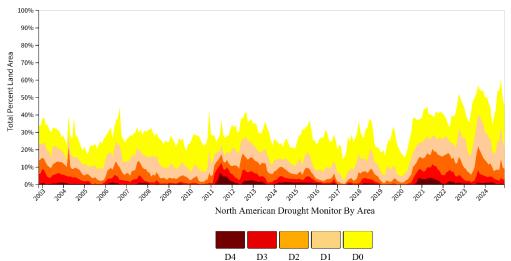
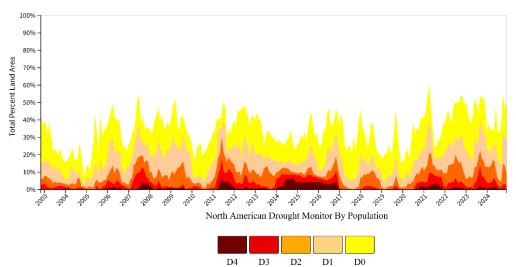
#### North American Drought Monitor – December 2024

At the end of December 2024, moderate to exceptional drought (D1-D4) affected 21.0% of the area and 28.4% of the population of North America. The percent area value was 3.9% less than the value for the end of November 2024. The percent population value was 1.5% less than the value for the end of November. At the end of December 2024, 55.4% of the Rio Grande/Bravo River Basin was in moderate to exceptional drought, 39.5% of the Great Plains and 24.4% of the Columbia River Basin were in moderate to extreme drought, and 21.7% of the Great Lakes Basin was in moderate to severe drought. The North American Great Plains extends across the United States and into adjacent parts of northeast Mexico and the southern Prairies of Canada. The percent area value for the Rio Grande/Bravo River Basin increased compared to the end of November. The percent area values for the Great Plains, Columbia River Basin and Great Lakes Basin decreased compared to the end of November.



Percent area of North America in drought, November 2002-December 2024.



Percent of the population of North America in drought, November 2002-December 2024.

### **CANADA:**

#### **National Overview**

Above normal precipitation and warmer than normal temperatures dominated much of the national landscape in December. Above normal precipitation was received in southwestern and central British Columbia, much of Alberta, western and northern Saskatchewan, and southern Ontario and portions of Quebec. Parts of Alberta, western Saskatchewan, and Interior British Columbia received twice the normal December precipitation. Below normal precipitation was received along British Columbia's central coast, along the Alberta foothills, central Saskatchewan, central Manitoba and throughout much of Nova Scotia and Prince Edward Island. Temperatures were above normal across the country, with temperatures in much of British Columbia as well as western and northern Alberta seeing monthly mean temperatures greater than 5 degrees above normal. The central Prairies and much of Central and Eastern Canada experienced monthly mean temperatures of up to 2 degrees warmer than normal. As a result of these monthly conditions drought continued to improve across much of Canada with only small areas of British Columbia and Nova Scotia having any significant worsening conditions. The most significant drought improvements this month occurred across Alberta, reaching into the territories where drought and Abnormally Dry (D0) conditions were significantly improved or alleviated by December precipitation. The region with the most significant drought at the end of December was the long-term drought in the Northwest Territories.

At the end of the month, 43% of the country was classified as Abnormally Dry (D0) or in Moderate to Extreme Drought (D1 to D3), including 35% of the country's agricultural landscape.

#### Pacific Region (BC)

Drought conditions continued to improve over much of the interior and the southern coast of Vancouver Island with above to well above normal precipitation in December. The largest improvements were around Prince George with above normal precipitation (from 178-260% of normal) alleviating long-term moisture deficits. The northeast portion of the province including Fort St. John, which received > 160% of normal precipitation in December, also saw significant improvement with a reduction of Abnormally Dry (D0), Moderate Drought (D1) and Severe Drought (D2) conditions. Despite improvements in the northeast, there is still a significant long-term moisture deficit resulting in a substantial area remaining in Severe Drought (D2). Despite elevated levels of precipitation in parts of the province, other regions including the Sunshine Coast and western Cariboo had an expansion of Abnormally Dry (D0) and Moderate Drought (D1) conditions. Temperatures were well above normal in December with at least 10 long-term monitoring locations measuring within their top 5 warmest

December temperatures, including many stations in the lower mainland or on Vancouver Island. Provincial snowpack was slightly below normal (averaging 87% of normal) across the province; this is significantly higher than last year when the provincial average was 56% for the same time.

