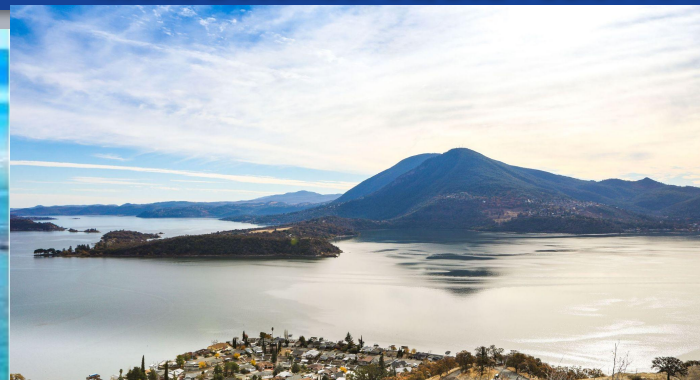


EUREKA CA

NOAA NATIONAL WEATHER SERVICE

Issued December 31, 2024 11:07 AM



2024 An EOY Review For Notable Weather Events



January Flooding

Weather Forecast Office
Eureka, CA
Tuesday, December 31

Rainfall for January 13, 2024 and 14, 2024

Name	Station Type	Total Precipitation
KLAMATH 0.8 SE	CoCoRaHS	6.79
GASQUET RS	COOP	6.60
FORT DICK 0.2 SSW	CoCoRaHS	6.44
CRESCENT CITY 5.5 NNE	CoCoRaHS	5.59
CRESCENT CITY 2.8 NNE	CoCoRaHS	5.07

Name	Station Type	Total Precipitation
WHITETHORN 1.4 NW	CoCoRaHS	8.51
MCKINLEYVILLE 4.2 E	CoCoRaHS	5.53
KNEELAND 0.4 NNW	CoCoRaHS	5.38
HONEYDEW 3.2 SSE	CoCoRaHS	5.26
BLUE LAKE 0.6 NNW	CoCoRaHS	5.23
ORLEANS 0.9 W	CoCoRaHS	5.06

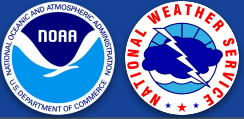
Top 5 Flood stages record at these sites

Redwood Creek at Orick*	
30.06 Feet	1/13/2024
25.37 Feet	1/30/1995
23.82 Feet	3/18/1975
23.23 Feet	12/31/2022
22.38 Feet	1/18/2016

Mad River at Blue Lake	
32.70 Feet	12/22/1964
28.43 Feet	12/22/1955
27.26 Feet	1/13/2024
25.46 Feet	1/1/1997
25.40 Feet	3/2/1972

*Highest since levees installed in 1966

Photo courtesy of Arcata Fire



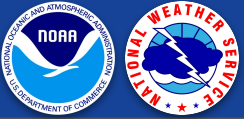
Early March Snow

Trinity, Mendocino and Lake county Snowfall for March 1st through March 4th 2024

Name	Station Type	County	Total Snowfall
POTTER VALLEY 8.4 ENE	CoCoRaHS	Lake	28.0
MAD RIVER 1.7 SW	CoCoRaHS	Trinity	17.2
COVELO 11.5 N	CoCoRaHS	Mendocino	14.7
DOUGLAS CITY 5.9 SE	CoCoRaHS	Trinity	12.7
MAD RIVER 7.4 SE	CoCoRaHS	Trinity	10.0
DOUGLAS CITY 6.9 ESE	CoCoRaHS	Trinity	7.0
TRINITY CENTER 7.1 N	CoCoRaHS	Trinity	7.0
UKIAH 8.4 NW	CoCoRaHS	Mendocino	5.5
TRINITY CENTER 0.6 ESE	CoCoRaHS	Trinity	3.8
TRINITY RIVER HATCHERY	COOP	Trinity	3.2
JUNCTION CITY 1.6 N	CoCoRaHS	Trinity	3.0
CLEARLAKE OAKS 5.0 NE	CoCoRaHS	Lake	0.5
KELSEYVILLE 2.8 NNE	CoCoRaHS	Lake	0.5
LAKEPORT 0.6 SE	CoCoRaHS	Lake	0.1



