

# PNW climate & drought update

Kathie Dello

Climate Impacts Research Consortium (CIRC)

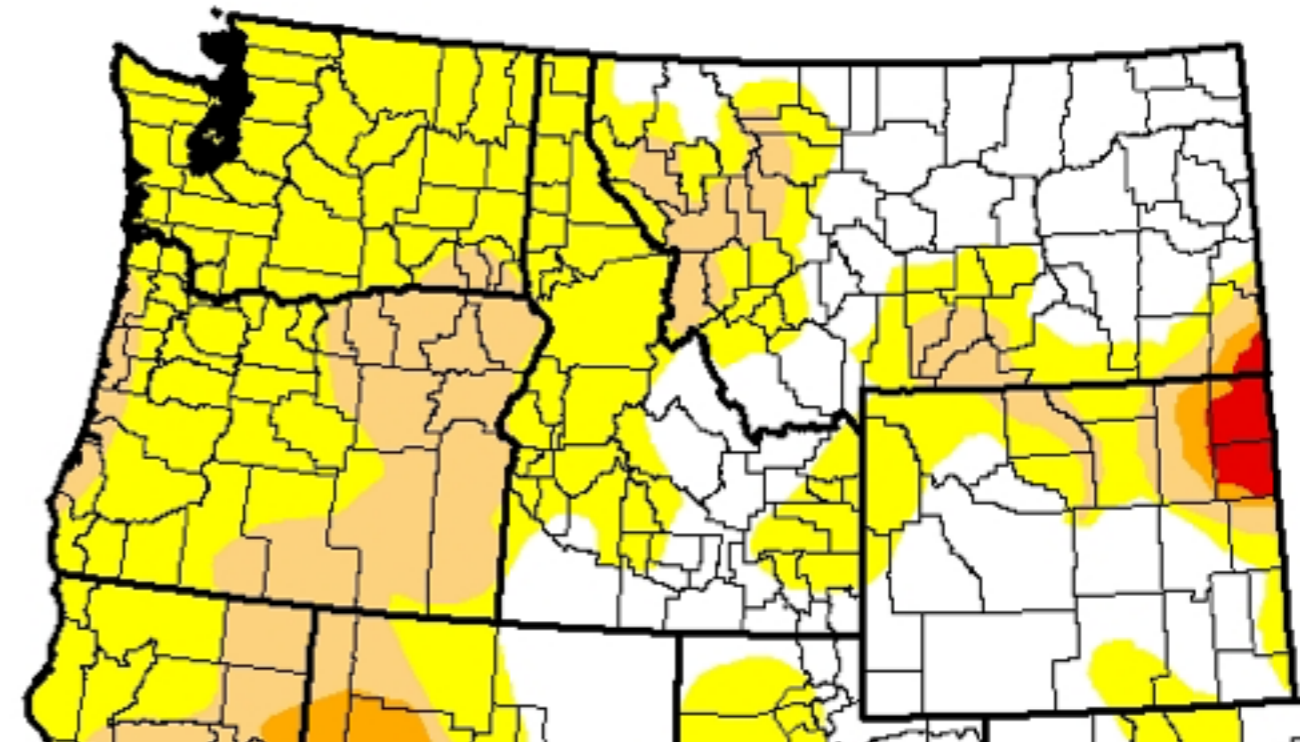
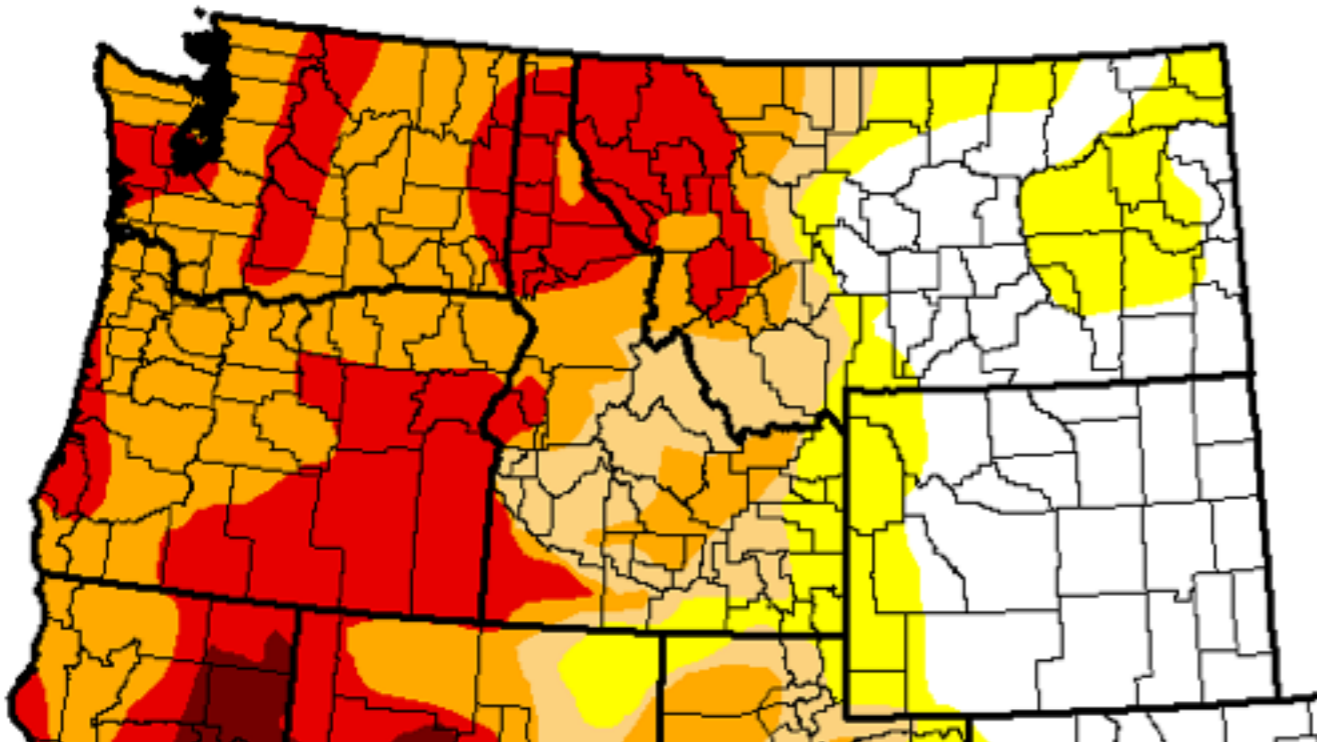


July 28, 2015

Today

***U.S. Drought Monitor***  
**West**

***U.S. Drought Monitor***  
**West**



*Intensity:*



*The Drought Monitor focuses on broad-scale conditions.  
Local conditions may vary. See accompanying text summary  
for forecast statements.*

