January 2016 East Asia cold wave

|  |  |
| --- | --- |
| **January 2016 East Asia cold wave** | |
| [Land surface temperature anomaly over East Asia in January 2016.jpg](https://en.wikipedia.org/wiki/File:Land_surface_temperature_anomaly_over_East_Asia_in_January_2016.jpg)  Variation from average land surface temperatures between 17–24 January 2016 | |
| **Formed** | 22 January 2016 |
| **Dissipated** | 24 January 2016 |
| **Lowest temperature** | −46.8 °C (−52.2 °F) in [Inner Mongolia](https://en.wikipedia.org/wiki/Inner_Mongolia), −19 °C (−2 °F) in [Pyongyang](https://en.wikipedia.org/wiki/Pyongyang) (lowest urban temperature) |
| **Maximum snowfall or ice accretion** | 142 cm (56 in) in [Kitahiroshima](https://en.wikipedia.org/wiki/Kitahiroshima,_Hiroshima" \o "Kitahiroshima, Hiroshima), Japan |
| **Areas affected** | East Asia, Southeast Asia and South Asia |
|  | |

In late January 2016, a [cold wave](https://en.wikipedia.org/wiki/Cold_wave) struck much of East Asia, parts of mainland Southeast Asia and parts of northern South Asia, bringing record cold temperatures and snowfall to many regions. [Sleet](https://en.wikipedia.org/wiki/Rain_and_snow_mixed) was reported in [Okinawa](https://en.wikipedia.org/wiki/Okinawa) for the first time on record, and many other regions saw their coldest temperatures in decades. Snowfall and frigid weather stranded thousands of people across four countries. At least 85 people in [Taiwan](https://en.wikipedia.org/wiki/Taiwan) died from [hypothermia](https://en.wikipedia.org/wiki/Hypothermia) and [cardiac arrest](https://en.wikipedia.org/wiki/Cardiac_arrest) following a sudden drop in temperature during the weekend of January 22–24. The cold claimed a further fourteen lives in Thailand, and snowstorms resulted in six deaths across Japan. This event was driven by a fast Arctic warming that occurred within the troposphere, forcing the [Arctic Oscillation](https://en.wikipedia.org/wiki/Arctic_oscillation) to change phase rapidly from positive (in late December) to negative (in late January), facilitating the atmospheric blocking and associated Siberian high buildup.[[1]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-1)

Hong Kong[[edit](https://en.wikipedia.org/w/index.php?title=January_2016_East_Asia_cold_wave&action=edit&section=1" \o "Edit section: Hong Kong)]

On 24 January, the temperature at the [Hong Kong](https://en.wikipedia.org/wiki/Hong_Kong) [Observatory](https://en.wikipedia.org/wiki/Hong_Kong_Observatory) fell to 3.1 °C (37.6 °F),[[2]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave" \l "cite_note-2) the coldest in 59 years.[[3]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-BBC_1-3) Hundreds of people hiked up [Tai Mo Shan](https://en.wikipedia.org/wiki/Tai_Mo_Shan) for sightseeing, where temperatures fell to a record low of −6.0 °C (21.2 °F). Many were also on Tai Mo Shan participating in a 100 km marathon.[[4]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-4) 129 required rescue and 67 were hospitalised for signs of hypothermia.[[5]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-CNN_1-5)[[6]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-6) The [Fire Services Department](https://en.wikipedia.org/wiki/Hong_Kong_Fire_Services_Department) (FSD) deployed 53 fire appliances, 39 ambulances and more than 300 personnel.[[7]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-isd1-7) The [Government Flying Service](https://en.wikipedia.org/wiki/Government_Flying_Service) evacuated eight patients by helicopter from Tai Mo Shan and [Sunset Peak](https://en.wikipedia.org/wiki/Sunset_Peak,_Hong_Kong) to [Pamela Youde Nethersole Eastern Hospital](https://en.wikipedia.org/wiki/Pamela_Youde_Nethersole_Eastern_Hospital) and the airport.[[7]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-isd1-7) The FSD also responded to 130 calls at [Kowloon Peak](https://en.wikipedia.org/wiki/Kowloon_Peak).[[8]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-8) In addition, the [Civil Aid Service](https://en.wikipedia.org/wiki/Civil_Aid_Service) and [Hong Kong Police Force](https://en.wikipedia.org/wiki/Hong_Kong_Police_Force) were mobilised.[[7]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-isd1-7)