Photo Courtesy of Jay Dottle



Early March Snow

Humboldt County Snowfall for March 1st through March 4th 2024

Name	Station Type	County	Total Snowfall
DINSMORE 2.3 W	CoCoRaHS	Humboldt	19.8
BRIDGEVILLE 5.2 ENE	CoCoRaHS	Humboldt	12.0
KNEELAND 0.4 NNW	CoCoRaHS	Humboldt	10.0
ORLEANS	COOP	Humboldt	5.0
ETTERSBURG 2.8 N	CoCoRaHS	Humboldt	3.5
ORLEANS 0.9 W	CoCoRaHS	Humboldt	2.0
WHITETHORN 2.4 WSW	CoCoRaHS	Humboldt	1.4
KNEELAND 3.4 WNW	CoCoRaHS	Humboldt	1.3
MIRANDA 4.1 SW	CoCoRaHS	Humboldt	1.0
HONEYDEW 3.2 SSE	CoCoRaHS	Humboldt	0.9
EUREKA WFO WOODLEY ISLAND	WBAN	Humboldt	T
WILLOW CREEK 3.2 NE	CoCoRaHS	Humboldt	T

No snowfall was reported in Del Norte county during this event.



Photo Courtesy of Dottie Simmons

Early March Hail

US-101 : North Of SR-299 - Looking South (C005)



Heavy showers with accumulating hail impacted the Highway 101 near Arcata.

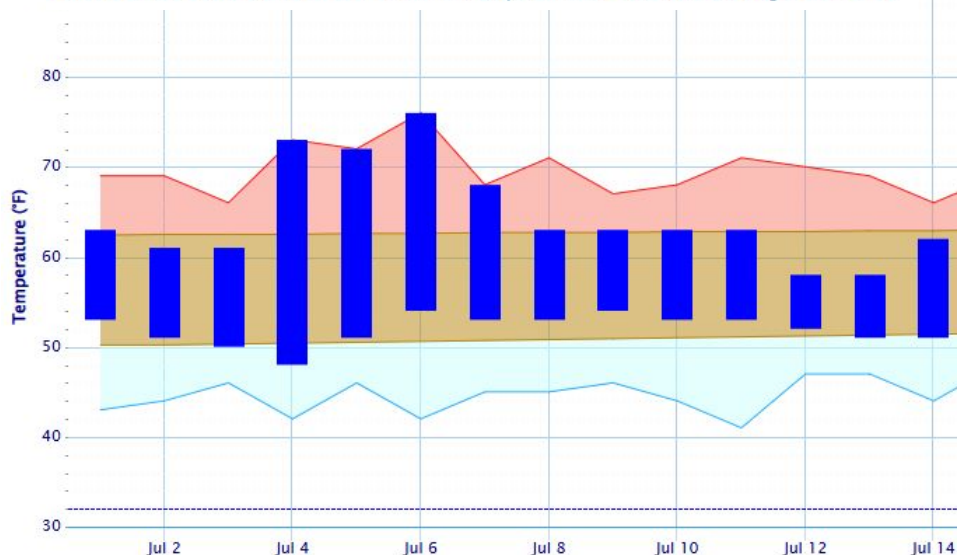
Accumulated hail was reported in Arcata and vicinity.



July Heat Wave (Coastal)

Daily Temperature Data - CRESCENT CITY MCNAMARA AP, CA

Period of Record - 1949-10-15 to 2024-12-30. Normals period: 1991-2020. Click and drag to zoom chart.

