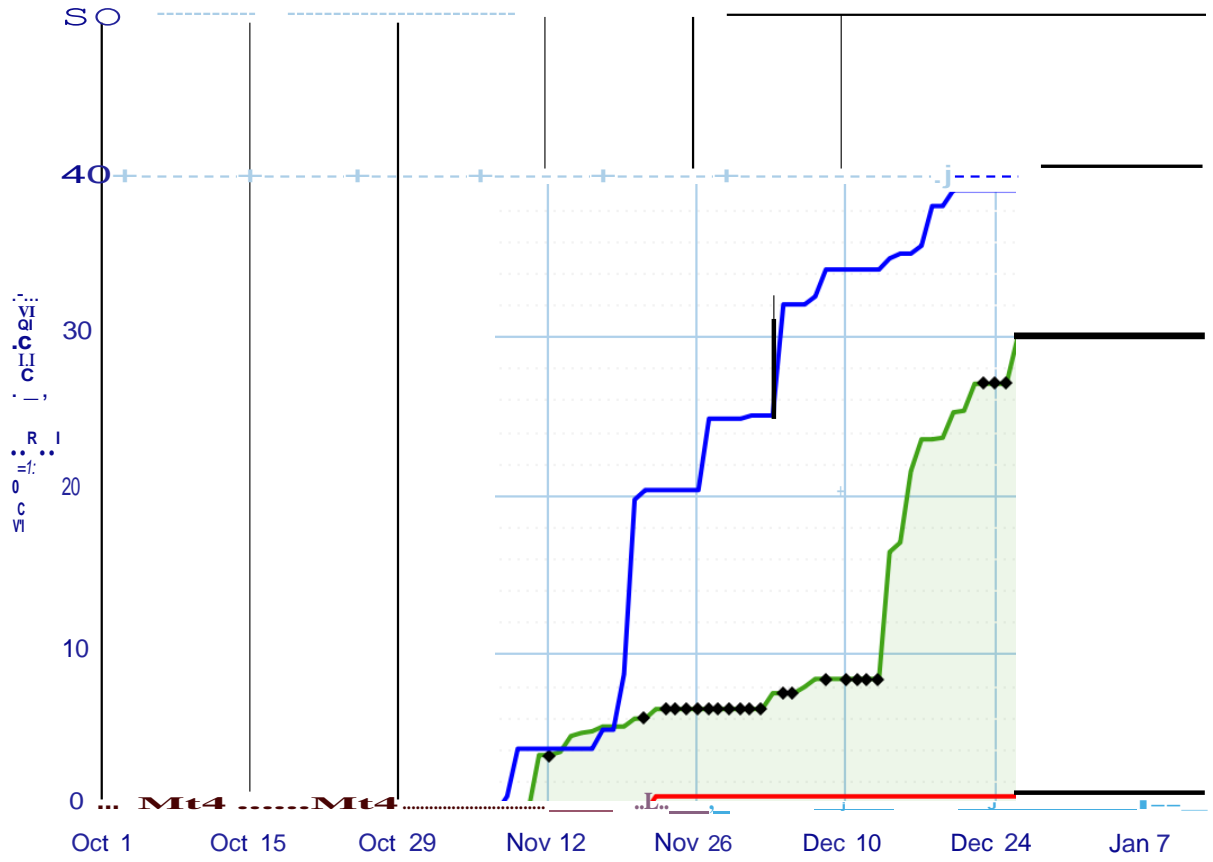
Accumulated Snowfall - LISBON, ND

Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



Accumulated Snowfall - MAYVILLE, ND