# U.S. Drought Monitor West

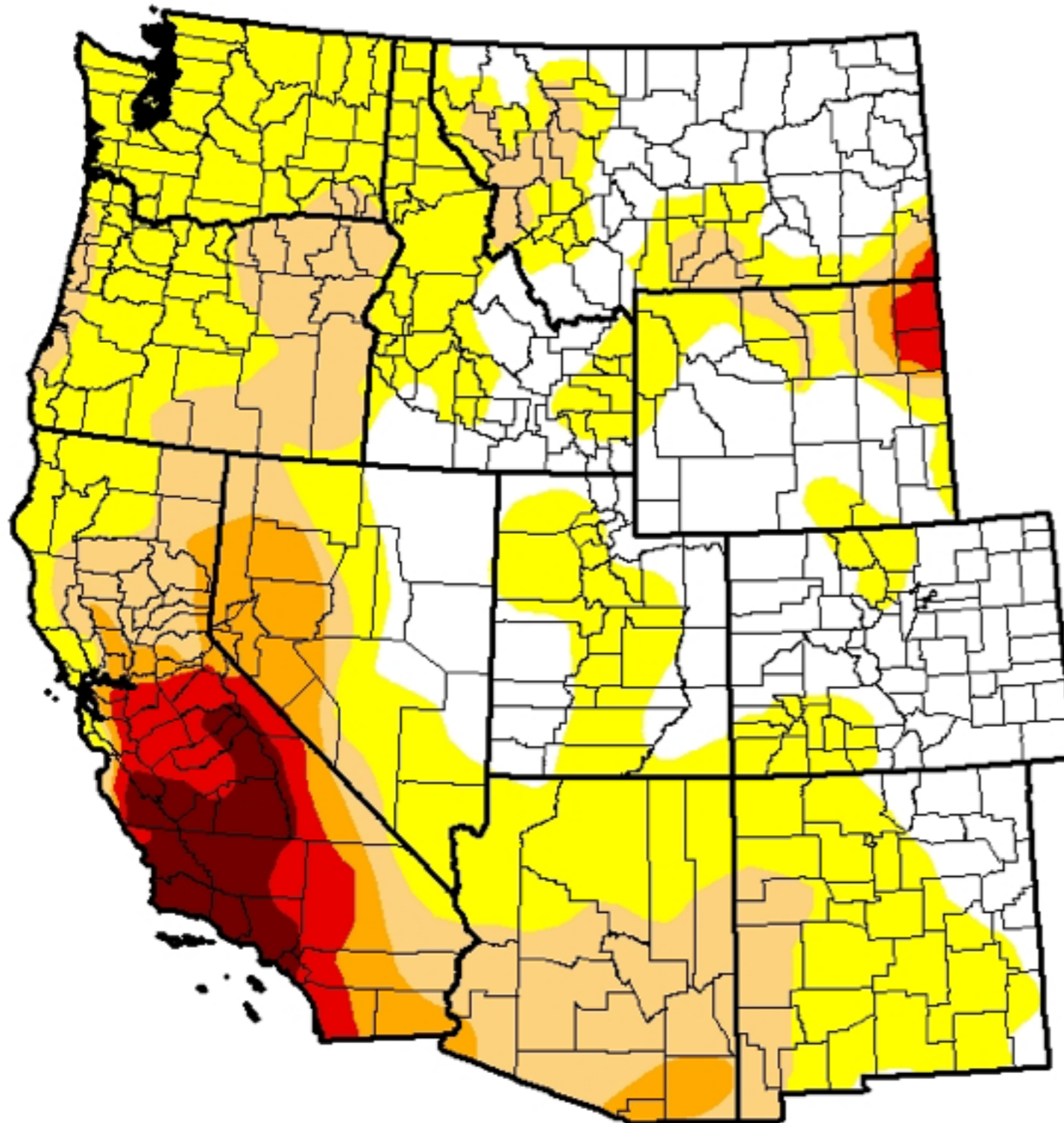
**July 19, 2016**

(Released Thursday, Jul. 21, 2016)

Valid 8 a.m. EDT

*Drought Conditions (Percent Area)*

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	31.17	68.83	29.17	11.44	6.18	2.81
<b>Last Week</b> <i>7/12/2016</i>	34.31	65.69	28.08	11.11	5.80	2.81
<b>3 Months Ago</b> <i>4/19/2016</i>	40.56	59.44	34.76	14.89	8.71	2.81
<b>Start of Calendar Year</b> <i>12/29/2015</i>	33.17	66.83	45.07	29.30	15.92	6.85
<b>Start of Water Year</b> <i>9/29/2015</i>	22.77	77.23	57.81	42.42	26.50	7.62
<b>One Year Ago</b> <i>7/21/2015</i>	25.49	74.51	61.04	41.92	18.87	7.17



**Intensity:**

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

*The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.*

**Author:**

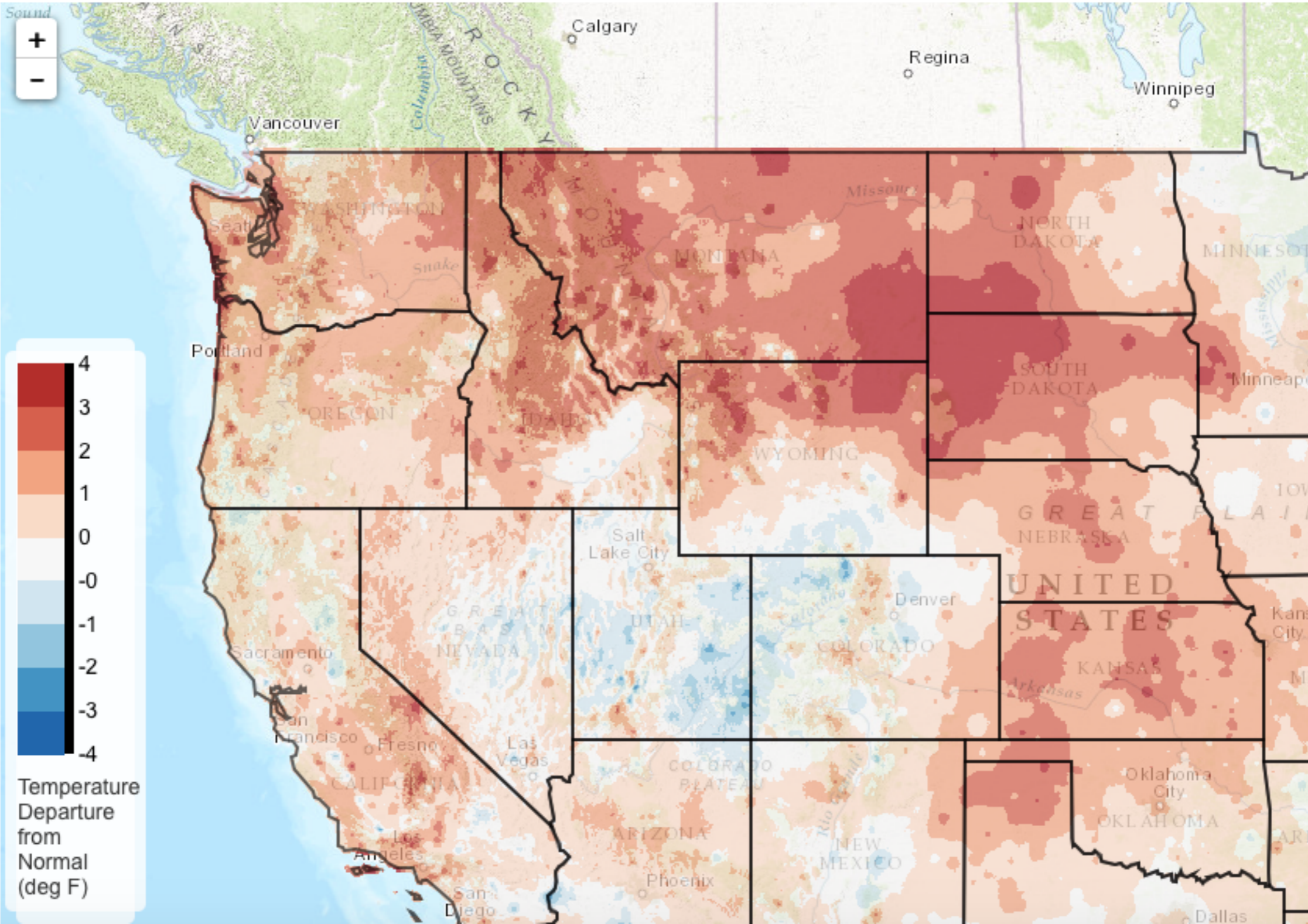
Chris Fenimore  
NCEI/NESDIS/NOAA





# Current Calendar Year Air Temperature (Departure from Normal, Degrees F)

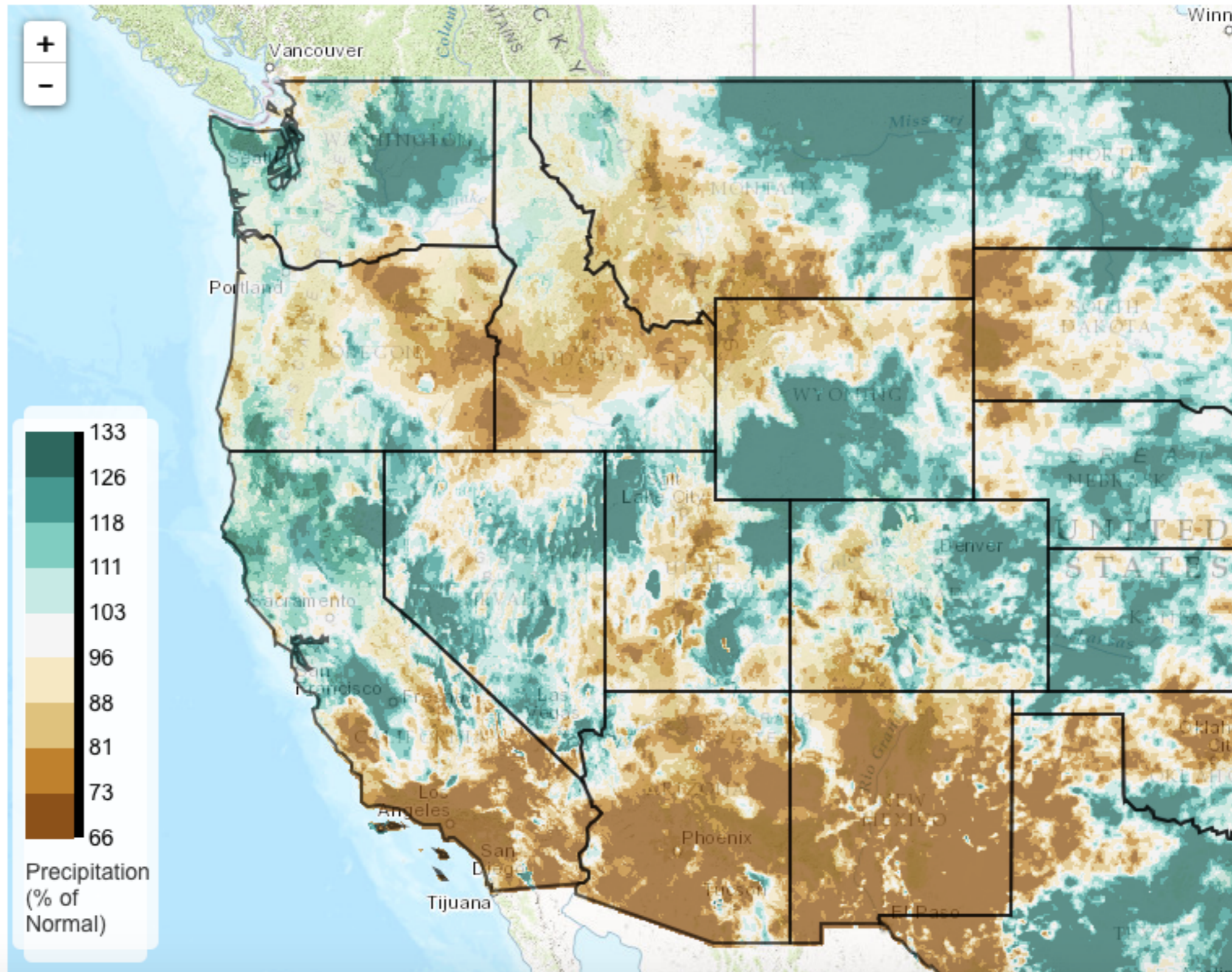
Data Source: METDATA/gridMET 4-km dataset (Univ. Idaho), 2016/01/01 - 2016/07/25