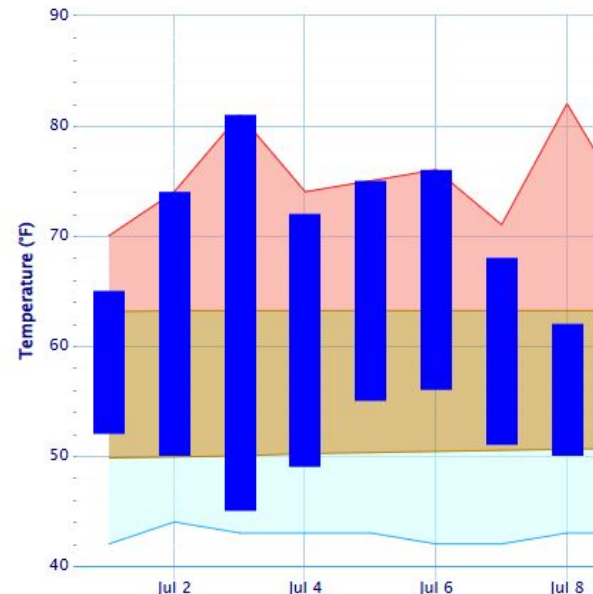


of Max. Temperature Records Broken: 2
Hottest Temperature Recorded: 76°F (7/6)

RECORDS BROKEN IN: Fort Bragg(7/3,83°F) & WFO EKA (7/5,75°F & 7/6,76°F)

Daily Temperature Data - ARCATA EUREKA AP, CA

Period of Record - 1945-05-01 to 2024-12-30. Normals period: 1991-2020. Click and drag to zoom chart.



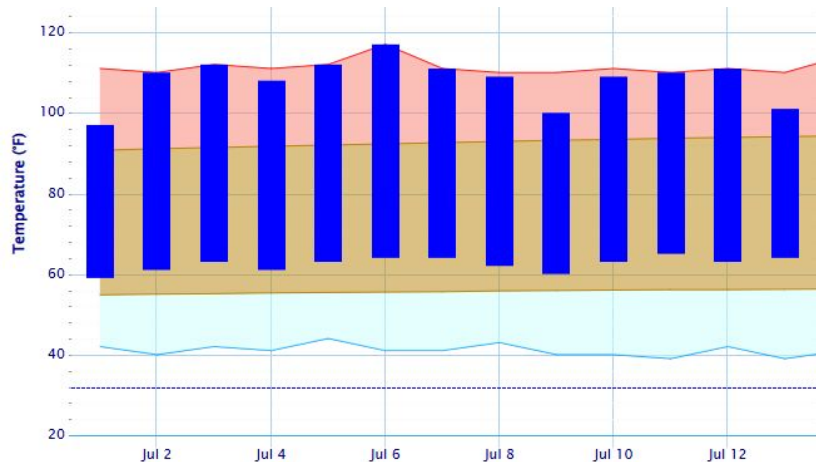
of Max. Temperature Records Broken: 4
7/2, 7/3, 7/5, & 7/6
Hottest Temperature Recorded: 81°F (7/3)



July Heat Wave (Inland)

Daily Temperature Data – Ukiah Area, CA (ThreadEx)

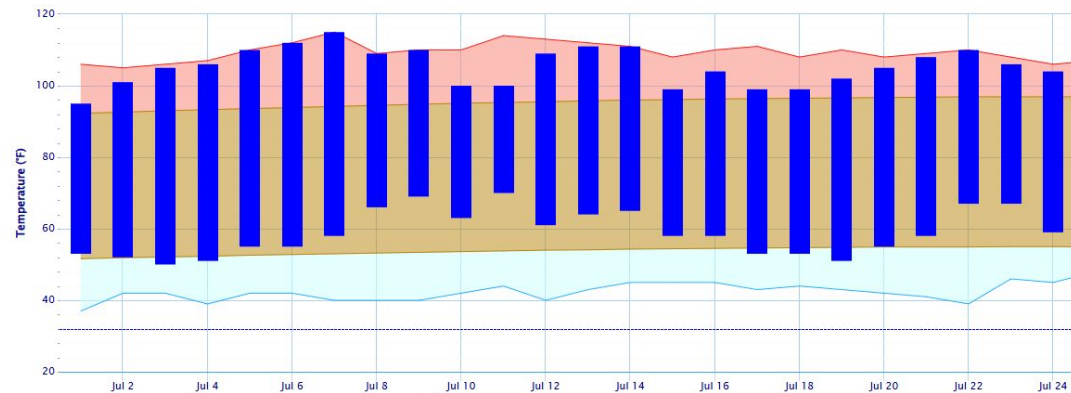
Period of Record – 1893-01-01 to 2024-12-30. Normals period: 1991-2020. Click and drag to zoom chart.



