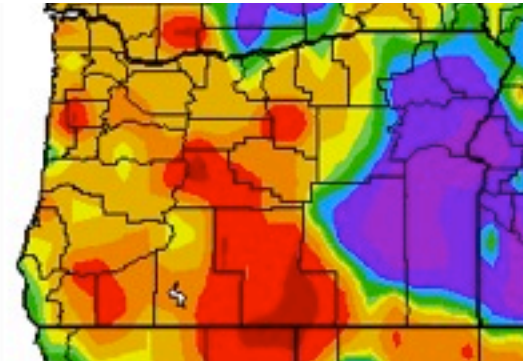


at 8/11/2011 at HPRCC using provisional data. Regional Climate Center



Generated 1/2/2011 at HPRCC using provisional data. Regional Climate Centers

Figures 1a and b: a) Departure from Normal Temperature ( $^{\circ}$ F) and b) Percent of Normal Precipitation for October (source: HPRCC)

It was an incredibly quiet month weather-wise in Oregon, despite mounting anticipation (or trepidation) of another La Niña winter. This was a stark contrast to a majority of the rest of the country, which saw continued drought, record-setting early snow in the Northeast US, and other bouts of extreme weather.

Averaged over the entire month the state was near normal, there was some variation from low to high elevations. In the higher elevation locations around the state, including the Oregon Cascades, Siskiyous and Blue/Wallowa Mountains, temperatures were below normal. The rest of the state, mostly lower elevations, saw above average temperatures for the month. The month was mostly unremarkable in terms of daily temperature, save for a few colder than normal days, a span of warmer than normal days due to offshore flow and a continental high pressure system. The Willamette Valley towns of Corvallis and Eugene fell below freezing for the first time of the season and Redmond and Baker City dropped to the teens at the end of the month, setting new minimum temperature records.

The western two-thirds of the state were abnormally dry in October, mostly due to a calm two-week period toward end of the month. Central Oregon was well below average for the

month, including the COOP stations in Bend (0.16") and Sisters (0.21"). However, as Fig 1b shows, eastern Oregon was wetter than normal, and Burns nearly doubled a daily precipitation record early in the month, with 0.64" falling on October 5 (previous record was 0.35" in 1976).

With regards to La Niña, NOAA said that conditions strengthened in October and they expect La Nina to continue through winter 2011-2012. A majority of models show a peak in the strength of La Niña during the November-January period. This is consistent with a chance of above average precipitation in the northern US, including the Pacific Northwest. While La Niña often plays a role in our winter weather, it's not the only factor at play. Last year, during a strong La Nina event, January and February were warmer/drier than normal in Oregon.

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## October station records

All Oregon records from NCDC's US records page will be posted here. This includes both COOP and ASOS stations. <http://www.ncdc.noaa.gov/extremes/records/>

### Maximum temperatures

Station	Date	New Record °F	Old Record °F	Previous date	Years in Record
JOHN DAY	Oct 1, 2011	91 (tied)	91	Oct 1, 1992	59
LONG CREEK	Oct 1, 2011	88 (tied)	88.0	Oct 1, 2001	46
JOSEPH	Oct 1, 2011	85.0	81.0	Oct 1, 1943	71
MASON DAM	Oct 1, 2011	84 (tied)	84.0	Oct 1, 2010	38
HART MTN REFUGE	Oct 1, 2011	84.0	83.0	Oct 1, 1966	66
MONUMENT 2	Oct 3, 2011	96	93.0	Oct 3, 1987	44
NYSSA	Oct 3, 2011	87	85.0	Oct 3, 2003	65
MADRAS 2 N	Oct 4, 2011	84	81.0	Oct 4, 1993	41
COQUILLE CITY	Oct 19, 2011	81 (tied)	81.0	Oct 19, 1978	39
ESTACADA 2 SE	Oct 19, 2011	78 (tied)	76.0	Oct 19, 1926	101
MONUMENT 2	Oct 20, 2011	86.0	82.0	Oct 20, 2008	45
SUMMER LAKE 1 S	Oct 30, 2011	71 (tied)	71.0	Oct 30, 1988	54
CORVALLIS WATER BUREAU	Oct 31, 2011	65 (tied)	65.0	Oct 31, 1988	48