# Current Calendar Year Precipitation (% of Normal)

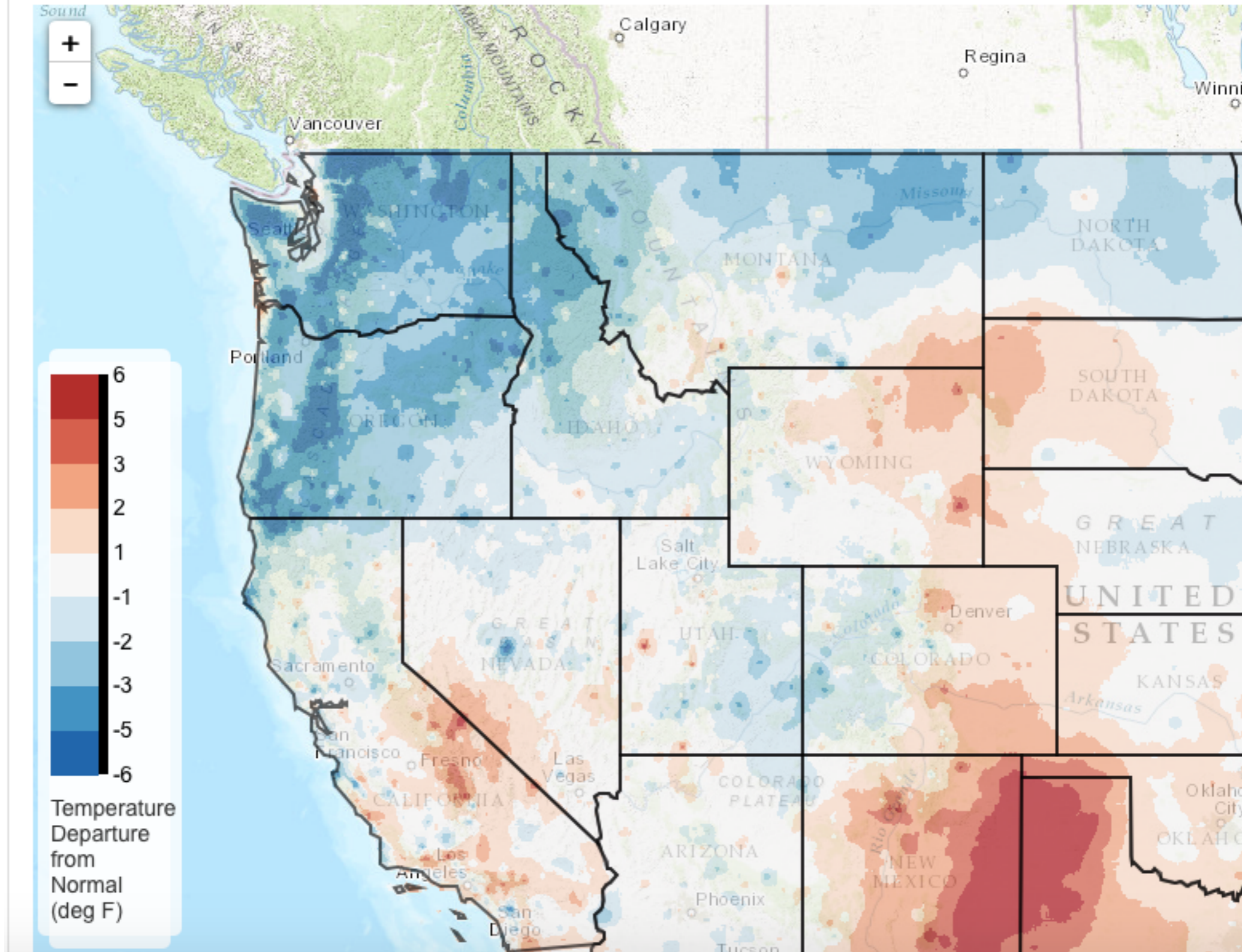
Data Source: METDATA/gridMET 4-km dataset (Univ. Idaho), 2016/01/01 - 2016/07/25





# Last 30 Days Air Temperature (Departure from Normal, Degrees F)

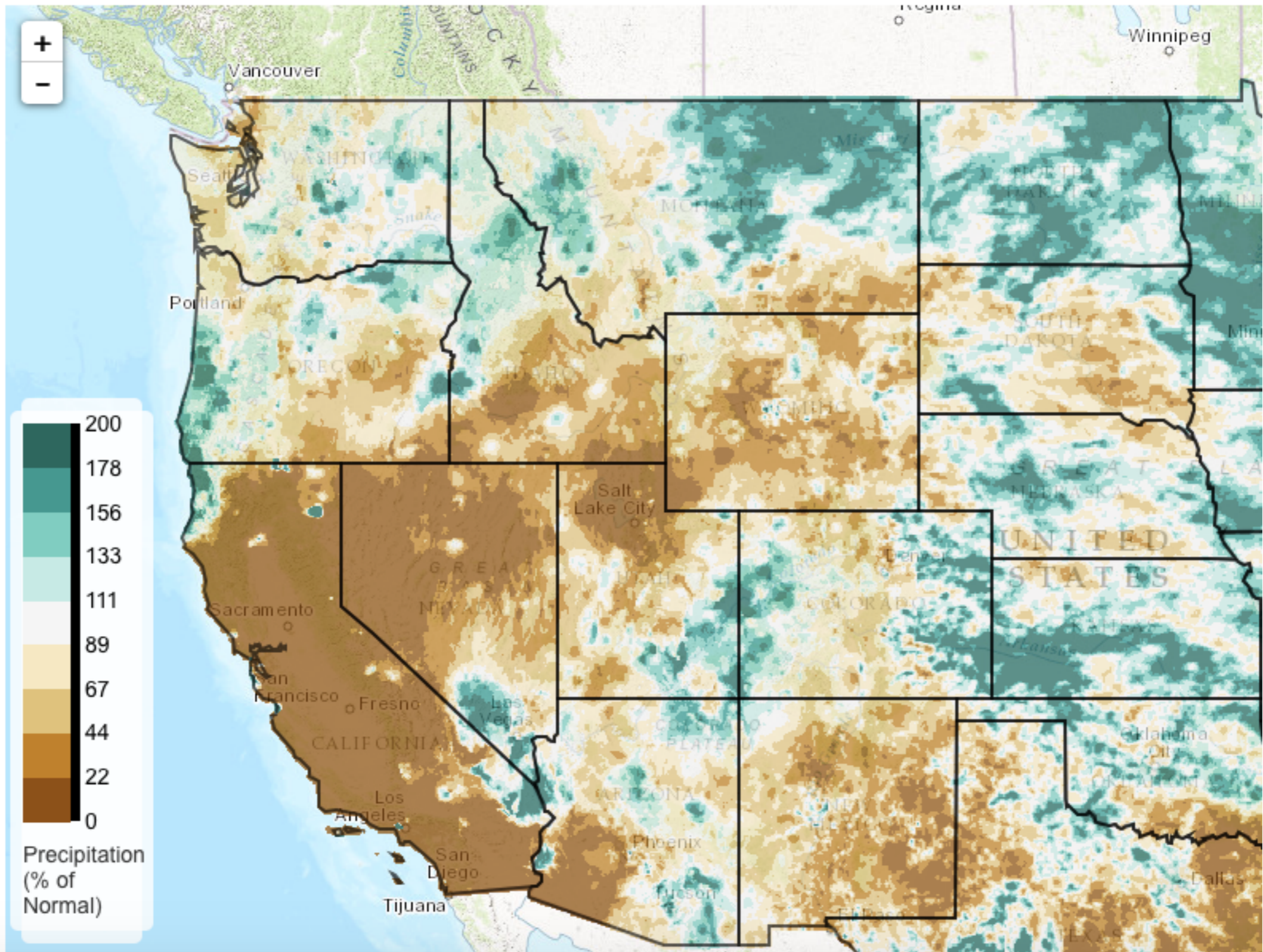
Data Source: METDATA/gridMET 4-km dataset (Univ. Idaho), 2016/06/26 - 2016/07/25