of Max. Temperature Records Broken: 7
 7/2, 7/3, 7/5, 7/6, 7/7, 7/11, 7/12
 Hottest Temperature Recorded: 117°F (7/6)

Daily Temperature Data – TRINITY RIVER HATCHERY, CA

Period of Record – 1974-08-01 to 2024-11-30. Normals period: 1991-2020. Click and drag to zoom chart.



of Max. Temperature Records Broken: 7
 7/5, 7/6, 7/7, 7/8, 7/9, 7/14, 7/22
 Hottest Temperature Recorded: 115°F (7/7)

ADDITIONAL RECORDS BROKEN
 Potter Valley Powerhouse: 7/3, 7/4, 7/5, 7/6 (112°F),
 7/7(112°F), 7/8(112°F), 7/9, 7/12

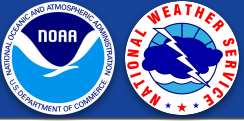


Rare August Rain 8/21 - 8/23

Unseasonably heavy rain fell on August 21st through 23rd. This significantly reduced fire danger across much of the area, aside from southern Lake county

Location	Station Type	Rain
Del Norte County		
CRESCENT CITY AP	WBAN	2.20
FORT DICK 0.2 SSW	CoCoRaHS	2.90
GASQUET RS	COOP	2.60
KLAMATH 0.8 SE	CoCoRaHS	2.33
Humboldt County		
ARCATA EUREKA AP	ASOS	1.48
BLOCKSBURG 6.6 NW	CoCoRaHS	1.37
EUREKA WOODLEY ISLAND	WFO	1.39
GARBERVILLE 0.8 NNW	CoCoRaHS	0.82
HONEYDEW 3.2 SSE	CoCoRaHS	2.06
KNEELAND 0.4 NNW	CoCoRaHS	2.06
ORLEANS	COOP	1.38
WILLOW CREEK 3.2 NE	CoCoRaHS	1.68

Location	Station Type	Rain
Lake County		
UPPER LAKE 3.6 W	CoCoRaHS	0.09
LAKEPORT 0.6 N	CoCoRaHS	0.00
MIDDLETOWN	COOP	0.00
Mendocino County		
FORT BRAGG 5 N	COOP	0.57
LAYTONVILLE 1.1 SW	CoCoRaHS	0.55
POINT ARENA 4.8 ESE	CoCoRaHS	0.36
WILLITS 1.6 ESE	CoCoRaHS	0.32
UKIAH MUNICIPAL AP	ASOS	0.03
Trinity County		
JUNCTION CITY 1.6 N	CoCoRaHS	0.80
MAD RIVER 1.7 SW	CoCoRaHS	1.16
TRINITY CENTER	CoCoRaHS	0.92
LEWISTON	COOP	0.60



November Wind

A series of Atmospheric Rivers (AR) brought violent winds with storm force gusts to many of our areas observation points in our area in late November.

These AR events also brought heavy rainfall.

These events caused issues for those travelling for the holidays, power outages and property damage

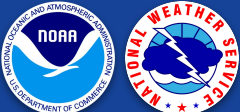
Highest Wind Gusts Recorded 1:41 P.M. 11/19 through 1:41 P.M. 11/20

Station	Max Speed	Elevation
...Maritime Stations...		
Crescent Harbor	80 MPH	
Fairhaven 2 W	66 MPH	
Capetown 18 NW	63 MPH	
Fort Bragg 17 SW	58 MPH	
...Humboldt County...		
Mattole Road	98 MPH	1075
Kneeland RAWs	78 MPH	2736
School House RAWs	67 MPH	2652
...Mendocino County...		
Cahto Peak	64 MPH	4229
Bell Springs	60 MPH	3842
Elk Rock	55 MPH	299
...Lake County...		
Hobergs (PGE)	51 MPH	3024
Cobb Mountain RAWs	48 MPH	4724
Knobcone Camp 5.4 NW (PGE)	44 MPH	3096



