NOAA Climate Science and Services
Monthly Climate Update

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National Oceanic and Atmospheric Administration
January 2022
January 2022

• **Global Land & Ocean**: +0.89°C / +1.60°F; the 6th warmest Jan on record.
  **Global Land**: +1.49°C / +2.68°F; 6th warmest Jan on record.
• **Global Ocean**: +0.67°C / +1.21°F; 5th warmest Jan on record.
Global Temperature

The global temperature record dates back to 1880 (143 years)

2022 currently ...

• 10.0% chance of warmest year
• Virtually certain that 2022 will be a top 10 year
Contiguous U.S. January 2022

**Temperature:** 31.0°F, +0.9°F, “near average”

**Precipitation:** 1.60”, -0.71”, tied with 2009 as the 14th driest Jan on record

- Above-average temperatures across much of the West and parts of the northern Plains. California had 9th warmest Jan.
- Below-average temperatures observed from Midwest and Tennessee Valley to the Northeast.
- Drier-than-average conditions observed across much of West, High Plains, Deep South, Great Lakes and Northeast.
- NV and CA 2nd driest Jan, UT had 3rd driest Jan
- TN, KY, MD, DE, WV, VA, and NC had above-average statewide precipitation.
Current U.S. Drought

57% of Contiguous U.S. in Drought
(↑ 2 percentage points since mid-January)
January 28–29 Blizzard

- Storm rapidly intensified off the U.S. East Coast
- Coastal areas experienced heavy snow and strong winds

Photo courtesy of National Weather Service – Boston/Norton, Massachusetts
January 28–29 Blizzard

- Storm snowfall totals exceeded 12 inches in coastal areas from Maryland to Maine
- Parts of eastern Massachusetts, Rhode Island, and New York’s Long Island saw 24 to 30 inches of snow

Map courtesy of National Weather Service – Eastern Region Headquarters
January 28–29 Blizzard

- Boston, Massachusetts, and Providence, Rhode Island, experienced their all-time snowiest day on record (1891 and 1904, respectively) on January 29.

- January 29 ranked among the 10 snowiest January days on record at several other sites.

<table>
<thead>
<tr>
<th>Station</th>
<th>Jan. 29 Snowfall</th>
<th>Jan. Rank</th>
<th>All-time Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boston, MA</td>
<td>23.6</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Islip, NY</td>
<td>23.2</td>
<td>2</td>
<td>2</td>
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<tr>
<td>Providence, RI</td>
<td>18.8</td>
<td>1</td>
<td>1</td>
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<tr>
<td>Worcester, MA</td>
<td>14.7</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Atlantic City, NJ</td>
<td>14.0</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Bridgeport, CT</td>
<td>9.6</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Kennedy Airport, NY</td>
<td>9.3</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>LaGuardia Airport, NY</td>
<td>8.1</td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

- Atlantic City, New Jersey, has its snowiest January on record (since 1946).

- This January was among the 10 snowiest Januaries and 20 all-time snowiest months on record for several sites.

<table>
<thead>
<tr>
<th>Location</th>
<th>Jan. 2022 Snowfall (in.)</th>
<th>Normal (in.)</th>
<th>Departure (in.)</th>
<th>Jan. Rank</th>
<th>All-time Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atlantic City, NJ</td>
<td>33.2</td>
<td>5.7</td>
<td>27.5</td>
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<td>3</td>
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<td>Buffalo, NY</td>
<td>52.1</td>
<td>26.7</td>
<td>25.4</td>
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<td>Boston, MA</td>
<td>36.2</td>
<td>14.3</td>
<td>21.9</td>
<td>4</td>
<td>8</td>
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<tr>
<td>Islip, NY</td>
<td>31.8</td>
<td>10.3</td>
<td>21.5</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Providence, RI</td>
<td>27.1</td>
<td>10.3</td>
<td>16.8</td>
<td>5</td>
<td>9</td>
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<tr>
<td>Bridgeport, CT</td>
<td>20.8</td>
<td>8.5</td>
<td>12.3</td>
<td>5</td>
<td>15</td>
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<tr>
<td>LaGuardia Airport, NY</td>
<td>20.4</td>
<td>8.6</td>
<td>11.8</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td>Kennedy Airport, NY</td>
<td>17.8</td>
<td>7.5</td>
<td>10.3</td>
<td>5</td>
<td>18</td>
</tr>
</tbody>
</table>
January 28–29 Blizzard

THE FOLLOWING STATIONS RECORDED BLIZZARD CONDITIONS...

IN RHODE ISLAND...

PROVIDENCE (KVD)...5 HOURS 18 MINUTES, FROM 9:21 AM TO 15:08 PM AND FROM 210 PM TO 251 PM.

WESTERLY (KWS)...6 HOURS 16 MINUTES. CRITERIA WERE MET FROM 9:11 AM TO 11:46 AM, FROM 11:53 AM TO 3:01 PM, AND FROM 4:20 TO 4:53 PM.