# Last 30 Days Precipitation (% of Normal)

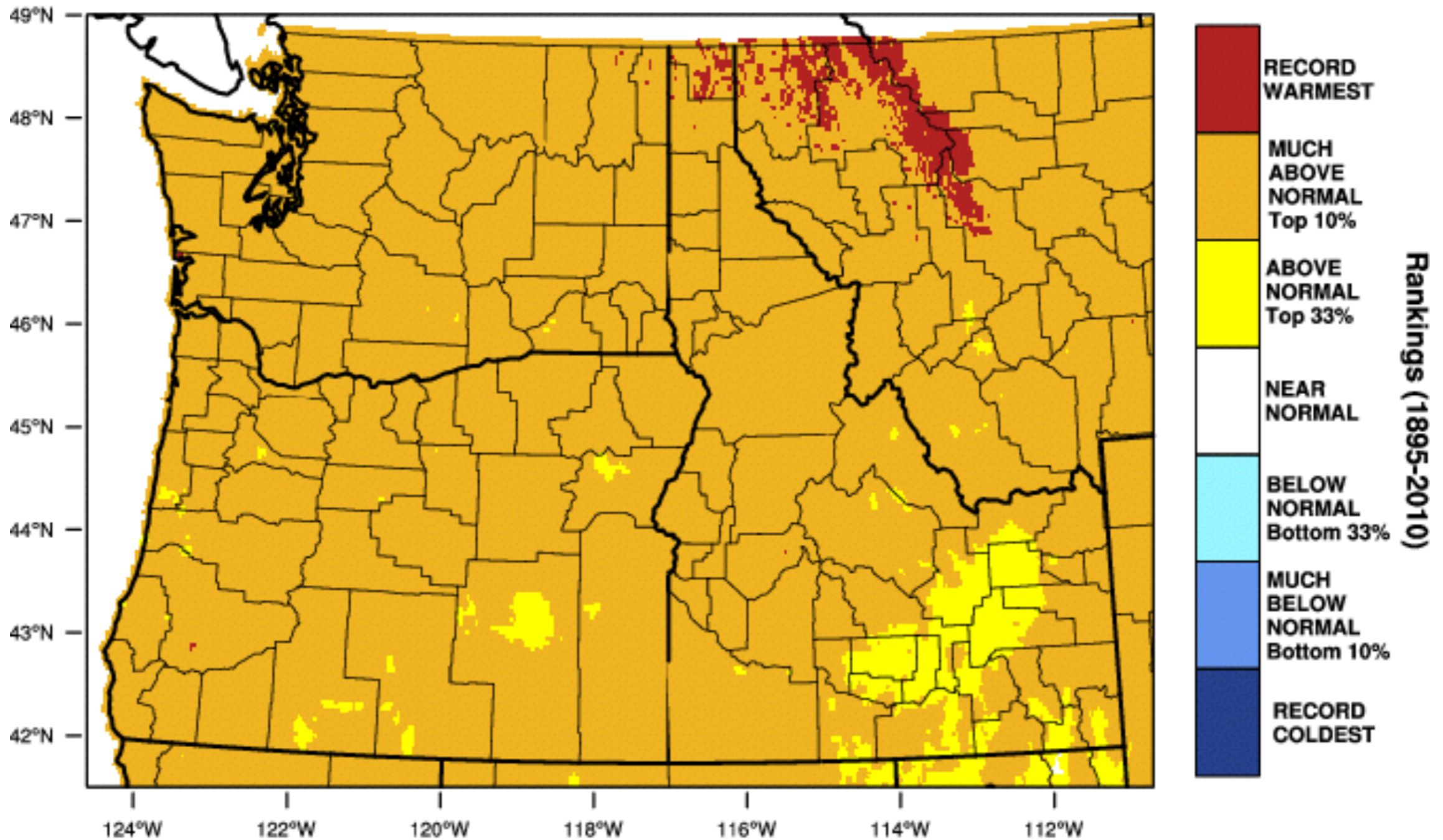
Data Source: METDATA/gridMET 4-km dataset (Univ. Idaho), 2016/06/26 - 2016/07/25





# Pacific Northwest - Mean Temperature

## January-June 2016 Percentile



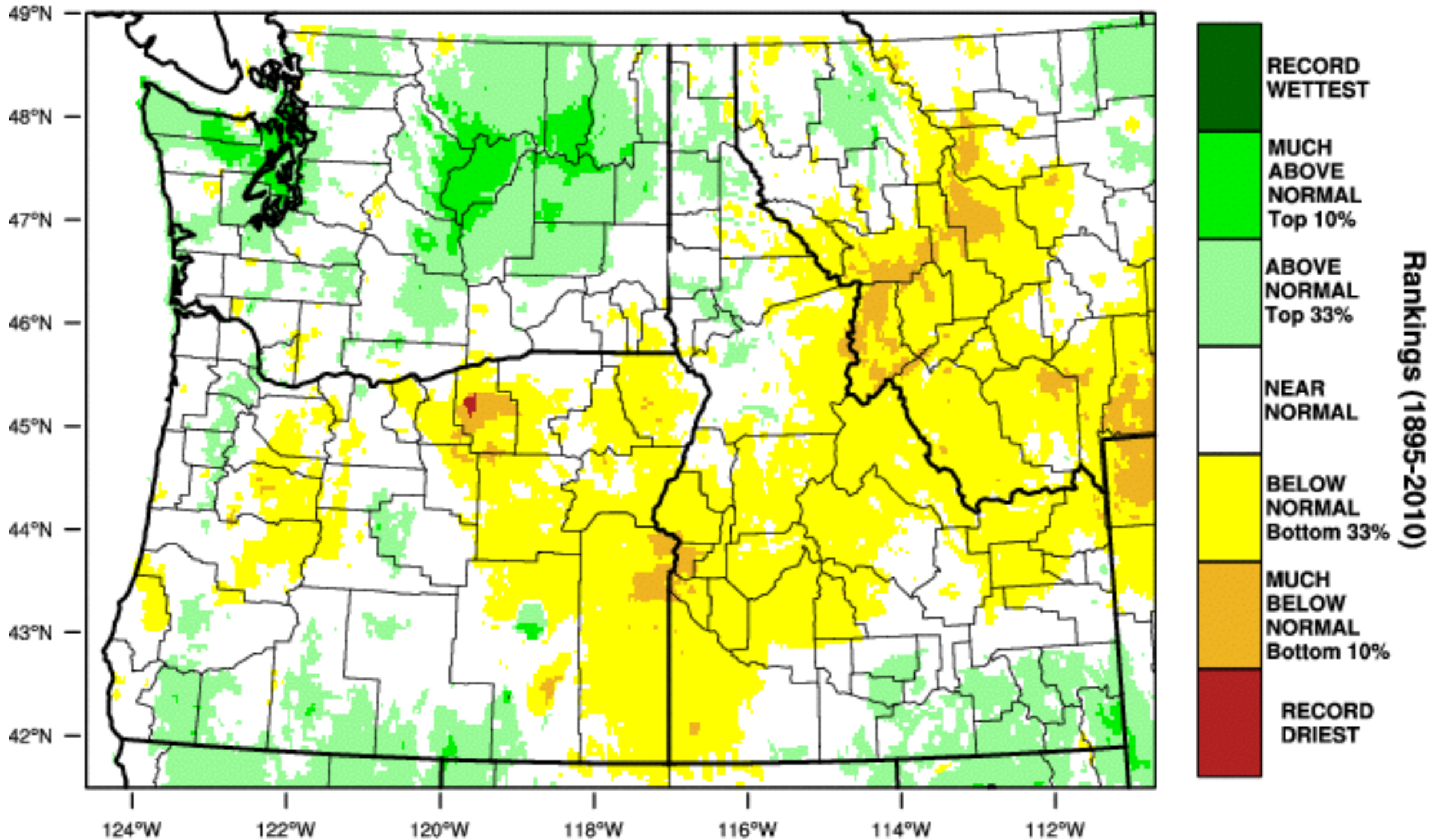
WestWide Drought Tracker - U Idaho/WRCC Data Source - PRISM (Prelim), created 16 JUL 2016