Classes were cancelled for more than 510,000 students of kindergartens, primary schools, and the [English Schools Foundation](https://en.wikipedia.org/wiki/English_Schools_Foundation) on 25 January.[[9]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-9) The closure was suggested by the [Hong Kong Professional Teachers' Union](https://en.wikipedia.org/wiki/Hong_Kong_Professional_Teachers%27_Union) and it is believed to have been the first time the [Education Bureau](https://en.wikipedia.org/wiki/Education_Bureau) has ever cancelled classes due to cold weather.[[10]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-standard1-10) In the face of some criticism the government noted that most schools do not have heat.[[11]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-11) The vice chairman of the Aided Primary School Heads' Association stated that the decision was justified as slippery roads could endanger school buses, which in Hong Kong are not fitted with winter tyres.[[10]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-standard1-10)

Japan[[edit](https://en.wikipedia.org/w/index.php?title=January_2016_East_Asia_cold_wave&action=edit&section=2" \o "Edit section: Japan)]

Snowstorms across [Japan](https://en.wikipedia.org/wiki/Japan) killed six people and injured 100 others.[[12]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-TE_1-12) More than 600 flights were disrupted across the nation. [Okinawa](https://en.wikipedia.org/wiki/Okinawa) observed [sleet](https://en.wikipedia.org/wiki/Rain_and_snow_mixed) for the first time since reliable records began.[[3]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-BBC_1-3) [Amami Ōshima](https://en.wikipedia.org/wiki/Amami_%C5%8Cshima" \o "Amami Ōshima) saw snow for the first time in 115 years. Record snowfall blanketed portions of the mainland, with [Nagasaki](https://en.wikipedia.org/wiki/Nagasaki) observing 17 cm (6.7 in).[[5]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-CNN_1-5) On [Honshu](https://en.wikipedia.org/wiki/Honshu), the main island of Japan, 142 cm (56 in) of snow was recorded at [Kitahiroshima, Hiroshima](https://en.wikipedia.org/wiki/Kitahiroshima,_Hiroshima" \o "Kitahiroshima, Hiroshima) and 59 cm (23 in) at [Suzu, Ishikawa](https://en.wikipedia.org/wiki/Suzu,_Ishikawa" \o "Suzu, Ishikawa).[[13]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-japantimes-13) Temperatures in Tokyo fell to −2.6 °C (27.3 °F), the lowest recorded since 1984.[[14]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-14) Temperatures fell to record lows across much of western Japan.[[13]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-japantimes-13) And Kamikawa in Hokkaido record -32℃. Mt. Fuji recorded -31℃. Nagano recorded -25℃.

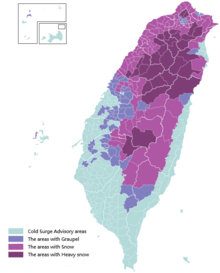
Mainland China[[edit](https://en.wikipedia.org/w/index.php?title=January_2016_East_Asia_cold_wave&action=edit&section=3" \o "Edit section: Mainland China)]

Snow and sleet were reported in parts of [Guangzhou](https://en.wikipedia.org/wiki/Guangzhou), the first time these had been observed since 1967 and 1956 respectively.[[12]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-TE_1-12)[[15]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-TG_1-15) Snow also fell on [Shenzhen](https://en.wikipedia.org/wiki/Shenzhen), a rare occurrence for the region.[[3]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-BBC_1-3) At least four people died of [carbon monoxide poisoning](https://en.wikipedia.org/wiki/Carbon_monoxide_poisoning) from a heating system in Guangzhou.[[12]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-TE_1-12) Farther north, the minimum temperature in Shanghai fell to −7.5 °C (18.5 °F), with light snow falling on the morning of 23 January.[[*citation needed*](https://en.wikipedia.org/wiki/Wikipedia:Citation_needed)] Twenty-four weather stations observed all-time record lows. Temperatures across [Inner Mongolia](https://en.wikipedia.org/wiki/Inner_Mongolia) fell to a record low of −46.8 °C (−52.2 °F).[[15]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-TG_1-15)

Korean Peninsula[[edit](https://en.wikipedia.org/w/index.php?title=January_2016_East_Asia_cold_wave&action=edit&section=4" \o "Edit section: Korean Peninsula)]