At the end of the month, 30% of the Pacific Region was classified as Abnormally Dry (D0) or in Moderate to Extreme Drought (D1 to D3), including 26% of the region's agricultural landscape.

## Prairie Region (AB, SK, MB)

Temperatures across the Prairies were above normal in December with the highest temperatures, more than 5 degrees Celsius above normal, in western Alberta. Well above normal precipitation (>150% of normal) helped to reduce or alleviate drought conditions in central and northern Alberta. However, the foothills in southwestern Alberta continued to receive well below normal precipitation (less than 40% of average) resulting in continued Abnormally Dry (D0) to Moderate Drought (D1) conditions. Winter precipitation has been above normal across much of the Prairies, however, annual precipitation trended below normal this calendar year. As a result, Abnormally Dry (D0) or Moderate Drought (D1) conditions remain along the southern border of Saskatchewan in the central and eastern regions of the province despite near normal precipitation in December. In southern Manitoba, December precipitation was highly variable with some regions recording normal and others recording below normal precipitation. As a result, drought conditions were mostly unchanged across northern Saskatchewan and Manitoba with Moderate Drought (D1) remaining around Flin Flon, La Ronge, and Buffalo Narrows.

At the end of the month, 36% of the Prairie Region was classified as Abnormally Dry (D0) or in Moderate to Severe Drought (D1 to D2), including 25% of the region's agricultural landscape.

## Central Region (ON, QC)

In December, Central Canada received normal to above normal precipitation reducing moisture deficits that accumulated during the dry fall. Temperatures across the region continued to be slightly above normal this month (0-2 degrees Celsius). Despite normal to above normal precipitation, significant portions of Ontario and Quebec remain in Abnormally Dry (D0) or Moderate Drought (D1), with some remaining pockets of Severe Drought (D2). Dry areas included portions of southern Ontario, the northern shore of Lake Ontario and southern Quebec. Winter precipitation to date has greatly improved short-term drought conditions including the extent of Moderate (D1) and Severe Drought (D2) in southern Ontario and southern Quebec. Moderate Drought (D1) persisted along the north

shore of Lake Ontario expanding in December to include areas east of Toronto, where Abnormally Dry conditions also expanded west of Sudbury. Extremely high precipitation (more than 100 mm) was received around Georgian Bay and Lake Erie, as a result Moderate and Severe Drought (D1-D2) and Abnormally Dry (D0) areas were reduced or removed in these regions. December was dry (40-85% of normal precipitation) across much of northwestern Ontario resulting in some expansion of Abnormally Dry (D0) conditions west of Kapuskasing. The most severe drought conditions persisted in the southwest around Montréal and north of La Mauricie National Park.

At the end of the month, 54% of the Central Region was classified as being Abnormally Dry (D0) or in Severe Drought (D2), including 58% of the region's agricultural landscape.

## Atlantic Region (NS, NL, NB, PEI)

Precipitation throughout much of the Atlantic Region was normal to below normal in December, with southwestern New Brunswick, Prince Edward Island, and much of Nova Scotia recording below normal precipitation (<85% of normal monthly precipitation). These regions recorded below normal precipitation for the fourth consecutive month. The western portion of Nova Scotia received the least precipitation in December, increasing the Moderate Drought (D1) region to cover most of the province. Eastern New Brunswick and Cape Breton received near to above normal precipitation, including several snowstorms in December. Moderate Drought (D1) was reduced in New Brunswick while severe Drought was eliminated. Abnormally dry conditions were pulled back from Eastern New Brunswick and around Cape Breton. December precipitation helped to alleviate Severe Drought (D2) around Halifax and Yarmouth in Nova Scotia. However, Moderate Drought (D1) and Abnormally Dry (D0) conditions expanded this month due to long-term precipitation deficits. Moderate Drought was also eliminated in southern Newfoundland and Severe Drought was removed in Labrador due to higher December precipitation reducing long-term precipitation deficits. Mean monthly temperatures were slightly warmer than normal (less than 2 degrees Celsius above normal). Snow depth at the end of the month was below normal across the Maritimes. Although there was snowfall throughout the month, warm temperatures leading into the New Year led to a significant decrease in the snowpack in the last few days of the month. Although some storm totals were significant, most storms were isolated with little significant impact. Snowfall was below normal on the Island and southeastern Labrador partly due to the warm temperatures. Sea ice was at least two weeks behind normal for growth on the Labrador coast.