West Wide Drought Tracker



# Pacific Northwest - Precipitation

## January-June 2016 Percentile

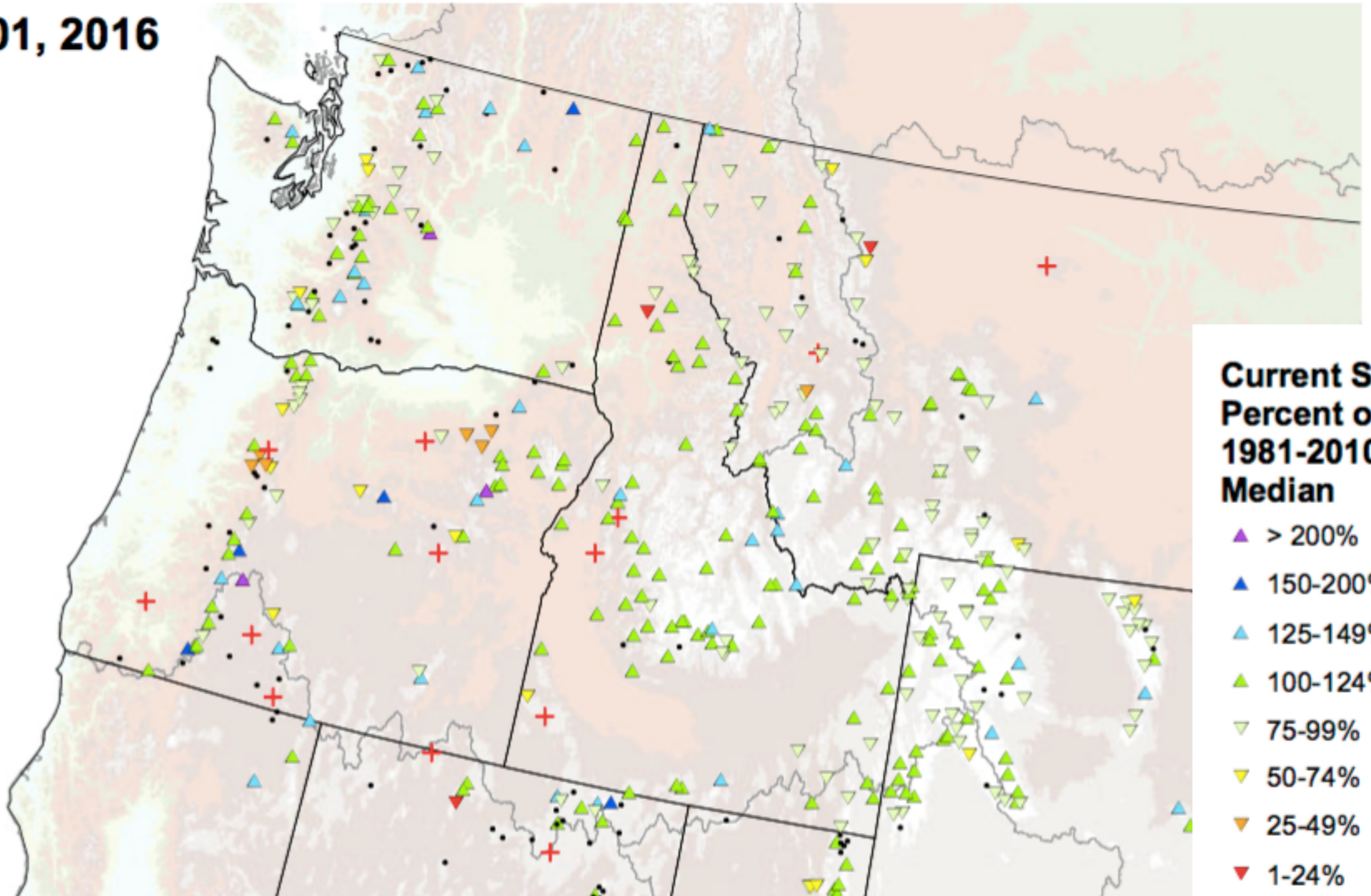


WestWide Drought Tracker - U Idaho/WRCC Data Source - PRISM (Prelim), created 16 JUL 2016

West Wide Drought Tracker

# SNOTEL Current Snow Water Equivalent (SWE) Percent of Normal

Apr 01, 2016



## Current SWE Percent of 1981-2010 Median

- ▲ > 200%
- ▲ 150-200%
- ▲ 125-149%
- ▲ 100-124%
- ▲ 75-99%
- ▲ 50-74%
- ▲ 25-49%
- ▲ 1-24%
- + 0%
- Unavailable\*

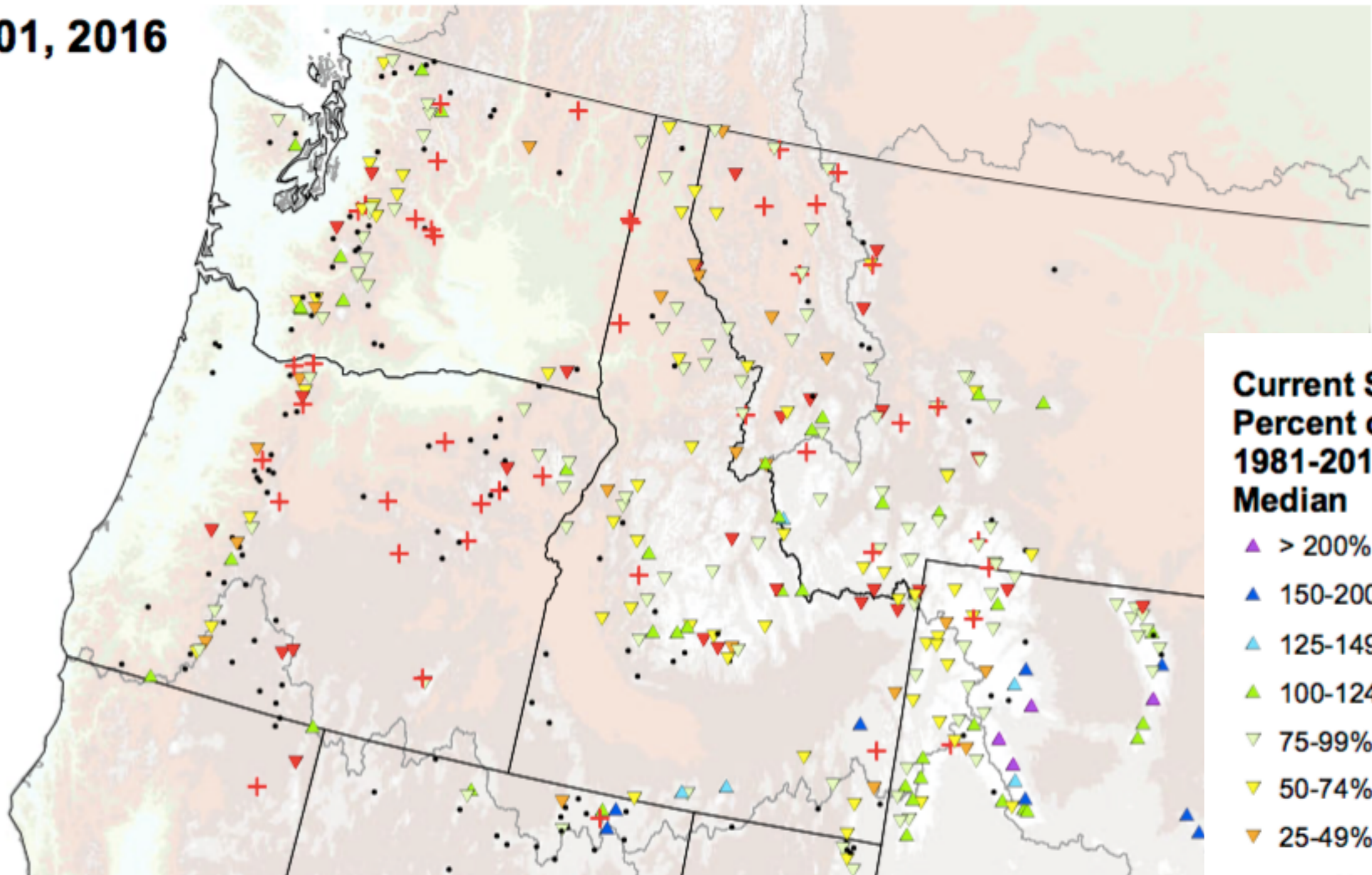
\* Data unavailable at time of posting or long-term normal not available at

