

Appendix I – Weather Extremes

Temperature

The world's highest temperature on record was 136° at Al Aziziyah, Libya, on September 13, 1922.

Vostok, Antarctica holds the world's record for coldest temperature: -129° on July 21, 1983.

On January 22, 1943 in Spearfish, SD: The temperature rose 49 degrees in two minutes, from - 4 to 45; later the same morning, it dropped 60 degrees in 27 minutes, from 56° to - 4°. Plate glass windows cracked as a result of the wild fluctuation in temperatures caused by Chinook winds.

The greatest 24- hour U.S. temperature difference in one place was set January 23- 24, 1916, in Browning, MT, at 100 degrees when it went from a low of -56° to a high of 44°.

Alaska and Hawaii share the same record high temperature of 100°. Pahala, Hawaii, reached that temperature on April 27, 1913; Fort Yukon, Alaska, hit 100° on June 27, 1915.

It was 134° at Death Valley on July 10, 1913. It remains the highest reading on record for the Western Hemisphere, the nation's highest temperature on record for July, and the second highest reading in the world. Sandstorm conditions accompanied the heat.

The greatest diurnal range of temperature on record for the U.S. is 65 degrees, at Deeth, NV. After a morning low of 12°, the mercury rose to 87° on 9.21.1954.

Precipitation

Dry

Arica, Chile is the world's driest place, receiving 0.03" of rain annually. It never rained at all in one 14- year period.

Death Valley is the driest place in the United States, receiving 2.33" annually (1971-2000 normals). In 1929, it did not rain at all.

Bagdad, California holds the U.S. record for continuous days without rain at 767.

The driest state in the U.S. is Nevada, with an average annual rainfall of 9.0".

Wet

The wettest locations in the world according to the most average annual rainfall are Mawsynram, India: 467.4 inches, Tutunendo, Colombia: 463.4 inches, and Mt.

Waialeale, Kauai, Hawaii: 460 inches. At Mt. Waialeale it averages more than one inch a day, on the average of 355 days a year. In India, most of the rainfall occurs in a six month period.

Greatest one minute rainfall in the world: 1.5 inches in Guadeloupe, West Indies, on Nov 26, 1970.

In the U.S.: 1.23 inches in Unionville, MD, on July 4, 1956.

Greatest one hour rainfall in the world: 15.78 inches in Muduoacaidoang, Inner Mongolia, on Aug 1, 1977.

In the U.S.: 12.0 inches in Holt, MO, in June 1947.

Greatest 24- hour rainfall in the world: 73.62 inches at La Reunion Island, Indian Ocean, on March 15- 16, 1952.

In the U.S.: 43 inches in Alvin, Texas, on July 25- 26, 1979.

Greatest one month rainfall in the world: 366 inches in Cherrapunji, India, in July 1861.

In the U.S.: 107 inches in Kukui, Hawaii, in March 1942.

Greatest one year rainfall in the world: 1,042 inches in Cherrapunji, India, in 1860- 1861.

In the U.S.: 739 inches in Kukui, Hawaii, in 1981- 1982.

Hail

Large hailstones fall at speeds faster than 100 mph.

Hailstones sometimes contain foreign matter such as pebbles, leaves, twigs, nuts, and insects.

The costliest U.S. hailstorm occurred in Denver, Colorado, on July 11, 1990. Total damage was \$625 million.

The most deadly international hailstorm on record occurred in India on April 30, 1888. This hailstorm killed 230 people at Moradabad, about 100 miles east of Delhi, and 16 others at Bareilly.

The heaviest hailstones on record reportedly weighed 2.25 pounds and killed 92 people in Gopalganj, a district of Bangladesh, on April 14, 1986.

A hailstone that fell June 22, 2003 at Aurora, NE, measured 7.0 inches in diameter and 8.75 inches in circumference. This was the largest hailstone ever recorded in the state of

Nebraska, and the largest hailstone ever documented in the U.S. and the world. Another hailstone from the same storm measured 6.5 inches in diameter, with a circumference of 17.3 inches, and weighed 1.33 pounds. The previous U.S. record was held by a Coffeyville, KS hailstone, which fell on September 3, 1970. It measured 5.7 inches in diameter, had a circumference of 17.5 inches, and weighed 1.67 pounds. A Potter, NE hailstone that fell on July 6, 1928, held the U.S. record for 42 years. It measured around 7 inches in diameter and weighed about 1.5 pounds.

A 1959 hailstorm in northwestern Kansas lasted 1.5 hours and covered an area of 54 square miles with hailstones 18 inches deep.

Hail was swept into drifts in Iowa on August 6, 1890. The hail was so deep in some protected areas that hail remained on the ground for 26 days.

Snow

Greatest 24- hour snowfall in the world: 75.8 inches at Silver Lake, Colorado, on April 14- 15, 1921.

Greatest one storm snowfall in the world: 189 inches at Mt. Shasta Ski Bowl, California, on February 13- 19, 1959.

Greatest one month snowfall in the world: 390 inches at Tamarack, California, in January 1911.

Greatest one season snowfall in the world: 1140 inches at Mt. Baker, Washington, in 1998- 99.

The largest reported snowflake on record fell at Bratsk, Siberia, in 1971 and was 12 inches across.

Wind

The highest surface wind speed of 231 mph was recorded at Mt. Washington, New Hampshire on April 12, 1934. Its average wind speed is 35 mph.

Tornadoes

75% of the world's tornadoes occur in the United States.

In 1990, there were 1126 tornadoes reported in the U.S., a record for a single year.

In the year 2005, California was hit by 27 tornadoes, while Oklahoma managed only 25.

Thunderstorms

At any given time, there are nearly 2,000 thunderstorms occurring over the planet.

The U.S. has over 100,000 thunderstorms annually.

The estimated number of global thunderstorms in a single year is about 16 million.

Hurricanes

Hurricane Andrew was the costliest hurricane on record, leaving \$25-30 billion in damage on August 24, 1992. It left a quarter of a million people homeless before it died. Only 40 lives were lost thanks to advanced warning.

The deadliest weather event in U.S. history was the Galveston Hurricane that hit Galveston, Texas, on September 8, 1900. More than 8,000 people (some estimates say nearly 12,000) lost their lives.