At the end of the month, 73% of the Atlantic Region was classified as Abnormally Dry (D0) or in Severe Drought (D2), including 82% of the region's agricultural landscape.

## Northern Region (YK, NWT)

Temperatures across the Northern Region were variable in December with cooler temperatures experienced in western Northwest Territories and much warmer than normal

temperatures dominating the rest of the region. Above normal precipitation was recorded across much of the northern region in December except for parts of the Yukon where precipitation was near below normal. Southern portions of the Northwest Territories, south of Great Slave Lake, where dry conditions have persisted since fall, saw continued recovery this month with near to above normal precipitation.

Overall, the extent of drought was reduced across the North with the Abnormally Dry (D0) areas most reduced. Specifically, areas north and east of the Great Slave Lake like the Snare River, Lockhart River, and Coppermine River improved because of above normal precipitation this winter improving moisture deficits. However, Great Slave Lake continued to report its lowest water level on record for this time of year. The extent of Moderate (D1) and Severe (D2) Drought south and west of Great Bear Lake improved slightly this month with higher precipitation. As reported in early December, early winter water levels and flow rates remain very low across most of the Northwest Territories, and in many instances are similar to those recorded last year at this time. Along with long-term precipitation deficits Moderate (D1) and Severe (D2) Drought remains across much of the region. In the Yukon, Moderate Drought (D1) persisted in December, Abnormally Dry (D0) conditions improved somewhat with recent precipitation. Snowpack in most other parts of the Yukon has been above average, starting the winter season with significant November precipitation.

At the end of the month, 33% of the Northern Region was classified as Abnormally Dry (D0) or in Moderate to Extreme Drought (D1 to D3).

# **UNITED STATES:**

## **National Overview**

Drought conditions across the United States saw a mix of improvements and degradations in December. Significant improvements were observed in the Mid-Atlantic, Northeast, and parts of the South, including southern Alabama, eastern Oklahoma, southwest Missouri, eastern Texas, western Arkansas, and northwest Louisiana. Conversely, drought conditions worsened significantly in the Southwest, where a very dry start to the water year has contributed to the degradation. Hawaii also experienced significant worsening of drought conditions in some areas.

From December 3 to 31, drought and abnormal dryness coverage changed across the U.S. states and Puerto Rico as follows:

- Abnormal dryness (D0) or worse coverage dropped from 59.79% to 56.8%.
- Moderate drought (D1) or worse coverage declined from 36.49% to 31.87%.
- Severe drought (D2) or worse coverage decreased from 13.62% to 12.13%.
- Extreme drought (D3) or worse coverage increased from 3.89% to 3.97%.
- Exceptional drought (D4) coverage dipped from 0.5% to 0.46%.

**Northeast:** Significant improvements in drought conditions were observed across much of the Northeast during the month. Drought severity decreased in many areas, with some regions experiencing a two-category improvement. While severe or extreme drought persisted in pockets of southern New England, New Jersey, southeast Pennsylvania, Delaware, and eastern Maryland, overall drought coverage diminished. Above-normal precipitation, particularly in southeastern Massachusetts, Rhode Island, and parts of Connecticut and Long Island, contributed to this improvement. However, drier-than-normal conditions prevailed in eastern Maryland, southwest Pennsylvania, and parts of southwest New York. Temperatures were generally below normal across much of the region, with some exceptions in northwest New York where above-normal temperatures were recorded.

- Abnormal dryness (D0) or worse coverage decreased from 97.69% to 72.19%.
- Moderate drought (D1) or worse declined from 65.15% to 41.59%.
- Severe drought (D2) or worse dropped from 23.31% to 13.08%.
- Extreme drought (D3) decreased from 3.96% to 1.37%.