Photo from Caltrans via RHBB

Station	Max Speed	Elevation
...Del Norte County...		
Camp Six RAWs (Gasquet 5 E)	61 MPH	3698
Jack McNamara Airport	55 MPH	32
Crazy Peak	54 MPH	3970
...Trinity County...		
Horse Ridge Lookout	51 MPH	6071
Zenia 1.1 W (PGE)	38 MPH	2815
Dinsmore 4 SE	37 MPH	2873



November Flooding

24hr Rainfall Amounts 8pm 11/19 through 8pm 11/20

These Atmospheric Rivers also delivered persistent rain to much of our area.

The highest amount of rain was focused in the coastal mountains of Humboldt Co. & Mendocino Co.

Station	Recorded Rain	Elevation
...Humboldt County...		
Cooskie Mountain RAWs	5.07 in 0808 PM 11/20	2944
Miranda 4.1 SE	4.56 in 0730 PM 11/20	266
Redway 1 NNW	4.23 in 0728 PM 11/20	476
Alderpoint 7 NW	3.41 in 0751 PM 11/20	1059
Kneeland RAWs	3.41 in 0655 PM 11/20	2736

...Mendocino County...		
Manchester	6.04 in 0750 PM 11/20	2162
Branscomb 6.2 N (DRI)	5.78 in 0730 PM 11/20	1365
Boonville RAWs	4.90 in 0750 PM 11/20	644
Potter Valley 2.9 N	4.89 in 0800 PM 11/20	1062
Laytonville RAWs	4.35 in 0729 PM 11/20	1820

Station	Recorded Rain	Elevation
...Del Norte County...		
Camp Six RAWs (Gasquet 5 E)	4.11 in 0759 PM 11/20	3698
Gasquet RAWs	3.65 in 0750 PM 11/20	425
Crazy Peak	3.51 in 0738 PM 11/20	3970
Smith River 3 S	2.94 in 0707 PM 11/20	1574
Crescent City 3.8 NNE	2.92 in 0745 PM 11/20	127

...Trinity County...		
Burnt Ranch 6 SSW	5.02 in 0724 PM 11/20	2625
Hayfork RAWs	3.76 in 0724 PM 11/20	2325
Dinsmore 4 SE	3.64 in 0753 PM 11/20	2873
Ruth RAWs	3.61 in 0723 PM 11/20	2732
Coffee Creek 12.3 NE	3.04 in 0745 PM 11/20	5700

...Lake County...		
Cobb	4.44 in 0805 PM 11/20	2791
Lake Pillsbury at Scott Dam	4.06 in 0700 PM 11/20	1843
Middletown	3.74 in 0800 PM 11/20	1105
Knoxville Creek	2.75 in 0709 PM 11/20	2200
Konocti RAWs	2.09 in 0657 PM 11/20	2163



November Flooding Continued

Weather Forecast Office
Eureka, CA
Tuesday, December 31

72hr Rainfall Amounts 8:00 A.M. 11/19 through 8:00 A.M. 11/22

Rain Continued...

Station	Recorded Rain	Elevation
...Del Norte County...		
Camp Six RAWS (Gasquet 5 E)	10.79 in 1259 PM 11/22	3698
Ft Dick	7.95 in 0800 AM 11/22	49
Crescent City 3.8 NE	7.61 in 0800 AM 11/22	307
Klamath 0.8 SE	7.48 in 0700 AM 11/22	145
Crescent City 4 NE	7.37 in 0800 AM 11/22	97

...Humboldt County...		
Honeydew 2 SSE	22.25 in 0800 AM 11/22	1395
Benbow 3.8 SSE	15.09 in 0800 AM 11/22	
Blocksburg 6.6 NW	14.56 in 0700 AM 11/22	1185
Bridgeville 5 ENE	13.75 in 0700 AM 11/22	2675
Miranda 4 SW	13.72 in 0700 AM 11/22	539