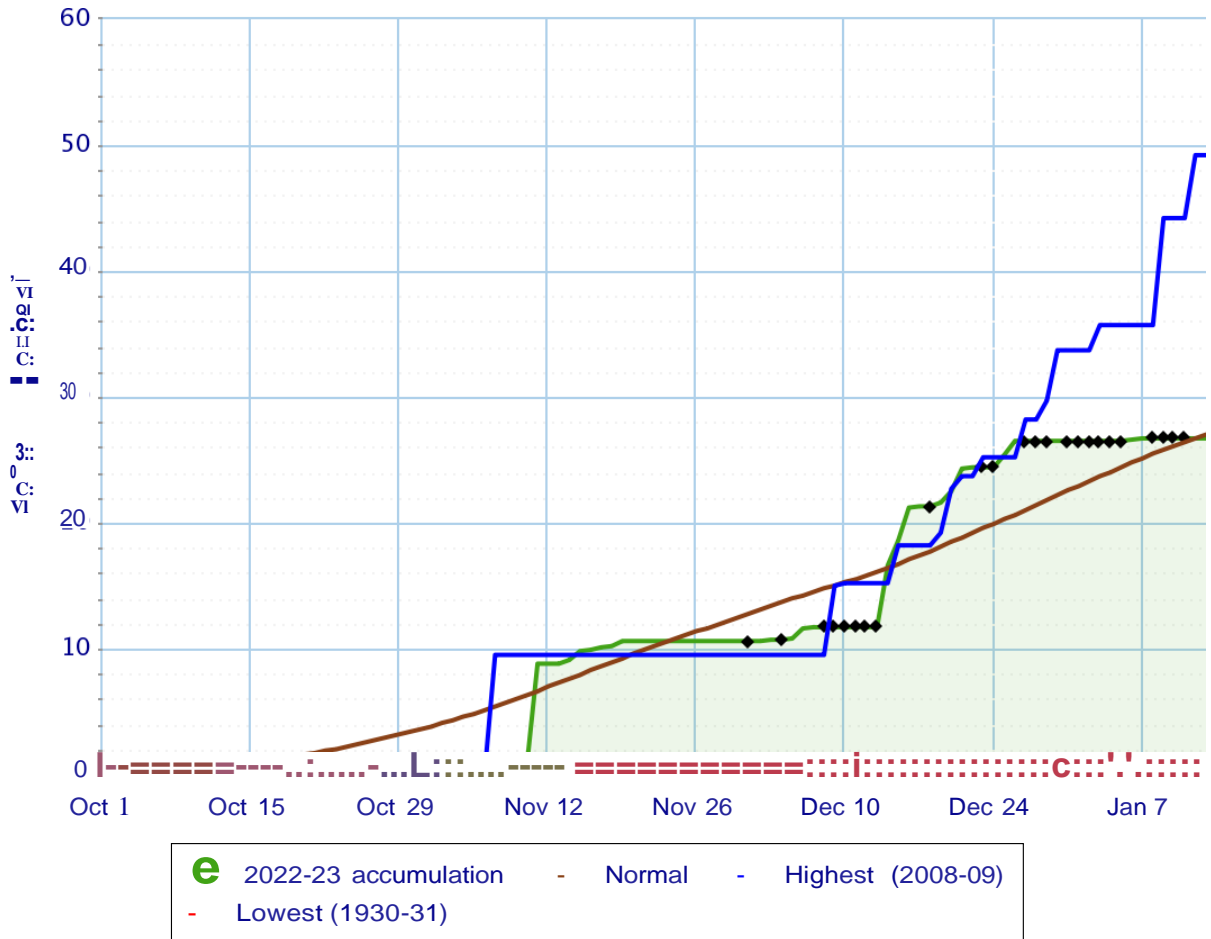
Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



e 2022-23 accumulation - Highest (1977-78) - Lowest (1913-14)