Snow and cold weather forced the cancellation of 1,200 flights on [Jejudo](https://en.wikipedia.org/wiki/Jejudo" \o "Jejudo), off the southwestern tip of the [Korean Peninsula](https://en.wikipedia.org/wiki/Korean_Peninsula), stranding approximately 90,300 passengers.[[5]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-CNN_1-5) [Ulleungdo](https://en.wikipedia.org/wiki/Ulleungdo" \o "Ulleungdo) was blanketed with 137.3 cm (54.1 in) of snow.[[16]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-16) Temperatures in [Seoul](https://en.wikipedia.org/wiki/Seoul) fell to −18 °C (0 °F),[[12]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave" \l "cite_note-TE_1-12) the lowest in 15 years.[[5]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-CNN_1-5) Many all-time low temperature records were broken in cities across the south of the country, especially on Jejudo, where [Seogwipo](https://en.wikipedia.org/wiki/Seogwipo" \o "Seogwipo) and [Seongsan](https://en.wikipedia.org/w/index.php?title=Seongsan-eup&action=edit&redlink=1" \o "Seongsan-eup (page does not exist)) recorded the lowest temperatures on record, at −6.4 °C (20.5 °F) and −6.2 °C (20.8 °F), respectively.[[*citation needed*](https://en.wikipedia.org/wiki/Wikipedia:Citation_needed)] In [North Korea](https://en.wikipedia.org/wiki/North_Korea), temperatures fell to −19 °C (−2 °F) in [Pyongyang](https://en.wikipedia.org/wiki/Pyongyang) and to −37.5 °C (−35.5 °F) in [Samjiyŏn County](https://en.wikipedia.org/wiki/Samjiyon_County" \o "Samjiyon County). 40,000 construction workers were reportedly withdrawn from construction sites.[[17]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-17)

Taiwan[[edit](https://en.wikipedia.org/w/index.php?title=January_2016_East_Asia_cold_wave&action=edit&section=5" \o "Edit section: Taiwan)]

[](https://en.wikipedia.org/wiki/File:2016_snowfalls_in_Taiwan.png)

Snowfall levels in Taiwan, January 2016

[](https://en.wikipedia.org/wiki/File:20160124%E5%A4%A7%E5%B1%AF%E5%B1%B1%E4%B8%8B%E9%9B%AA-2.jpg)

A 500-meter snowfall line on [Datun Mountain](https://en.wikipedia.org/wiki/Datun_Mountain" \o "Datun Mountain) in [Yangmingshan](https://en.wikipedia.org/wiki/Yangmingshan" \o "Yangmingshan), [Taipei](https://en.wikipedia.org/wiki/Taipei)

A surge of cold air during the weekend of January 22–24 brought temperatures as low as 4 °C (39 °F) to [Taipei](https://en.wikipedia.org/wiki/Taipei), the lowest temperatures in 44 years.[[3]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-BBC_1-3) [Yangmingshan](https://en.wikipedia.org/wiki/Yangmingshan" \o "Yangmingshan), the [Matsu Islands](https://en.wikipedia.org/wiki/Matsu_Islands), and [Kinmen](https://en.wikipedia.org/wiki/Kinmen" \o "Kinmen) all observed their coldest temperatures on record at −1.3 °C (29.7 °F), 0.3 °C (32.5 °F), and 1.3 °C (34.3 °F), respectively.[[18]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-TCP_1-18) Due to the [subtropical climate](https://en.wikipedia.org/wiki/Subtropical_climate),[[19]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave" \l "cite_note-ciataiwan-19) many homes do not have [central heating](https://en.wikipedia.org/wiki/Central_heating) or insulation, and residents struggled to cope with the temperatures. Overall, at least 85 people died from [hypothermia](https://en.wikipedia.org/wiki/Hypothermia) and cardiac arrest in Taiwan, including 66 people in Taipei and [Taoyuan](https://en.wikipedia.org/wiki/Taoyuan,_Taiwan" \o "Taoyuan, Taiwan), and another 16 in [Kaohsiung](https://en.wikipedia.org/wiki/Kaohsiung). The majority of victims died in their homes.[[3]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-BBC_1-3) The Ministry of Health subsequently claimed only three people died and 45 were admitted to hospital emergency wards.[[20]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-20) Snow accumulated to 8.9 cm (3.5 in) on [Jade Mountain](https://en.wikipedia.org/wiki/Jade_Mountain).[[12]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-TE_1-12)