...Mendocino County...		
Branscomb 6.2 N (DRI)	17.08 in 0210 PM 11/22	1365
Laytonville 13.1 N	14.55 in 0900 AM 11/22	2879
3 NW Gualala	14.53 in 0700 AM 11/22	
Laytonville RAWS	14.37 in 0129 PM 11/22	1819
Boonville 2 WSW	14.35 in 0900 AM 11/22	1060

**The Garcia River
blocking State Route 1
north of Point Arena.
[Caption from RHBB,
Image from Caltrans
traffic cam]**



Thursday, November 21, 2024 16:45:08 PST

Station	Recorded Rain	Elevation
...Trinity County...		
Mad River 7 SE	14.80 in 0700 AM 11/22	2762
Mad River 2 SW	12.23 in 0700 AM 11/22	2531
Trinity Center 0.6 ESE	11.56 in 0800 AM 11/22	2427
Burnt Ranch 6 SSW	10.68 in 0124 PM 11/22	2625
Dinsmore 4 SE	10.00 in 0153 PM 11/22	2873

...Lake County...		
Soda Creek	12.39 in 0121 PM 11/22	1725
Middletown 3.3 SSE	12.33 in 0700 AM 11/22	1272
Middletown 4 SE	12.25 in 0700 AM 11/22	1153
Upper Lake 3.6 W	10.04 in 0700 AM 11/22	1439
Knoxville Creek	8.59 in 0209 PM 11/22	2200

Record November Rain in Ukiah

These Atmospheric River Events led to back-to-back record rainfall days in Ukiah, California.

Dramatic and Prolonged flooding took place in the Russian River valley at this time, creating scenes like the ones shown below.

November 2024 Rainfall Records Set in Ukiah

Date	New Record	Year	Old Record
November 21st	3.27	1937	2.79
November 22nd	3.66	1977	3.16



Flooding at Russian River @ Hopland on 11/22
Photos by DES





December M7.0 Offshore Earthquake

Weather Forecast Office

Eureka, CA

Tuesday, December 31

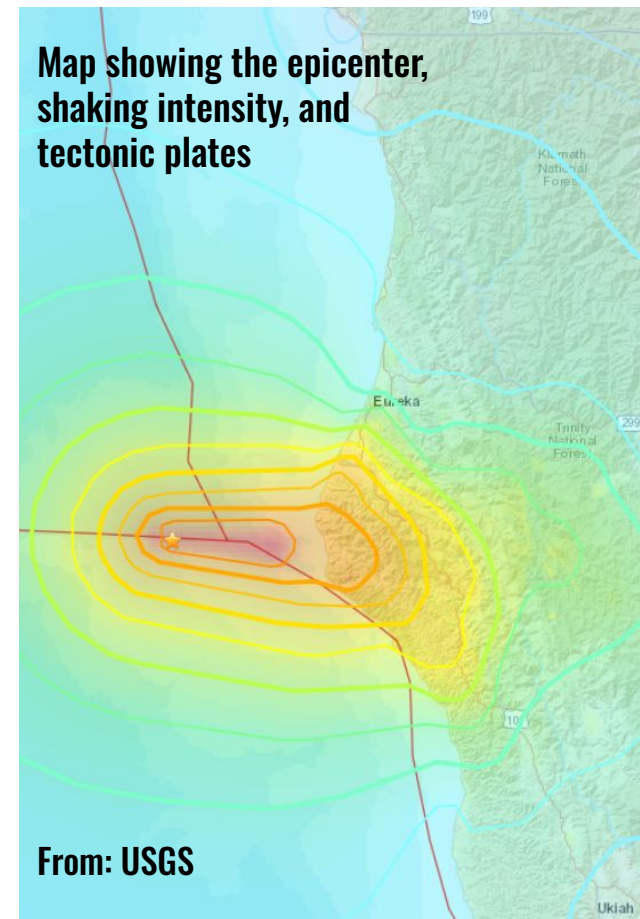
An earthquake 10.0km deep on December 5, 2024 @ 10:44:21 A.M. approximately 60 km off the coast of Cape Mendocino triggered shaking all throughout the Redwood Coast.