Accumulated Snowfall - MINOT EXP STATION, ND

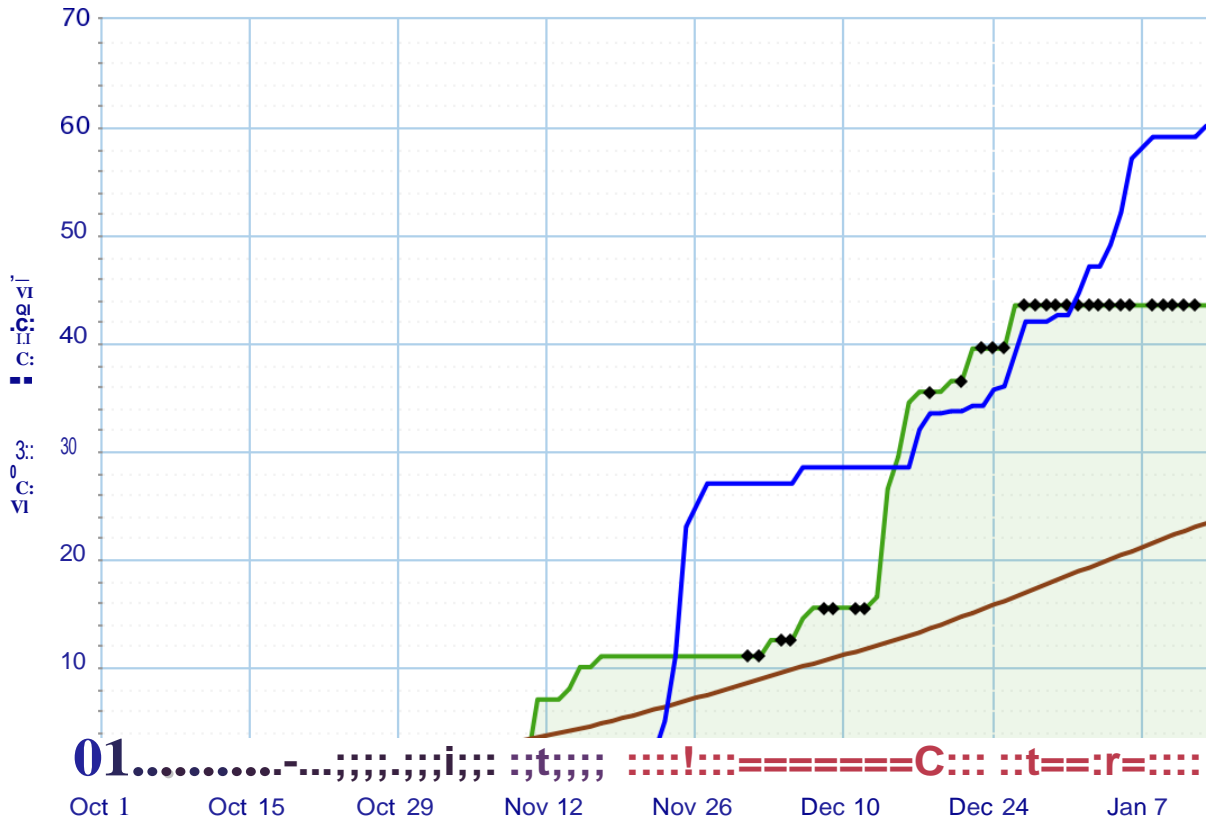
Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



Powered by ACIS

Accumulated Snowfall - MONTPELIER, ND

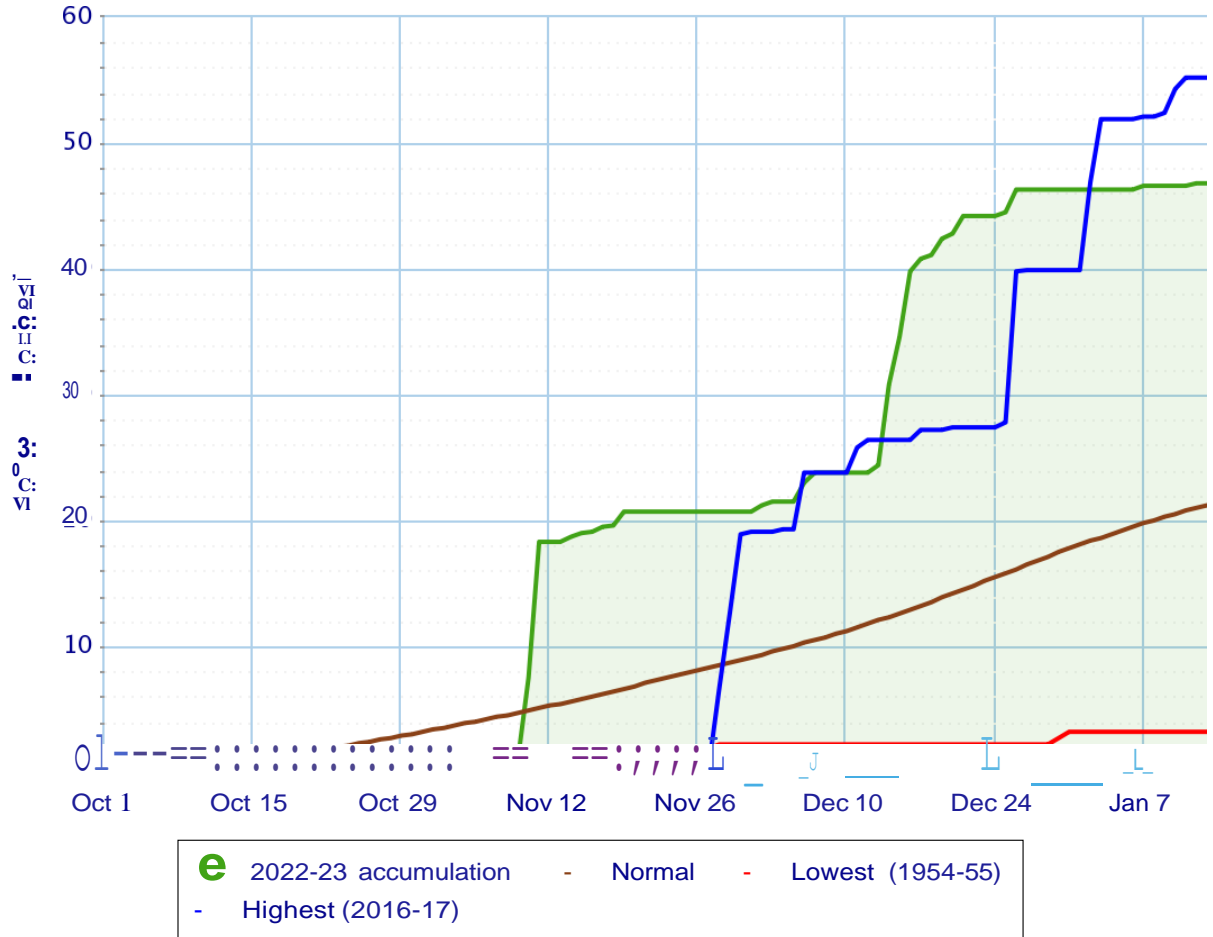
Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