### Minimum temperatures

Station	Date	New Record °F	Old Record °F	Previous date	Years in Record
SILVER LAKE RS	Oct 25, 2011	10	12	Oct 25, 1997	42
HART MTN REFUGE	Oct 25, 2011	11	12	Oct 25, 1997	64
REDMOND AP (KRDM)	Oct 25, 2011	13	18	Oct 25, 2004	64
GRIZZLY	Oct 25, 2011	16	17	Oct 25, 2002	62
MEACHAM WSO AP	Oct 25, 2011	18 (tied)	18	Oct 25, 2009	34
ANTELOPE 6 SSW	Oct 25, 2011	20	21	Oct 25, 1978	75
LOST CREEK DAM	Oct 25, 2011	27	28	Oct 25, 2001	40
IDLEYLD PARK 4 NE	Oct 25, 2011	28	30	Oct 25, 1997	50
COQUILLE CITY	Oct 25, 2011	33 (tied)	33	Oct 25, 2000	39
LEABURG 1 SW	Oct 25, 2011	33 (tied)	33	Oct 25, 1954	75
HART MTN REFUGE	Oct 26, 2011	9	13	Oct 26, 1954	63
REDMOND AP (KRDM)	Oct 26, 2011	10	13	Oct 26, 2002	64
BURNS MUNI AP (KBNC)	Oct 26, 2011	12	15	Oct 26, 2002	38
GRIZZLY	Oct 26, 2011	15	16	Oct 26, 2007	61
LONG CREEK	Oct 26, 2011	16 (tied)	16	Oct 26, 1978	51
MONUMENT 2	Oct 26, 2011	16 (tied)	16	Oct 26, 2002	44
JOHN DAY	Oct 26, 2011	19	21	Oct 26, 1978	59
KLAMATH FALLS INTL A	Oct 26, 2011	20 (tied)	20	Oct 26, 2006	44
ANTELOPE 6 SSW	Oct 26, 2011	20	21	Oct 26, 1978	77

Station	Date	New Record °F	Old Record °F	Previous date	Years in Record
ASHLAND	Oct 26, 2011	24	26	Oct 26, 2002	119
RUCH	Oct 26, 2011	26	28	Oct 26, 2006	42
ARLINGTON	Oct 26, 2011	26	27	Oct 26, 2007	94
COTTAGE GROVE 2E	Oct 26, 2011	30 (tied)	30	Oct 26, 1954	88
COQUILLE CITY	Oct 26, 2011	31 (tied)	31	Oct 26, 2007	38
ROSEBURG KQEN	Oct 26, 2011	32 (tied)	32	Oct 26, 2007	45
CORVALLIS WATER BUF	Oct 26, 2011	32 (tied)	32	Oct 26, 1997	47
OCHOCO RS	Oct 27, 2011	15	16	Oct 27, 1970	62
JOHN DAY	Oct 27, 2011	18	19	Oct 27, 1970	59
KLAMATH FALLS INTL A	Oct 27, 2011	19	20	Oct 27, 2010	44
ASHLAND	Oct 27, 2011	24 (tied)	24	Oct 27, 2002	118
LACOMB 3 NNE	Oct 27, 2011	29	30	Oct 27, 2007	38
COQUILLE CITY	Oct 27, 2011	31	32	Oct 27, 2007	39
ROSEBURG KQEN	Oct 27, 2011	32 (tied)	32	Oct 27, 2006	45