**Southeast:** Drought conditions improved significantly across much of Virginia, North Carolina, northwest South Carolina, and northern Georgia, with some areas experiencing substantial improvements. In contrast, drought conditions worsened slightly in parts of southern Georgia and the Florida Peninsula. Below-normal precipitation was widespread across central and eastern portions of the region, including the Carolinas and Georgia. This dryness also impacted the Florida Panhandle and the northwestern half of the Florida Peninsula. Conversely, above-normal precipitation fell in southern Alabama, southwest Virginia, and isolated locations in southern Florida. Temperatures across most of the Southeast remained close to normal during December.

- Abnormal dryness (D0) or worse coverage decreased from 81.16% to 73.26%.
- Moderate drought (D1) or worse declined from 49.82% to 26.13%.
- Severe drought (D2) or worse dropped from 6.69% to 2.35%.
- Extreme drought (D3) dropped from 0.14% to 0.03%.

**South:** Drought conditions in the South saw a mix of improvements and degradations in December. Scattered improvements were observed in central and eastern Oklahoma, Arkansas, northeast Texas, western Louisiana, Tennessee, and Mississippi. However, some areas experienced slight worsening of drought conditions, particularly south of Houston and in parts of Texas, central Mississippi, eastern Tennessee, and northeast Arkansas. Wetter-than-normal conditions prevailed in northeast Texas, southeast Oklahoma, northwest Louisiana, parts of Arkansas, western Tennessee, northwest Mississippi, and parts of southern Texas. Conversely, drier-than-normal conditions were observed in northern and western Oklahoma, the Texas Panhandle, and parts of central and western Texas. December temperatures across the South were significantly warmer than normal, with Texas experiencing the most pronounced warming, where temperatures were 6-10 degrees above average.

- Abnormal dryness (D0) or worse coverage decreased from 61.07% to 50.68%.
- Moderate drought (D1) or worse dropped from 38.21% to 28.15%.

- Severe drought (D2) or worse declined from 15.6% to 12.29%.
- Extreme drought (D3) or worse increased from 6.93% to 7.27%.
- Exceptional drought (D4) coverage dropped from 3.21% to 3.18%.

**Midwest:** Drought conditions in the southern Midwest showed scattered improvements, with some localized areas experiencing more significant improvement. Minor improvements were also observed in Wisconsin, Minnesota, Iowa, and northern Michigan. Conversely, some areas in central and northern Illinois, eastern Iowa, and southern Wisconsin experienced slight worsening of drought conditions. Drier-than-normal weather prevailed in southern and eastern Wisconsin, west-central Missouri, western Iowa, most of central and southern Minnesota, and parts of Kentucky and Ohio. Above-normal precipitation occurred in the northern Upper Peninsula of Michigan, parts of the Lower Peninsula of Michigan, Indiana, northwest Ohio, southern Illinois, northeast Missouri, and portions of southeast Iowa and Missouri. Temperatures across the Midwest were predominantly warmer than normal during December, with Missouri, Illinois, Iowa, Minnesota, southern Indiana, western Kentucky, and northern Wisconsin experiencing the most pronounced warming, where temperatures were 2-4 degrees above average.

- Abnormal dryness (D0) or worse coverage decreased from 68.5% to 59.26%.
- Moderate drought (D1) or worse coverage dropped from 43.5% to 32.07%.
- Severe drought (D2) coverage declined from 5.89% to 3.73%.

**High Plains:** Drought conditions in the High Plains region worsened in December, with significant degradation observed in southwest Nebraska, north-central Colorado, and southeast Wyoming. While some areas experienced minor improvements, particularly in central Colorado, western South Dakota, and parts of Kansas and Nebraska, the overall trend was towards drier conditions. Drier-than-normal weather was widespread across the region, impacting southern and western Kansas, eastern Colorado, western Nebraska, southeast Wyoming, and parts of southwest Colorado and South Dakota. Above-normal precipitation was limited to localized areas of central South Dakota and northern North Dakota. Temperatures across the High Plains were significantly warmer than normal, with widespread areas in western Kansas, Nebraska, Colorado, and Wyoming experiencing temperatures 3-9 degrees above average. Portions of Wyoming recorded exceptionally warm temperatures, with departures from normal reaching 9-15 degrees.

