2013 Significant Climate Anomalies and Events

Norway

began in 1900.

Alaska

Wet conditions affected the state during 2013, resulting in the third wettest year in the 96-year record for the state.

Torrential downpours on June 19th triggered floods that caused billions of dollars in damages

Maniitsoq recorded the highest air temperature Canada's costliest natural disaster.

United States

Drought conditions improved across the southeast and central U.S., but deteriorated in the Far West during 2013. California had its driest year and Oregon # experienced its fourth driest year on record.

For the first time since 1958, two tropical

systems—Hurricane Manuel (Eastern North

Pacific) and Hurricane Ingrid (North Atlantic)—

Eastern North Pacific Hurricane Season

Above-average activity: 18 storms. 8 hurricanes.

made landfall in Mexico nearly simultaneously on September 15th. Copious rain led to flooding

and landslides.

El Niño-Southern Oscillation (ENSO) Neutral ENSO conditions persisted throughout the year.

Below-average rainfall was observed in northeastern Brazil in early 2013. Some locations were experiencing their worst drought in the past half century.

North and central Argentina were affected by a persistent heat wave during mid-December, causing several locations to observe new maximum, minimum, and mean temperature records for December. The warmth felt throughout the year contributed to 2013 ranking as the second warmest year on record, behind 2012.

Arctic Sea Ice Extent

During its melt season, the Arctic reached its sixth smallest sea ice extent on record. During its growth season, the Arctic reached its sixth lowest Had its second wettest December, maximum sea ice extent since records began in 1979.

ever observed in Greenland when temperatures soared to 25.9°C on July 30th.

France

Experienced its second coldest May on record.

Spain

In March, Spain received more than triple its monthly average precipitation—the wettest March since national records began in 1947.

Tropical Storm Chantal July 7th-10th

Maximum winds - 100 km/hr Chantal was the fastest-moving tropical cyclone observed in the deep Tropics (south of 20°N) in the Atlantic basin on record (1966-2013).

Atlantic Hurricane Season

Near-average activity: 13 storms. 2 hurricanes. For the first time since 1994 there were no major hurricanes in the basin. The number of hurricanes was the lowest since 1982.

Brazil

Heavy rains fell across parts of Brazil's southeastern states during December 2013, triggering floods and landslides. Many states had record rainfall for the month. The city of Aimores received over 400 percent of the average December rainfall. The torrential downpours resulted in 45 fatalities.

Global Tropical Cyclone Activity

Near-average activity: 92 storms 41 hurricanes/typhoons/cyclones

Experienced its warmest November & December since behind 1975, since national records

United Kingdom

Experienced its coldest March and May since 1962 and 1996, respectively. Overall, spring was the coldest since 1962. Northern parts of the nation received 20 cm or more of snow during March 22nd to 24th—the region's most significant late winter snow event since 1979.

Heavy snow fell during mid-December Snow accumulations ranged between 30 and 50 cm. This snow storm was unusually early and more in intense than usual

Temperatures on March 6th reached 43.0°C in Navrongo, the hottest temperature ever measured in Ghana for any month.

The southern African countries of Botswana, Namibia, and Angola experienced a large rainfall deficit during much of 2013, causing one of the worst droughts in 30 years.

Southwest Indian Ocean Cyclone Season

Near-average activity: 10 storms. 7 cyclones.

national records began in 1891. Overall, Russia observed its sixth warmest year on record.

China & Russia

Parts of eastern Russia and northeastern China were impacted by heavy rain in August. Nankougian Township received half its annual average total in a single day on August 16th. In Russia, more than 140 towns were affeced by their worst flooding in 120 years.

Parts of southern China experienced one of their most severe heat waves during July and August. More than 300 stations recorded daily maximum temperatures higher than 40°C. Over 40 people died due to the heat.

Cyclone Phailin

Maximum winds - 260 km/hr Phailin was the strongest storm in the North Indian basin since the Odisha Super Cyclone in 1999.

North Indian Ocean Cyclone Season

Below-average activity: 5 storms. 3 cyclones.

Australia

Australian Cyclone Season

Below-average activity:

10 storms. 4 cyclones.

Recorded its warmest year on record. The warmest December-February, 3rd warmest June-August and warmest September+ November contributed to the overall record

South Korea & Japan

Experienced their warmest summers (June-August) on record. Japan recorded a new national daily maximum temperature when temperatures rose to 41°C in Kochi Prefecture on August 12th.

Western North Pacific

Typhoon Season Above-average activity: 31 storms. 13 typhoons. 2013 was the most active season since 2004.

Typhoon Usagi September 16th-24th

Maximum winds - 260 km/hr Usagi made landfall in northern Philippines on September 21st, severely damaging the agriculture in the region and causing floods and landslides that claimed 30 lives.

-Typhoon Haiyan November 3rd_11th

Maximum winds - 315 km/hr Haiyan was the strongest tropical cyclone on record for any basin to make landfall and was also the deadliest Philippine typhoon on record, killing over 5,700 people.

Southwest Pacific Cyclone Season

Well-below-average activity: 5 storms. 4 cyclones.

New Zealand

Observed its third warmest year since national records began in 1909. Also, experienced its 4th warmest July and warmest August, resulting in the warmest June-August (winter) period.

Antarctic Sea Ice Extent

South Africa

Vioolsdrif—the hottest March temperature

recorded anywhere in Africa.

Temperatures rose to 47.3°C on March 4th in

During its melt season, the Antractic reached its second largest minimum sea ice extent. During its growth season, the Antarctic sea ice extent reached its largest sea ice extent since records began in 1979.

Cyclones Maximum Wind Legend

- 63-118 km/hr 119–153 km/hr
- 154-177 km/hr 178-209 km/hr
- 210-249 km/hr
- > 249 km/hr