Due to the location and magnitude of this Tsunami being off the coast, a Tsunami Warning was activated by the NWS, as it is protocol.

Thankfully, after further investigation, it turned out to be a different type of earthquake than the type that creates a Tsunami. The National Tsunami Warning Center recorded a maximum water height of 0.09 meters (~3.5”).

This was a great understanding of how fragile life is on the Redwood coast and how important understanding your evacuation plan (route, go-back, etc.) is to living safely in this part of the world.

Map showing the epicenter, shaking intensity, and tectonic plates

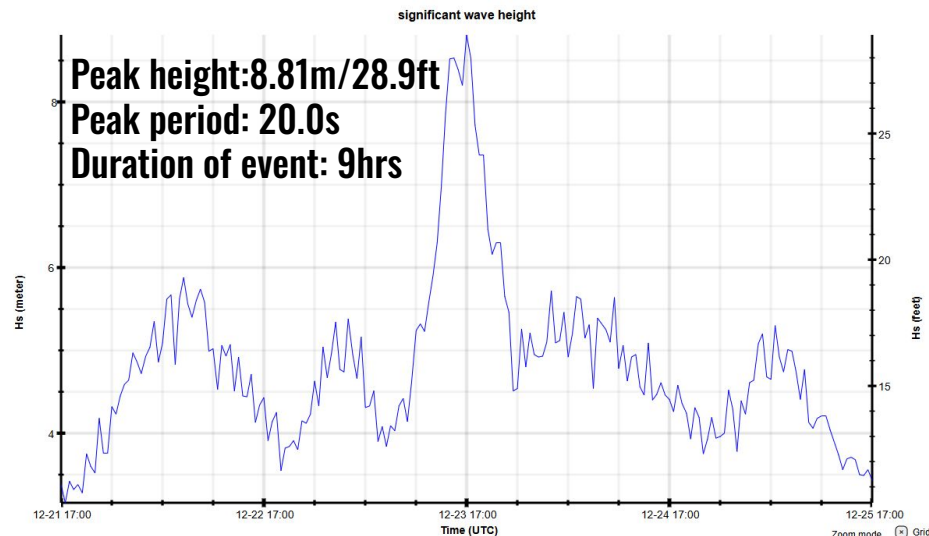
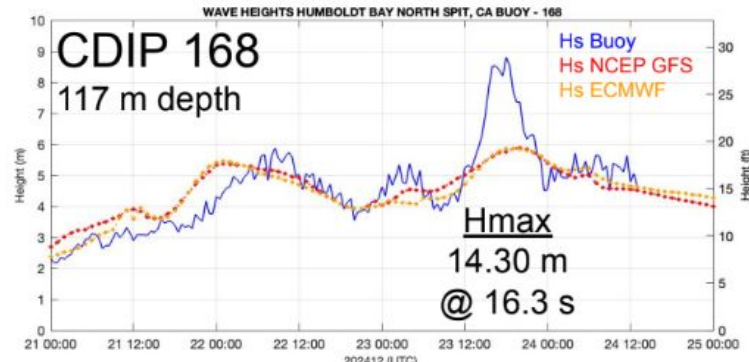


From: USGS

December Large Surf

Large Swell from repeated burst of storm energy hit the West Coast on 12/23. Breaker waves estimated up to 35 feet during the event.