■ 2022-23 accumulation - Normal - Lowest (1962-63)
- - - Highest (1993-94)

Accumulated Snowfall - NEW SALEM SNW, ND

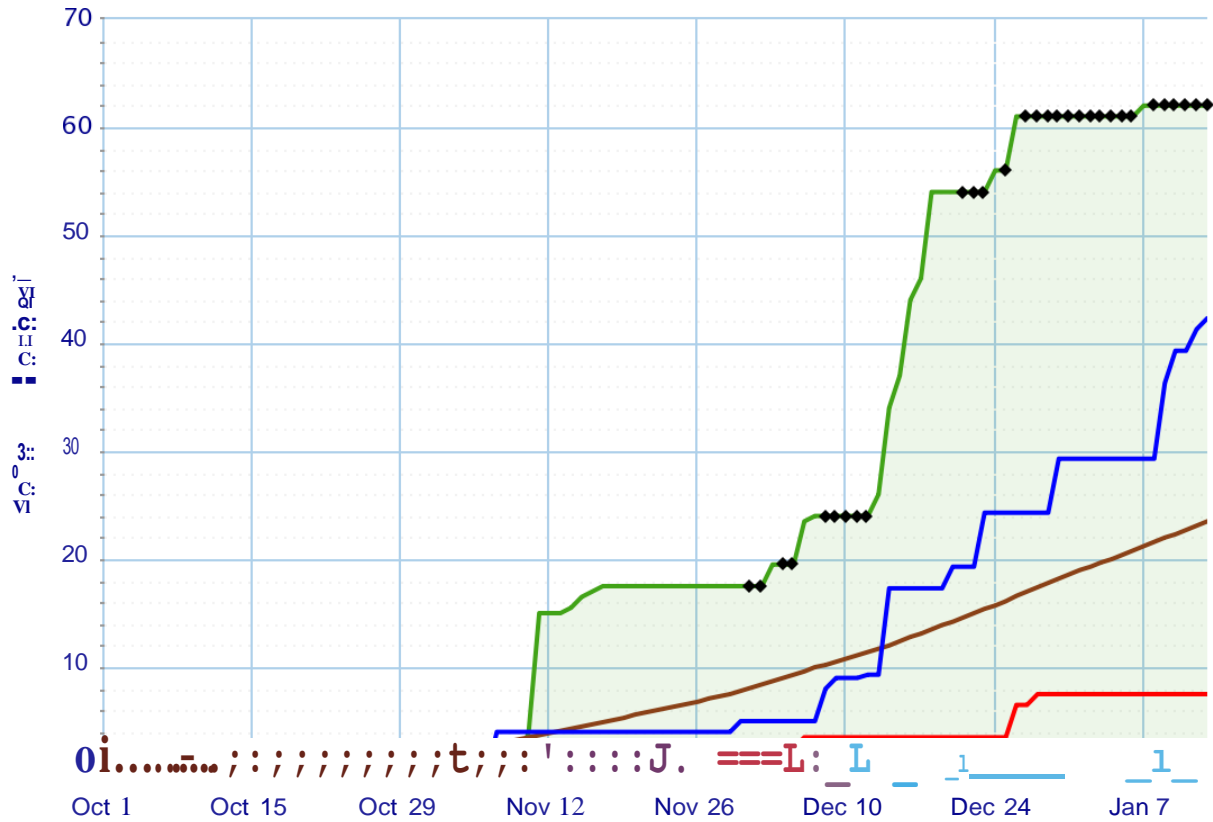
Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