- Abnormal dryness (D0) or worse coverage dipped slightly from 73.78% to 73.72%.
- Moderate drought (D1) or worse dropped slightly from 60.75% to 60.06%.
- Severe drought (D2) or worse grew slightly from 32.44% to 32.61%.
- Extreme drought (D3) increased from 8.99% to 9.17%.

**West:** Drought conditions worsened significantly across much of Nevada and southern California in December, with widespread degradation observed in Arizona, southern Utah, and northwest New Mexico. While some areas in eastern Oregon, central Washington, eastern Idaho, and western Montana experienced improvement, drought conditions worsened slightly in other areas, including northeast Nevada and parts of Washington. Drier-thannormal conditions prevailed across southern California, Arizona, most of New Mexico, southern Utah, and parts of southwest Montana and adjacent Idaho. Above-normal

precipitation was observed in parts of southern Idaho, central and eastern Washington and Oregon, eastern Montana, and northern California. Temperatures across most of the West were significantly above normal during December, with many areas experiencing temperatures 3-9 degrees warmer than average.

- Abnormal dryness (D0) or worse coverage grew from 67.64% to 70.34%.
- Moderate drought (D1) or worse increased from 35% to 39.86%.
- Severe drought (D2) or worse grew from 18.5% to 19.17%.
- Extreme drought (D3) or worse increased from 6.02% to 6.85%.
- Exceptional drought (D4) was removed during December, having covered 0.1% of the West region at the beginning of the month.

Alaska, Hawaii, and Puerto Rico: Abnormal dryness emerged in parts of west-central Alaska during the final week of December, affecting 5.83% of the state. Below-normal precipitation was observed in portions of south-central, central, and western Alaska, as well as along the North Slope. However, some areas also experienced near-normal or above-normal precipitation. Temperatures across Alaska were significantly warmer than normal during December, with central, south-central, and parts of southwest and west-central Alaska experiencing the most pronounced warming, where temperatures were 6-15 degrees above average.

In Hawaii, drought conditions worsened across much of the islands in December. Significant degradation occurred on the Big Island of Hawaii, Maui, Molokai, and Kauai, with even more severe worsening observed on Oahu. By the end of December, severe or extreme drought conditions affected portions of Kauai, Oahu, Molokai, Lanai, Kahoolawe, and Maui. Precipitation was below normal across the entire state of Hawaii. Most locations saw less than 50% of normal precipitation, while many received less than 25% of normal precipitation. Warmer -than-normal temperatures also occurred in most areas, with most locations finishing the month 1-3 degrees above normal.

- Abnormal dryness (D0) or worse coverage grew from 37.91% to 100%.
- Moderate drought (D1) or worse grew from 18.92% to 39.78%.
- Severe drought (D2) or worse grew from 10.67% to 12.38%.
- Extreme drought (D3) grew from 1.53% to 2.89%.

During December, drought conditions remained unchanged in Puerto Rico during December, with the island remaining free of drought or abnormal dryness. Above-normal rainfall was observed in the western part of the island, with some areas receiving twice the normal amount of rainfall for December. However, parts of eastern and north- and south-central Puerto Rico experienced drier-than-normal conditions. Temperatures across the island were mostly 1-4 degrees warmer than normal.

#### **MEXICO**

#### National overview

Above-average rainfall fell in areas of the northeast and the Gulf of Mexico coast. Moisture provided by nine frontal systems extended into the southeastern states and the Yucatan Peninsula throughout December 2024. For the rest of the country, rainfall was absent, which allowed for an increase in drought regions, mainly in the northwest and northern Pacific areas. The 13.4 mm of rain accumulated nationally in December 2024 represented only 57% of the normal December rainfall (23.5 mm) and ranked as the 10<sup>th</sup> driest December on record since 1941. Aside from being a partially dry month, it was a month with warmer than average temperatures, mainly in the northwest, the northern corridor, and the northeast; temperatures were near or slightly cooler than average in the southeast and Yucatan Peninsula regions. The average temperature observed in December 2024 of 18.0 °C was 1.0 °C above the 1991-2020 December average of 17.0 °C, and ranked as the third warmest December.