Photos by DES @ North Jetty





December Rain to end 2024

Name	Station Type	County	Total Precipitation
GASQUET RS	COOP	Del Norte	21.72
KLAMATH 0.8 SE	CoCoRaHS	Del Norte	18.41
CRESCENT CITY AP	ASOS	Del Norte	12.79

Name	Station Type	County	Total Precipitation
MAD RIVER 7.4 SE	CoCoRaHS	Trinity	18.03
HAWKINS BAR 0.6 NW	CoCoRaHS	Trinity	13.30
TRINITY CENTER 0.6 ESE	CoCoRaHS	Trinity	11.82
JUNCTION CITY 1.6 N	CoCoRaHS	Trinity	8.31

Name	Station Type	County	Total Precipitation
HONEYDEW 3.2 SSE	CoCoRaHS	Humboldt	35.09
GARBERVILLE 0.8 NNW	CoCoRaHS	Humboldt	16.03
ORLEANS 0.9 W	CoCoRaHS	Humboldt	14.76
EUREKA WFO WOODLEY ISLAND	WBAN	Humboldt	9.88

This rain fell from December 10th and December 31st. These amounts are generally 110% to 150% of normal. Minor flooding was reported on the Russian River and the Navarro river. Other rivers reached Action Stage. Small stream flooding occurred as well.

Name	Station Type	County	Total Precipitation
LAYTONVILLE 1.1 SW	CoCoRaHS	Mendocino	20.13
POINT ARENA 4.8 ESE	CoCoRaHS	Mendocino	18.63
COVELO 11.5 N	CoCoRaHS	Mendocino	13.48
FORT BRAGG 5 N	COOP	Mendocino	12.50
UKIAH MUNICIPAL AP	ASOS	Mendocino	8.88

Name	Station Type	County	Total Precipitation
POTTER VALLEY 8.4 ENE	CoCoRaHS	Lake	17.60
COBB 0.8 S	CoCoRaHS	Lake	13.28
UPPER LAKE 3.6 W	CoCoRaHS	Lake	12.51
MIDDLETOWN	COOP	Lake	9.75
LAKEPORT 0.6 SE	CoCoRaHS	Lake	8.16



December Coastal Flooding

Weather Forecast Office
Eureka, CA
Tuesday, December 31



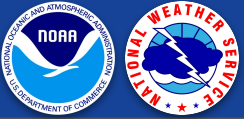
Rank	Ft MLLW	Date
1	9.89	2005-12-31
2	9.85	2003-12-23
3	9.83	2006-01-01
4*	9.73	2024-12-14
5	9.72	2022-01-03
6	9.72	1983-01-26
7	9.7	2003-12-24
8	9.68	2001-01-10
9	9.66	2005-01-10
10	9.63	2005-12-30

Photos by JDB and RPA at King Salmon and Pine Hill Road on December 14th

King tides brought coastal flooding to Humboldt Bay in mid December. The North Spit tide gauge reported water levels above 8.8 ft MLLW December 12th-16th.

The highest tide was reported on December 14th as strong southerly winds the previous day increased water levels further.

*Preliminary Data



Eureka Record Rain

Weather Forecast Office
Eureka, CA
Tuesday, December 31

2024 Rainfall Records Set in Eureka (Woodley Island)

Date	New Record	Year	Old Record
January 13th	2.45	1913	2.22
January 31st	2.17	1992	1.74
May 4th	1.99	2009	1.74
August 23rd	1.19	1997	0.27
December 23rd	1.61	1892	1.41



Top 10 Calendar Year Rain

Weather Forecast Office
Eureka, CA
Tuesday, December 31

Middletown

Records since 1939

Rank	Year	Total Precipitation
1	1983	90.23
2	1995	82.37
3	1940	80.03
4	1941	70.09
5	2017	68.48
6	1996	68.06
7	1970	67.65
8	1969	66.28
9	2024	64.80
10	1973	64.79

Gasquet

Records since 1949

Rank	Year	Total Precipitation
1	1983	144.06
2	1996	143.48
3	1950	136.58
4	1953	128.84
5	1998	126.35
6	2024	124.43
7	2012	124.14
8	1995	120.51
9	2017	119.96
10	1982	117.62

Eureka

Records since 1889

Rank	Year	Total Precipitation
1	1983	67.21
2	1904	64.47
3	1998	63.68
4	1996	60.61
5	1902	58.76
6	2024	57.86
7	1896	55.37
8	1890	54.74
9	1907	54.11
10	2010	53.74