Powered by ACIS

Accumulated Snowfall - STREETER 5 NW, ND

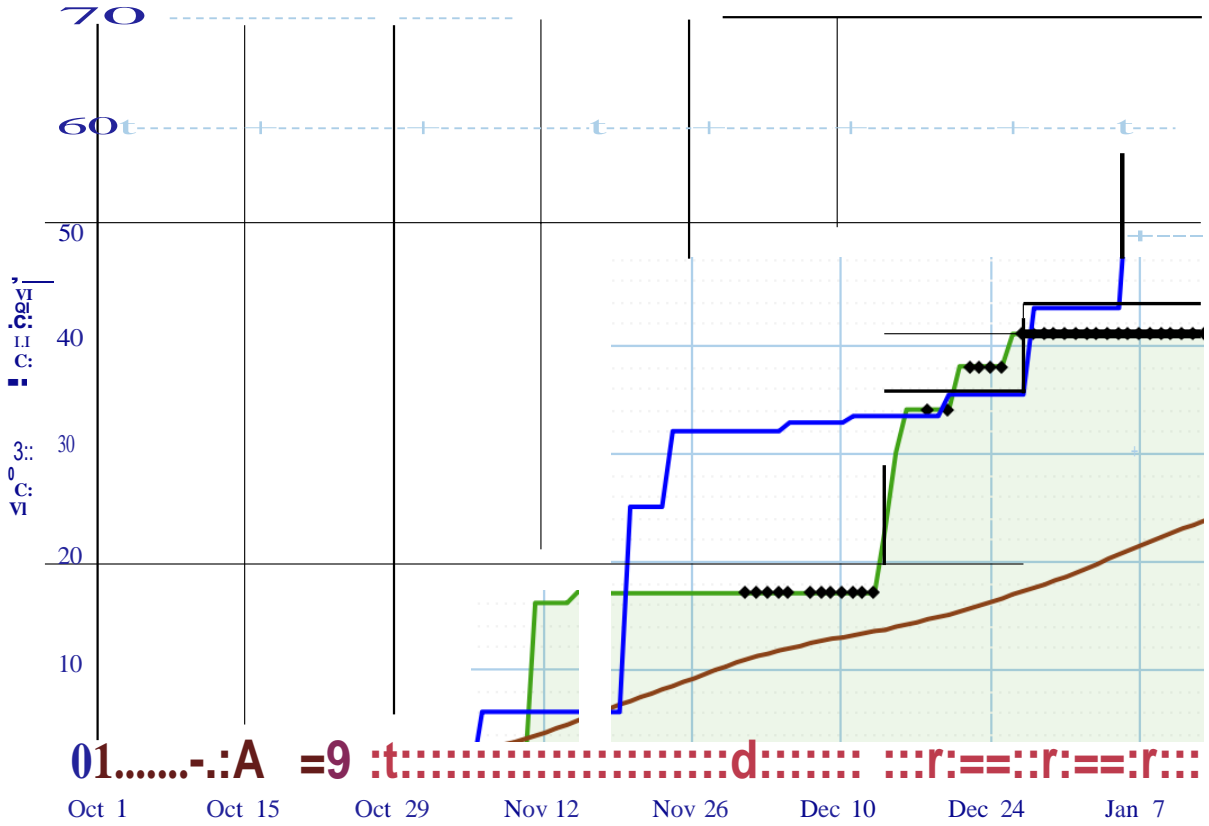
Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