NRCS



# SNOTEL Current Snow Water Equivalent (SWE) Percent of Normal

May 01, 2016



## Current SWE Percent of 1981-2010 Median

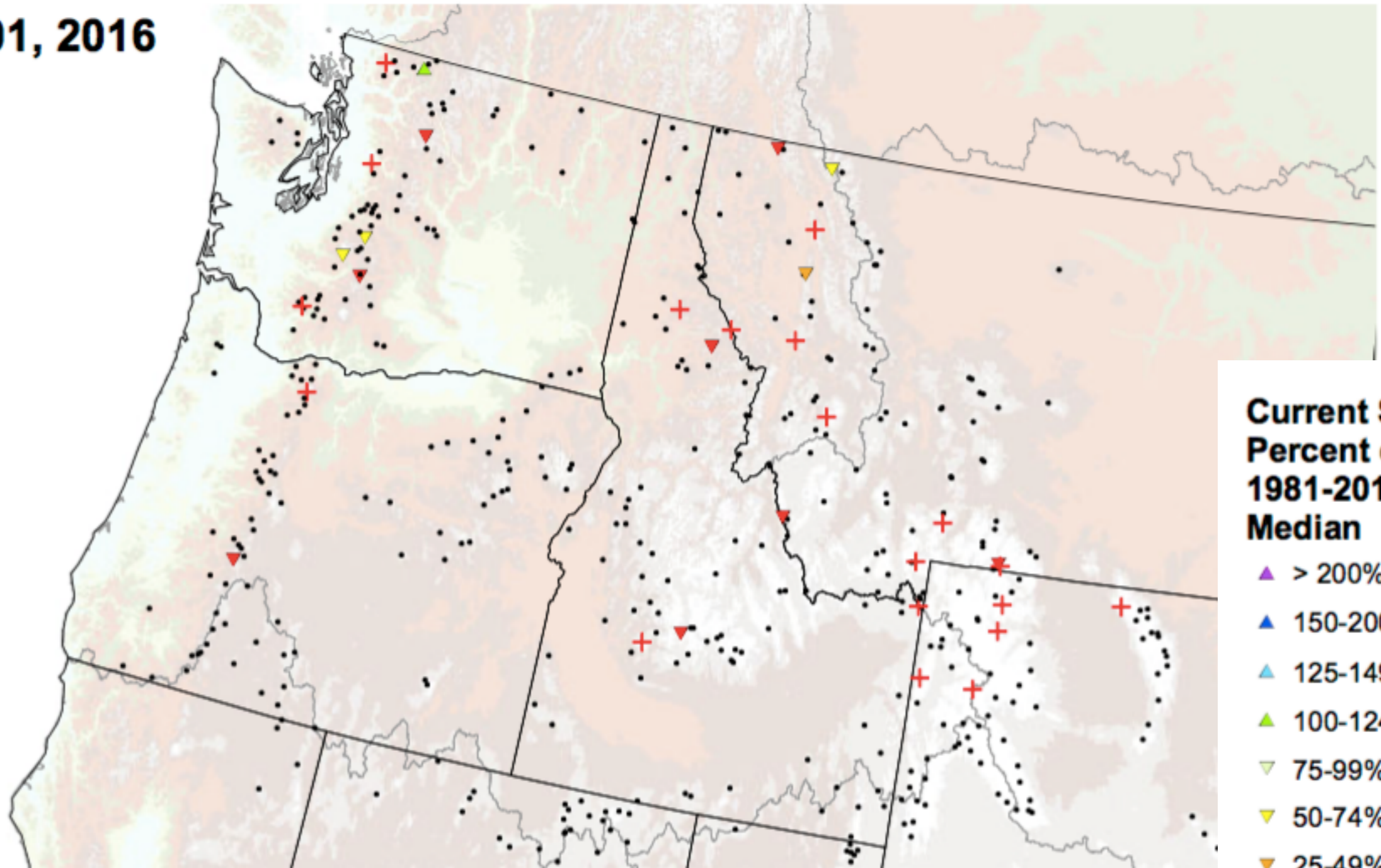
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- ▼ 50-74%
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- + 0%
- Unavailable\*

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NRCS

# SNOTEL Current Snow Water Equivalent (SWE) Percent of Normal

Jul 01, 2016



## Current SWE Percent of 1981-2010 Median

- ▲ > 200%
- ▲ 150-200%
- ▲ 125-149%
- ▲ 100-124%
- ▼ 75-99%
- ▼ 50-74%
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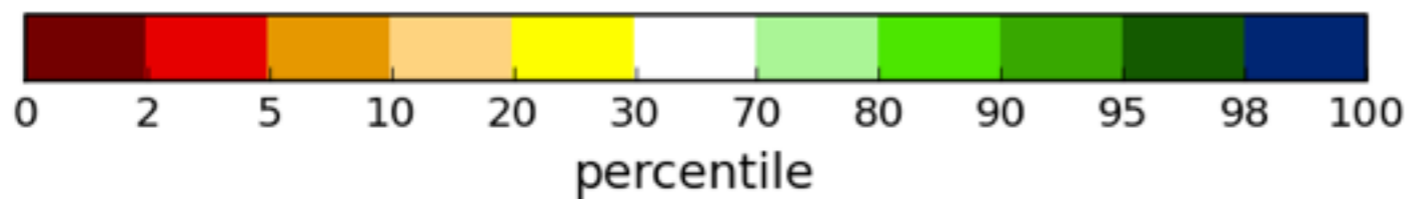
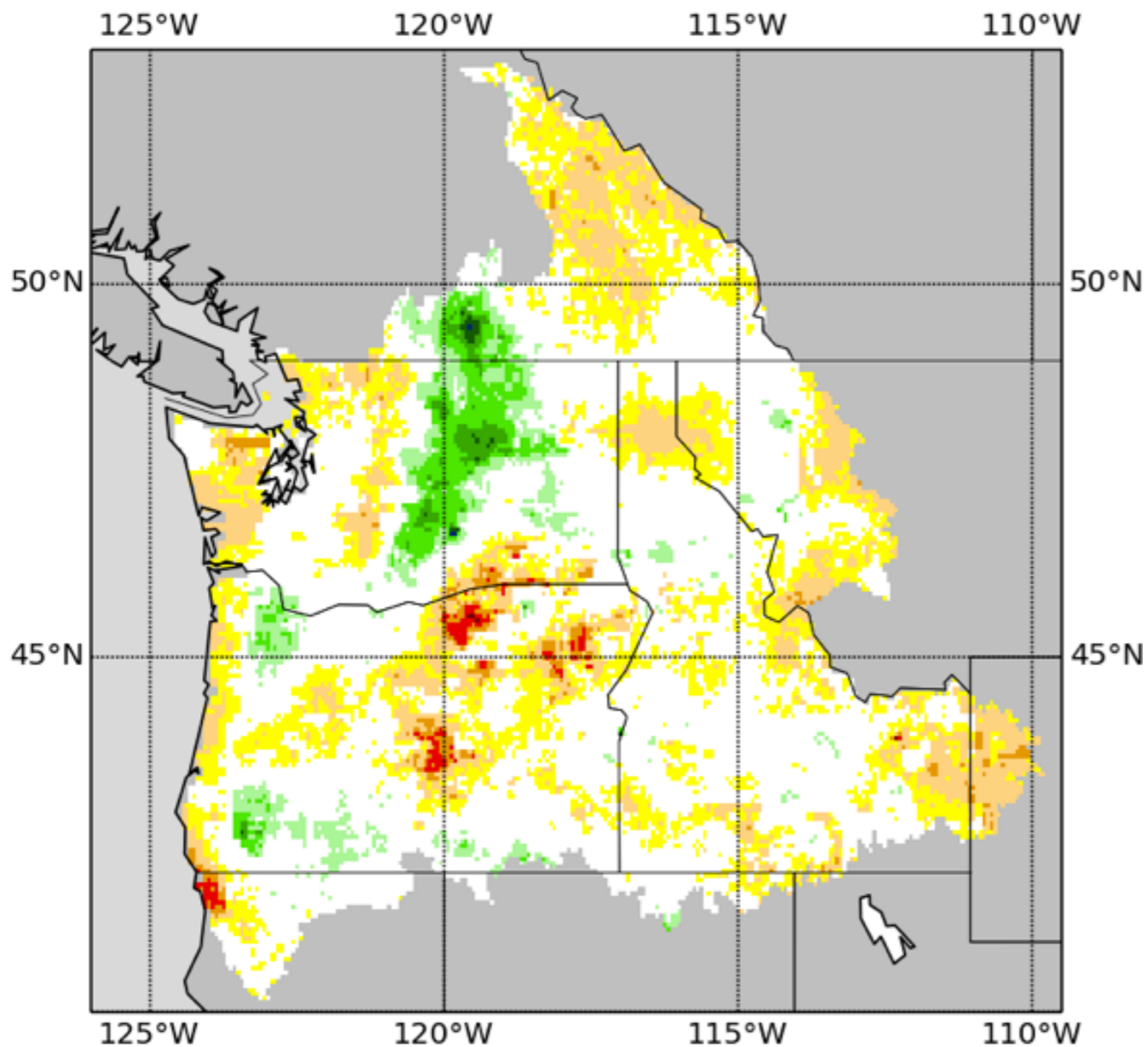
\* Data unavailable at time of posting or long-term normal not available at