According to preliminary data, 735.7 mm of rain accumulated nationally during 2024, which was 1.6% below the 1991-2020 annual average of 747.6 mm and ranked as the 25<sup>th</sup> driest year on record since 1941. On the other hand, the year 2024 ranked as the warmest year on record for the country, with an average annual temperature of 22.9 °C, 1.5 °C above the 1991-2020 annual average of 21.4 °C. The year 2024 exceeded the previous warmest year (2023) by 0.2 °C.

It was the tenth driest December nationally, as well as the driest December in Baja California, the third driest in Sonora and the fourth driest December in Chihuahua. In the last three months, rainfall was the 13<sup>th</sup> driest period nationally and the driest period in Baja California and Sonora. This resulted in an expansion of severe drought in the northern and northwestern. As of December 31, 38.1% of the country has moderate to exceptional drought (D1 to D4), an increase of 7.5% from the November 30 assessment. Throughout the year, the peak drought percentage for the country was seen on the May 31 assessment when 76% of the country was in moderate to exceptional drought (D1-D4), this was due to a dry first half of the year nationwide. The greatest recovery in drought areas was during the September 30 assessment when the figure dropped to 37.0%, due to rains in the latter part of the summer.

At the end of the year, the corn harvest in Guanajuato reported 98% progress, in Michoacán reached 75% progress, while in Jalisco it was only at 30%. The progress in Guanajuato and Michoacán was because rains suppressed as of November, a condition not observed in Michoacán. In the case of beans, Zacatecas producers have only been able to sell between 10% and 20% of their spring-summer crop, due to the lack of competition and the increase of intermediaries that have begun to reduce purchase prices in the free market. Low bean prices also affect farmers in Chihuahua and Durango. In Sinaloa, bean-harvesting activities were delayed, farmers expected to begin in January or early February. As for wheat, the decrease in the area planted with this grain has been noted, which would have an impact on the decrease in the volume to be harvested; in fact, a 45% decrease is expected with respect to the year 2023. Under this scenario, a record wheat import is expected, especially crystalline wheat, which has not been imported for 25 years and is planted especially in Sonora, Sinaloa and Baja California, and is used in foods such as pasta.

The National Water Commission (CONAGUA) reported that at the end of the year, storage in the country's 210 main dams represented a 14% deficit with respect to the average at the end of each year. Only 24 of those 210 dams had percentages around 100% of their capacity and 66 reservoirs were below 50%. The reservoirs with the highest filling capacity were located in the central-west, Gulf of Mexico and southeast. The reservoirs with the lowest percentages were located in the northwest and the North Pacific.

According to the National Forestry Commission (CONAFOR), the 2024 was classified as the year with the largest area burned by fires with 1672215.7 hectares, which is 624723 hectares more than that observed in the year 2023 (the previous year with the largest area burned). The largest number of fires reported during the year occurred in the State of Mexico, Mexico City, Jalisco, Michoacán, Chihuahua, Chiapas, Puebla, Durango, Guerrero and Oaxaca, which together accounted for 78% of the fires reported at the national level.

Northwest or North Pacific (Baja California, Baja California Sur, Sonora, Sinaloa and Nayarit): Only northern Sonora received some precipitation; the rest of the country did not receive any rain during the month. As a result, it was the driest December in Baja California and the third driest in Sonora. The Baja California peninsula was slightly cooler than average, but the rest of the region recorded warmer than average temperatures. It was the warmest December in Sonora and the fourth warmest in Baja California Sur. As a result, the area with moderate to exceptional drought (D1 to D4) in the northwest or northern Pacific increased by 15.1% with respect to November 30, going from 55.6% to 70.7%.