Powered by ACIS

Accumulated Snowfall - TURTLE LAKE, ND

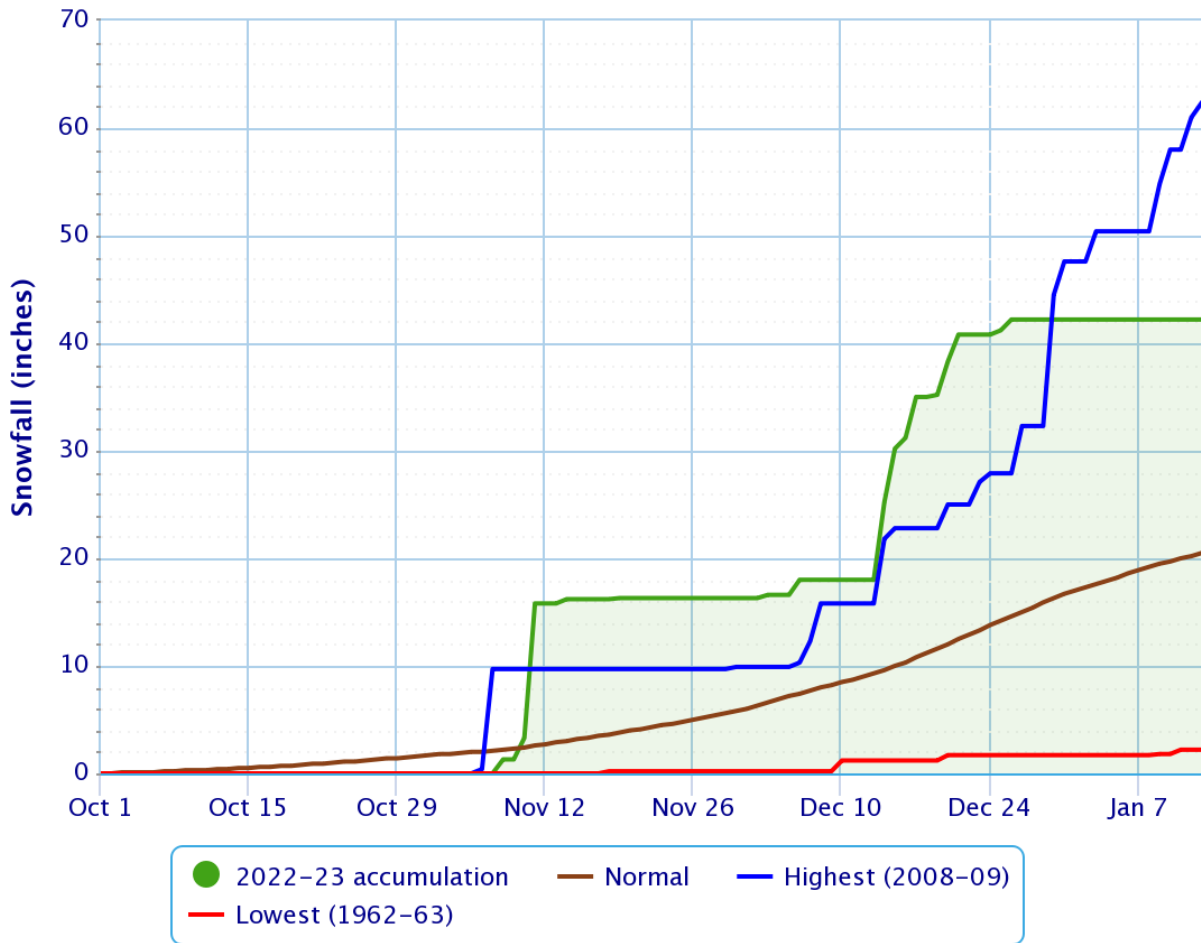
Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



■ 2022-23 accumulation - Normal - Highest (1996-97)
- Lowest (2001-02)

Accumulated Snowfall – UNDERWOOD, ND

Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



Powered by ACIS

Prepared For: North Dakota Department of Emergency Services

Prepared On: Friday, January 13, 2023

Prepared By: NOAA's National Weather Service, Bismarck and Grand Forks, ND

Contact: John Paul Martin (NWS Bismarck) (701) 527-3469 john.paul.martin@noaa.gov

Corey King (NWS Bismarck) (701) 250-4495 corey.king@noaa.gov

Mindy Beerends (NWS Grand Forks) (701) 772-0720 melinda.beerends@noaa.gov