NRCS



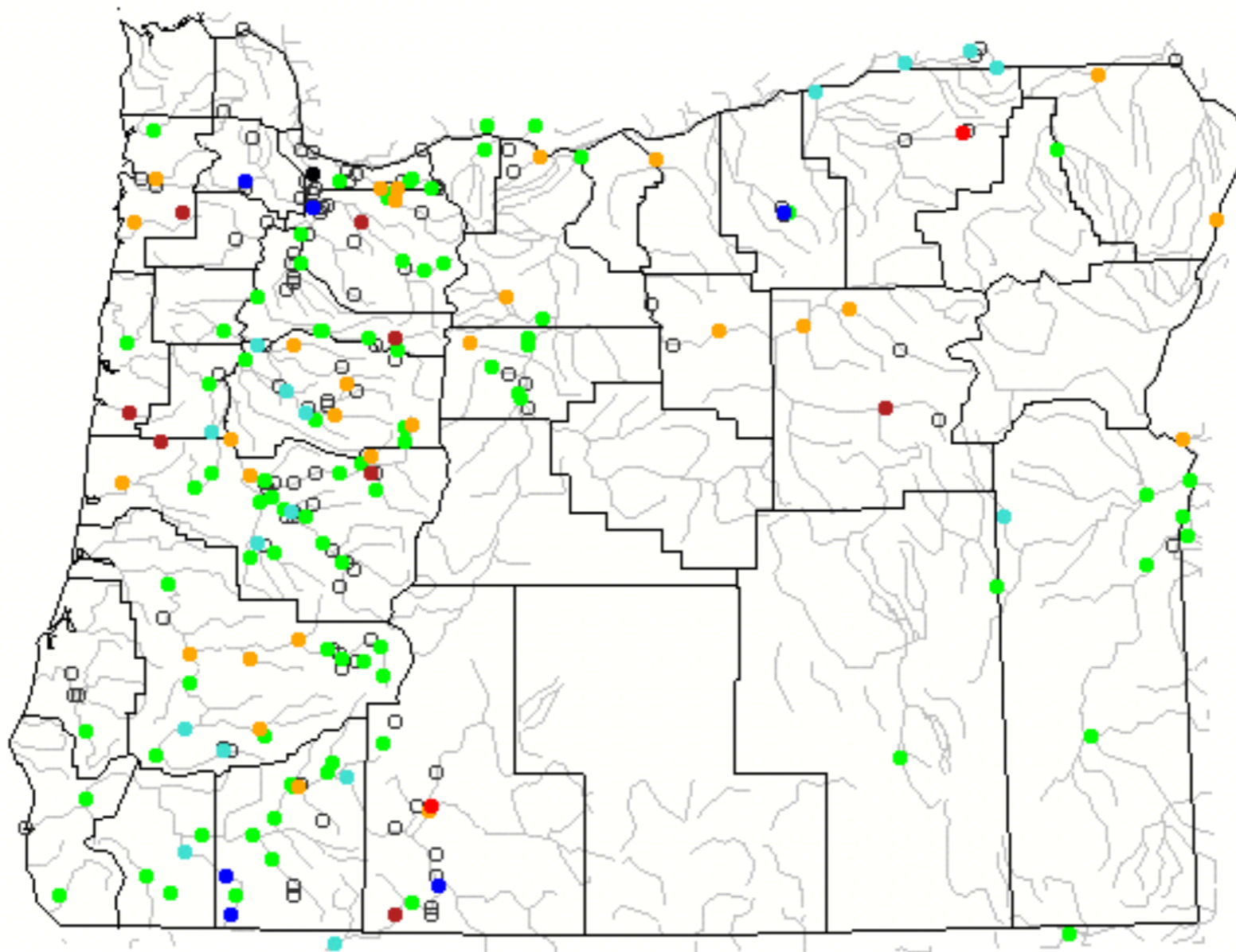
# Soil Moisture Percentile

2016--07--24



UW Drought Monitor

Tuesday, July 26, 2016 10:30ET



Choose a data retrieval option and select a location on the map

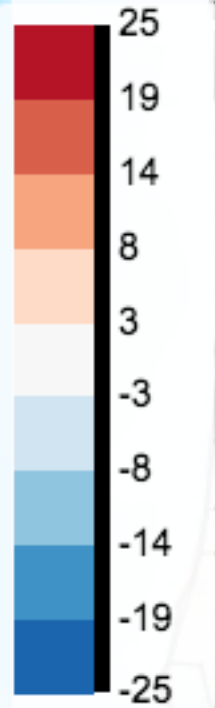
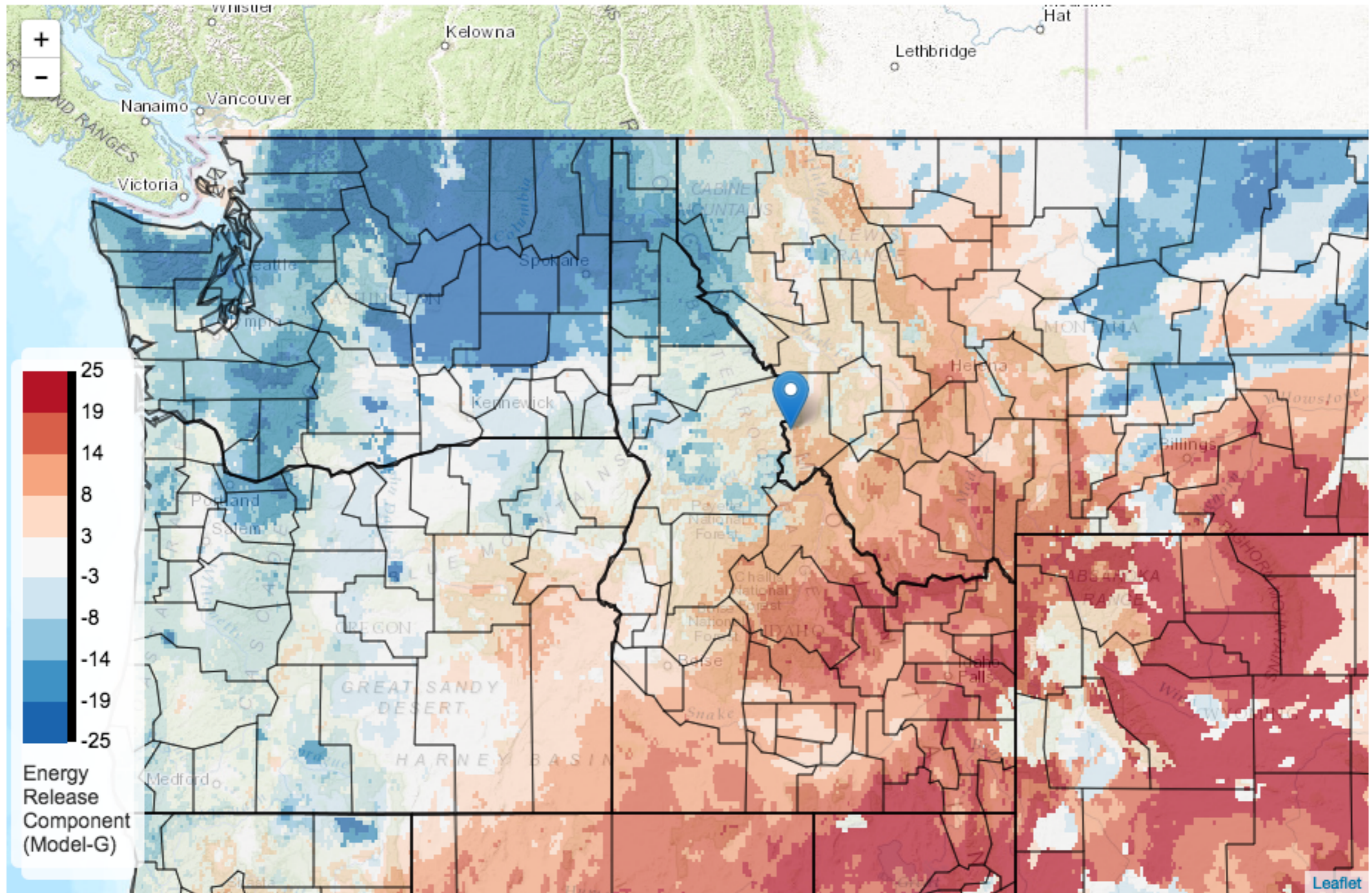
List of all stations  Single station  Nearest stations  Peak flow

Explanation - Percentile classes							
Low	<10 Much below normal	10-24 Below normal	25-75 Normal	76-90 Above normal	>90 Much above normal	High	Not-ranked



### Energy Release Component (Model-G), Departure from Normal

Data Source: METDATA/gridMET 4-km dataset (Univ. Idaho),2016/07/24



Energy Release Component (Model-G)