The cold weather caused severe damage to crops, with losses exceeding [NT$](https://en.wikipedia.org/wiki/New_Taiwan_dollar)20 million (US$600,000) in [Miaoli County](https://en.wikipedia.org/wiki/Miaoli_County" \o "Miaoli County) alone. President [Ma Ying-jeou](https://en.wikipedia.org/wiki/Ma_Ying-jeou) declared the crop damage a national concern.[[18]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-TCP_1-18)

South and Southeast Asia[[edit](https://en.wikipedia.org/w/index.php?title=January_2016_East_Asia_cold_wave&action=edit&section=6" \o "Edit section: South and Southeast Asia)]

Temperatures in [Bangkok](https://en.wikipedia.org/wiki/Bangkok), [Thailand](https://en.wikipedia.org/wiki/Thailand) fell to 15 °C (59 °F),[[3]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-BBC_1-3) and down to 13 °C (55 °F) in [Chai Nat Province](https://en.wikipedia.org/wiki/Chai_Nat_Province).[[21]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-21) 14 people across Thailand died, many of whom were reportedly suffering from [chronic](https://en.wikipedia.org/wiki/Chronic_condition) or [respiratory diseases](https://en.wikipedia.org/wiki/Respiratory_diseases).[[22]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-bangkok-22)

In [Hanoi](https://en.wikipedia.org/wiki/Hanoi), [Vietnam](https://en.wikipedia.org/wiki/Vietnam), the lowest temperature recorded was 5 °C (41 °F), the coldest temperature measured in the city in over 20 years.[[3]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-BBC_1-3) Snow fell across the mountains of [Lào Cai Province](https://en.wikipedia.org/wiki/L%C3%A0o_Cai_Province" \o "Lào Cai Province) in [Northern Vietnam](https://en.wikipedia.org/wiki/Northern_Vietnam).[[15]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-TG_1-15)

In [Laos](https://en.wikipedia.org/wiki/Laos), temperatures in [Houaphanh Province](https://en.wikipedia.org/wiki/Houaphanh_Province" \o "Houaphanh Province) dropped to 0 °C (32 °F) and some upland areas experienced [frost](https://en.wikipedia.org/wiki/Frost), causing the death of several buffaloes in [Xam Neua District](https://en.wikipedia.org/wiki/Xam_Neua_District" \o "Xam Neua District).[[23]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-laos-23)

In the [northern islands](https://en.wikipedia.org/wiki/Batanes) of the [Philippines](https://en.wikipedia.org/wiki/Philippines) temperatures also dropped to 14 °C (57 °F), and the city of [Baguio](https://en.wikipedia.org/wiki/Baguio) tourists in the nearby regions flock because of the cold weather, temperatures dropped to 9 °C (48 °F) the coldest recorded temperature in 2016.

In [Cambodia](https://en.wikipedia.org/wiki/Cambodia), temperatures in some parts of the country dropped to 19 °C (66 °F).[*[citation needed](https://en.wikipedia.org/wiki/Wikipedia:Citation_needed" \o "Wikipedia:Citation needed)*]

In [Myanmar](https://en.wikipedia.org/wiki/Myanmar), the lowest temperature recorded was −5 °C (23 °F) in [Putao](https://en.wikipedia.org/wiki/Putao" \o "Putao). In [Yangon](https://en.wikipedia.org/wiki/Yangon), temperatures fell to 14 °C (57 °F).[[*citation needed*](https://en.wikipedia.org/wiki/Wikipedia:Citation_needed)]

In [northern](https://en.wikipedia.org/wiki/North_India) [India](https://en.wikipedia.org/wiki/India), temperatures dropped to −16.6 °C (2.1 °F) in some areas, and below 5 °C (41 °F) in [New Delhi](https://en.wikipedia.org/wiki/New_Delhi). [Fog](https://en.wikipedia.org/wiki/Fog) resulting from the low temperatures led to delays at [Indira Gandhi International Airport](https://en.wikipedia.org/wiki/Indira_Gandhi_International_Airport) and forced cancellations of train services in New Delhi.[[24]](https://en.wikipedia.org/wiki/January_2016_East_Asia_cold_wave#cite_note-24)

In [Nepal](https://en.wikipedia.org/wiki/Nepal), 700 schools were shut in [Rautahat](https://en.wikipedia.org/wiki/Rautahat" \o "Rautahat) and [Parsa](https://en.wikipedia.org/wiki/Parsa_(village)" \o "Parsa (village)) owing to thick fog and the cold, and the number of patients suffering from cold-related diseases increased in medical facilities throughout the country.