## Precipitation (liquid water equivalent)

Station	Date	New Record (in.)	Old Record (in.)	Previous date	Years in Record
SAINT HELENS RFD	Oct 2, 201	0.64	0.58	Oct 2, 1981	35
PORT ORFORD 5 E	Oct 3, 201	2.5	1.42	Oct 3, 2008	40
CAVE JUNCTION 1 WNW	Oct 3, 201	0.78	0.66	Oct 3, 1967	49
UPPER OLLALA 1N	Oct 3, 201	0.75	0.34	Oct 3, 2007	33
LOOKINGGLASS	Oct 3, 201	0.35	0.26	Oct 3, 2005	33
SUTHERLIN 2 W	Oct 4, 201	0.85	0.56	Oct 4, 2002	33
UPPER OLLALA 1N	Oct 4, 201	0.42	0.29	Oct 4, 2008	33
RUCH	Oct 4, 201	0.3	0.2	Oct 4, 2007	48
KLAMATH FALLS INTL AP (	Oct 4, 201	0.18	0.1	Oct 4, 2008	52
PORT ORFORD 5 E	Oct 5, 201	1.74	0.36	Oct 5, 1975	40
FLORENCE	Oct 5, 201	1.44	1.04	Oct 5, 1950	102
CAVE JUNCTION 1 WNW	Oct 5, 201	1.09	0.69	Oct 5, 1963	49
COQUILLE CITY	Oct 5, 201	0.82	0.61	Oct 5, 1982	39
IDLEYLD PARK 4 NE	Oct 5, 201	0.74	0.73	Oct 5, 1997	53
CHILOQUIN 12 NW	Oct 5, 201	0.74	0.23	Oct 5, 2008	31
WINCHESTER	Oct 5, 201	0.72	0.55	Oct 5, 1957	60
BURNS MUNI AP (KBNO)	Oct 5, 201	0.64	0.35	Oct 5, 1976	38
ROSEBURG KQEN	Oct 5, 201	0.59	0.3	Oct 5, 2008	46
LOST CREEK DAM	Oct 5, 201	0.56	0.35	Oct 5, 2008	41
RIVERSIDE 7 SSW	Oct 5, 201	0.55	0.25	Oct 5, 1918	114
HOWARD PRAIRIE DAM	Oct 5, 201	0.55	0.33	Oct 5, 1967	51
ONTARIO KSRV	Oct 5, 201	0.53	0.34	Oct 5, 1994	107
LOOKINGGLASS	Oct 5, 201	0.53	0.4	Oct 5, 1997	33

Station	Date	New Record (in.)	Old Record (in.)	Previous date	Years in Record
CHEMULT	Oct 5, 201	0.52	0.46	Oct 5, 1963	74
SENECA	Oct 5, 201	0.43	0.4	Oct 5, 2006	102
ROME CAA AP	Oct 5, 201	0.41	0.07	Oct 5, 1950	62
UPPER OLLALA 1N	Oct 5, 201	0.4	0.24	Oct 5, 2008	33
SPRAY	Oct 5, 201	0.36	0.11	Oct 5, 1939	74
MADRAS 2 N	Oct 5, 201	0.26	0.05	Oct 5, 1955	59
PELTON DAM	Oct 5, 201	0.23	0.07	Oct 5, 1963	53
DREWSEY	Oct 5, 201	0.23	0.1	Oct 5, 2003	41
PENDLETON E OR RGNL A	Oct 5, 201	0.17	0.15	Oct 5, 1949	83
LA GRANDE	Oct 6, 201	0.73	0.35	Oct 6, 1975	46
JOSEPH	Oct 6, 201	0.68	0.65	Oct 6, 1923	118
HALFWAY	Oct 6, 201	0.4	0.19	Oct 6, 1939	75
JOHN DAY	Oct 6, 201	0.15	0.15	Oct 6, 1904	107
MEACHAM WSO AP	Oct 10, 20	1.02	0.81	Oct 10, 1961	63
HALFWAY	Oct 10, 20	0.96	0.79	Oct 10, 1962	75
FLORENCE	Oct 10, 20	0.68	0.55	Oct 10, 1914	102
VALE	Oct 10, 20	0.64	0.5	Oct 10, 1962	118
IONE 18 S	Oct 10, 20	0.46	0.38	Oct 10, 2001	76
ROME CAA AP	Oct 10, 20	0.04	0.01	Oct 10, 2008	62
MARION FRKS FISH HATCH	Oct 11, 20	1.52	1.35	Oct 11, 2001	63
LAKEVIEW 2 NNW	Oct 11, 20	1.24	0.81	Oct 11, 1956	124
LA GRANDE	Oct 11, 20	0.95	0.71	Oct 11, 2001	46
MALHEUR BRANCH EXP S	Oct 11, 20	0.68	0.56	Oct 11, 1956	69
DREWSEY	Oct 11, 20	0.49	0.26	Oct 11, 2000	41
LA GRANDE 6 SE	Oct 11, 20	0.49	0.09	Oct 11, 1951	62
PORTLAND/HILLSBORO (K	Oct 11, 20	0.19	0.07	Oct 11, 2001	36
PORTLAND KGW-TV	Oct 12, 20	0.42	0.35	Oct 12, 1993	38
LA GRANDE 6 SE	Oct 13, 20	0.44	0.03	Oct 13, 1951	62
ROME CAA AP	Oct 16, 20	0.41	0.0	Oct 16, 2010	62
ROME 2 NW	Oct 16, 20	0.37	0.2	Oct 16, 1971	60
NYSSA	Oct 16, 20	0.21	0.19	Oct 16, 1964	73
BAKER CITY AP (KBKE)	Oct 16, 20	0.18	0.12	Oct 16, 1947	68
LA GRANDE 6 SE	Oct 16, 20	0.15	0.09	Oct 16, 2006	62
DREWSEY	Oct 17, 20	0.31	0.22	Oct 17, 2004	41
FIELDS	Oct 17, 20	0.14	0.03	Oct 17, 2006	38
LA GRANDE 6 SE	Oct 21, 20	0.04 (tied)	0.04	Oct 21, 1951	62