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- C
- C

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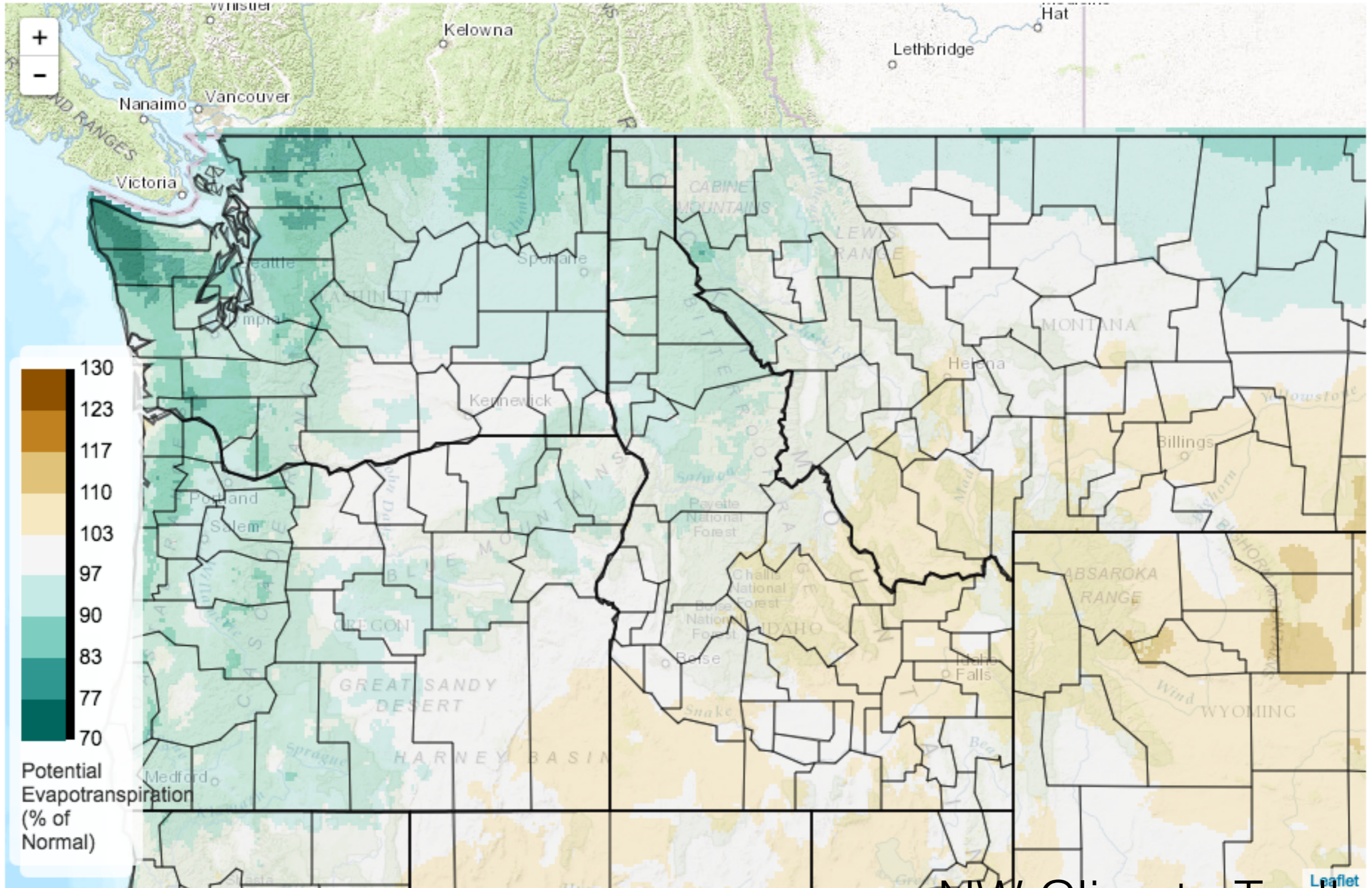
Choose Variable ▾

Change Map ▾

Download ▾

### Last 30 Days Potential Evapotranspiration (% of Normal)

Data Source: METDATA/gridMET 4-km dataset (Univ. Idaho), 2016/06/25 - 2016/07/24



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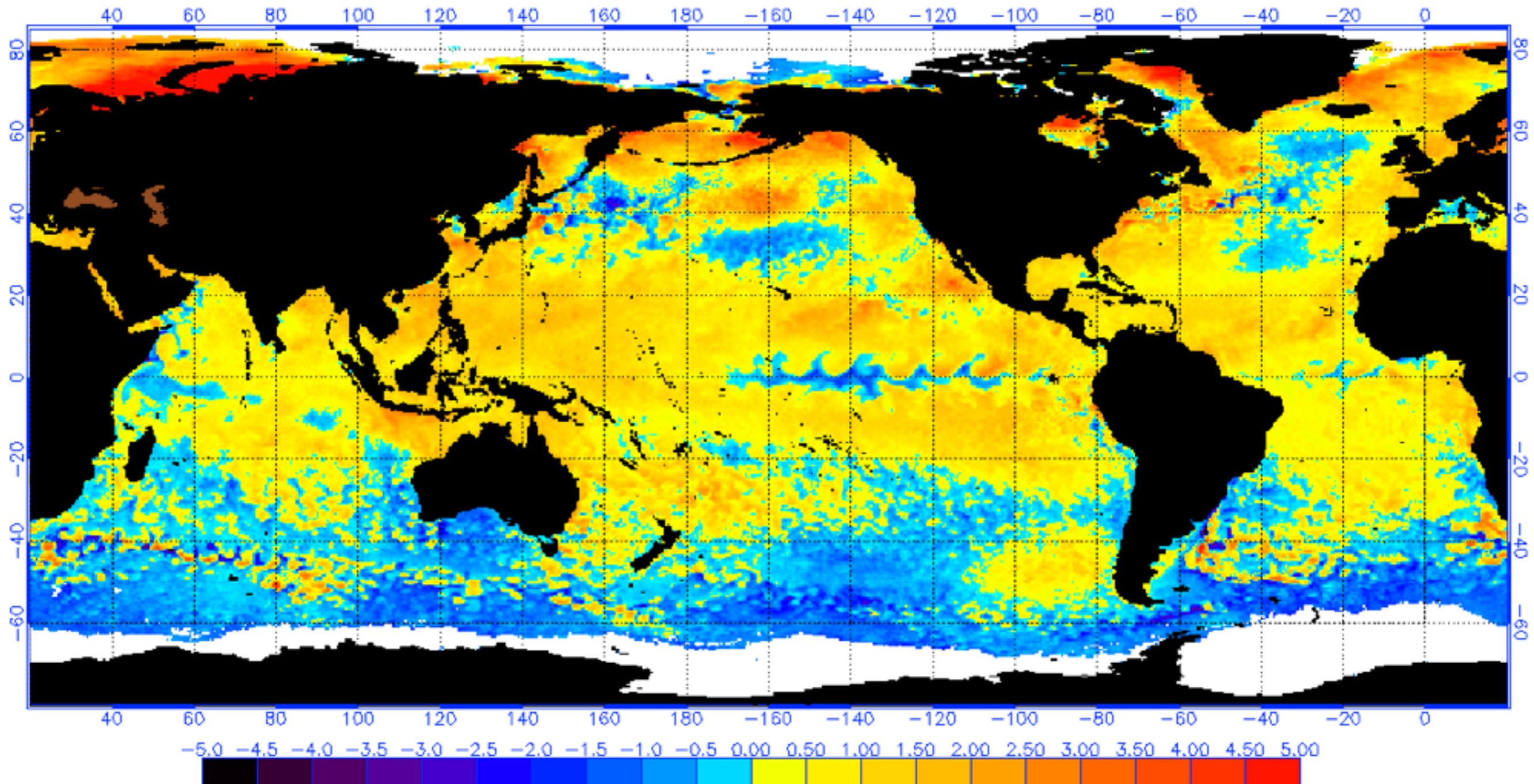
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NOAA/NESDIS 50 KM GLOBAL ANALYSIS: SST Anomaly (degrees C), 7/25/2016  
(white regions indicate sea-ice)



# take-away

- much better off than last year; still some areas of concern
- very warm start to calendar year, but July has been cool
- precipitation mixed around the region
- snow melted early due to warm temps
- soil moisture low in some areas
- lull in fire season due to PET and energy release component



# check us out

- NW Climate Toolbox Beta (feedback welcome!)  
and UW Drought Monitor
  - <http://nwclimatetoolbox.weebly.com>
  - [http://www.hydro.washington.edu/forecast/  
monitor\\_west/](http://www.hydro.washington.edu/forecast/monitor_west/)
- Send comments to Kathie Dello  
([kdello@coas.oregonstate.edu](mailto:kdello@coas.oregonstate.edu))