**Northern (Chihuahua, Coahuila, Durango, Zacatecas and San Luis Potosí):** Southern Durango received some precipitation that was above average; in the rest, there was no precipitation to consider. It was the fourth driest December in Chihuahua. Monthly temperatures were above average, in some areas in Coahuila and eastern Chihuahua with departures more than 3 °C above average. It was the second warmest December in Coahuila and Durango, as well as the third warmest in Chihuahua. Overall, the extent of drought increased by 12% over the previous month in the region, from 53.8% coverage on November 30 to 65.8% on December 31. The largest increase was in the severe drought category (D2).

**Northeast (Nuevo Leon and Tamaulipas):** Maximum accumulated rainfall amounts of around 60 mm for the month received in northeastern Nuevo Leon, while in the rest of the two states, rainfall amounts were below 50 mm. Despite this, these amounts represented above-average rainfall in most of Nuevo Leon and central to southern Tamaulipas. These rains were due to cold air masses that drove the frontal systems during the month. However, these rains were not enough to drop temperatures, which were 3 to 5 °C above the monthly average. Thus, the two states in this region reached their second warmest December on record. Monthly rainfall helped to keep the moderate drought coverage (D1) in the region almost unchanged, which decreased from 3.9% on November 30 to 3.5% on December 31.

**Central-West (Aguascalientes, Jalisco, Guanajuato, Colima and Michoacán):** This region showed a contrast, areas to the east received above average rainfall, while the other portion received little or no rainfall during the month. In spite of this, almost all states had rainfall in December in the middle part of the classification data. Most of these states had

above-average mean monthly temperatures, with the exception of the coast of Jalisco. Due to the summer rains and the fall months, the west-central region is almost free of drought, only 2.3% has moderate drought (D1).

**Central-South (Queretaro, Hidalgo, State of Mexico, Tlaxcala, Puebla, Morelos and Mexico City):** Cloudiness associated with the cold air masses caused a large part of the eastern part of this region to receive above average rainfall, such as northern Queretaro, Hidalgo and Puebla, as well as Tlaxcala. Mexico City and large portions of the State of Mexico were far from the influence of these weather systems and therefore did not receive precipitation; thus, the state-level rainfall classification left these states within the central part of the historical data. Temperatures were warmer than average for the month, just 1 to 2 °C above average in Querétaro and Hidalgo, about 1 °C above normal in most of the state of Puebla, while in Morelos and the State of Mexico, temperatures were close to average. Overall, the region had a slight contraction in the moderate drought footprint (D1), going from 2.1% on November 30 to 1.7% on December 31.

**Gulf of Mexico (Veracruz and Tabasco):** The northern part of Veracruz along with the eastern part of the Central-South zone was one of the areas that received most humidity due to the effects of frontal systems. Accumulated rainfall for the month was around 150 mm, which was about 40 mm above average. Towards central and southern Veracruz, rainfall decreased below 50 mm, about 10 mm below average. In the case of Tabasco, monthly accumulations were greater than 300 mm; climatologically this region receives one of the highest rainfall amounts in the month, this meant about 150 mm below normal; in fact, it was the 13<sup>th</sup> driest December in Tabasco. The below-average rainfall anomaly in Tabasco caused the addition of a small area with moderate drought (D1) covering 2.4% of the region, in addition to 13.1% of abnormally dry conditions (D0).

**South Pacific (Guerrero, Oaxaca and Chiapas):** Only northern Chiapas received monthlyaccumulated rainfall around 300 mm, however, as mentioned above, it was not enough to exceed the monthly average for the month in that portion; the rest of Chiapas received less than 50 mm during the month. Most of Guerrero and Oaxaca received no rainfall. Overall, it was a month with well below average rainfall in all three states in this region. The driest state was Oaxaca, which recorded its ninth driest December. By the end of the month, moderate to severe drought coverage (D1 to D2) almost doubled in the last month, from 2.4% to 4.2%.

**Yucatan Peninsula (Campeche, Quintana Roo and Yucatan):** The eastern part of this region received above average rainfall, with the highest rainfall accumulations, greater than 200 mm in Quintana Roo. Towards the rest of the region, rainfall accumulations were below 50 mm, which translated into more than 80 mm below average. In general, both in terms of rainfall and temperatures, the three states were located in the central part of the historical data. The Yucatan Peninsula is the only region of the country that ended the year without drought or dryness.