NEWPORT (KUHU)...9 HOURS 28 MINUTES CONTINUOUSLY, FROM 7:25 AM TO 4:53 PM.

BLOCK ISLAND (KBID)...6 HOURS 37 MINUTES CONTINUOUSLY, FROM 7:05 AM TO 2:42 PM.

IN MASSACHUSETTS...

BOSTON (KBOS)...7 HOURS 39 MINUTES CONTINUOUSLY, FROM 8:15 AM TO 3:54 PM.

WORCESTER (KORM)...8 HOURS 27 MINUTES. IT WAS CONTINUOUS FOR 8 HOURS 16 MINUTES FROM 7:49 AM TO 4:05 PM. CONDITIONS ALSO WERE MET FROM 4:32 PM TO 4:43 PM.

BEVERLY (KBVY)...6 HOURS 9 MINUTES. CONDITIONS WERE MET FROM 8:53 TO 11:53 AM, 12:25 PM TO 2:01 PM, 2:53 PM TO 3:53 PM, AND FROM 4:53 PM TO 5:26 PM.

LAWRENCE (KLAW)...5 HOURS 14 MINUTES. BLIZZARD CONDITIONS OCCURRED FROM 12:54 PM TO 2:45 PM AND FROM 3:31 PM TO 6:54 PM.

HYANNIS (KHYA)...AT LEAST 6 HOURS 33 MINUTES. BLIZZARD CONDITIONS WERE CONTINUOUS FROM 7:04 AM TO 12:32 PM, BUT THEN REPORTING WAS INTERRUPTED UNTIL LATER IN THE AFTERNOON. BLIZZARD CONDITIONS RESUMED FROM 5:05 PM TO 5:39 PM AND FROM 5:48 PM TO 6:19 PM.

MARSHFIELD (KKG)...12 HOURS 0 MINUTES. BLIZZARD CONDITIONS WERE CONTINUOUS FOR 10 HOURS 40 MINUTES FROM 4:35 AM TO 1:15 PM. THEY WERE AGAIN MET FROM 3:35 PM TO 3:55 PM AND FROM 4:15 PM TO 5:15 PM.

MARATHA’S VINEYARD (KVY)...9 HOURS 17 MINUTES CONTINUOUSLY, FROM 7:43 AM TO 5:00 PM.

Wind gusts ranged from 25 to 50 mph in many coastal areas, with localized gusts over 65 mph in coastal Maine, eastern Massachusetts, southern Rhode Island, and New York’s Long Island

Blizzard conditions were experienced from Maryland to Maine including Atlantic City, New Jersey; Providence, Rhode Island; Boston, Massachusetts; and Portland, Maine

Courtesy of National Weather Service – Boston/Norton, Massachusetts
• Sea surface temperatures
  – Below normal sea surface temperatures continue across the eastern Pacific Ocean near the equator
  – The oceanic and atmospheric observations currently reflect La Nina conditions
  – Easterly trade winds are slightly stronger than normal and precipitation over the central Pacific is less than normal

• ENSO forecast
  – La Nina is likely to persist through the next three months (77 percent chance)
  – ENSO neutral conditions are more likely later in spring and summer (greater than 50 percent chance)
Monthly Forecast (March)

March Average Temperature Probability

Monthly Temperature Outlook
Valid: March 2022
Issued: February 17, 2022

March Total Precipitation Probability

Monthly Precipitation Outlook
Valid: March 2022
Issued: February 17, 2022
Three-month Forecast (Mar, Apr, May)

Mar–Apr–May Average Temperature Probability

Mar–Apr–May Total Precipitation Probability

Seasonal Temperature Outlook
Valid: Mar-Apr-May 2022
Issued: February 17, 2022

Seasonal Precipitation Outlook
Valid: Mar-Apr-May 2022
Issued: February 17, 2022
U.S. Drought Outlook

U.S. Seasonal Drought Outlook
Drought Tendency During the Valid Period

Valid for February 17 - May 31, 2022
Released February 17

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Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events.

"Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

Drought persists
Drought remains but improves
Drought removal likely
Drought development likely

http://go.usa.gov/3eZ73
For More Information

TODAY’S PRESENTATION:

• http://www.ncdc.noaa.gov/sotc/briefings

NOAA’s National Centers for Environmental Information: www.ncdc.noaa.gov

• Monthly climate reports (U.S. & Global): www.ncdc.noaa.gov/sotc/

• Dates for upcoming reports: http://www.ncdc.noaa.gov/monitoring-references/dyk/monthly-releases

NOAA’s Climate Prediction Center: www.cpc.ncep.noaa.gov

U.S. Drought Monitor: www.drought.gov

Climate Portal: www.climate.gov

Northeast Regional Climate Center: https://www.nrcc.cornell.edu/

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