Tables 2a, b and c. Individual Station Records by date. Data from NCDC's US records page and OSU

## Three-month outlook



Figures 2a and b. Three-Month Outlook (October, November, December) for a) temperature and b) Precipitation for the Pacific Northwest from Climate Prediction Center/NOAA

NOAA's three month outlook from the Climate Prediction Center for the months of November, December, January shows equal chances of above or below average temperatures across Oregon (figure 2a). In terms of precipitation for the same period, the greatest chance for above average precipitation is in extreme northern Oregon, with a lesser chance of above average precipitation in the rest of the state (figure 2b). The chances of above average precipitation in the state are consistent with the weak to moderate La Niña.



Figure 3. Min, Mean and Max snowdepth at Mt. Hood plotted with Office of the Washington State Climatologist tool using Northwest Avalanche and Weather Center data <http://www.climate.washington.edu/snowdepth/>

La Niña's back and snow enthusiasts are excited, since La Niña conditions tend to bring cooler/wetter winters to the Pacific Northwest, especially western Oregon. While the odds are tilted toward a cooler/wetter overall winter, there is considerable variability within the season. In short, there is not a single set amount of snow, or rain, or cold that one can expect in a La Niña year. Figure 3 shows the min, mean and maximum snow depth at Timberline (Mt. Hood) in all La Niña years, dating back to 1973.

<b>Station</b>	<b>Average date 1st Fall min temp ≤ 32 °F</b>	<b>2011 date 1st Fall min temp ≤ 32 °F</b>
Redmond Airport	September 7	August 31
Burns	September 2	September 1
Baker City	September 10	September 1
Salem Airport	October 24	October 26
Medford Airport	October 23	October 25
Eugene Airport	October 20	October 25
Pendleton Airport	October 17	October 25
Astoria Airport	November 10	November 4
Portland Airport	November 10	November 2
North Bend	December 5	---

The first instance of an overnight low of 32 °F in the fall usually signifies the end of the summer growing season and often leaves its mark with frosty morning windshields. As shown in table 3, this date on average varies considerably across the state. Redmond (central OR) and Burns and Baker City (eastern OR) typically see min temps at or below freezing in the first two weeks of Fall. The Medford and the mid- and upper-Willamette Valley towns tend to freeze in late October. This year, the actual date ≤ 32 °F varied slightly from the averages. There weren't any rogue cool nights to put an end to a growing season that got a late start due to a wet spring and left many tomatoes green on the vines.

Table 3. Table with first date of minimum temperature ≤ 32 °F for selected stations around OR. Data from NWS NOWData