

1922 年 11 月 26 日-1923 年 2 月 28 日寒冷事件之分析

Analysis of the Cold Event from November 26 of 1922 to February 28 of 1923

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摘 要

1922 年 11 月 26 日至 1923 年 2 月 28 日連續數波寒流來襲，為臺灣百年氣象觀測史上相當強的寒秋與寒冬，其中 1922 年 11 月 27 日出現日最低溫紀錄，臺北 1.1°C 第 5 名，臺中 1.4°C 第 12 名，臺南 2.9°C 第 3 名，花蓮 8.1°C 第 21 名，臺東 9.3°C 第 12 名，並創下 11 月最低溫第 1 或第 2 的極端紀錄。1923 年 2 月 26 日亦有日最低溫紀錄，彭佳嶼 5.5°C 第 38 名及澎湖 8.8°C 第 31 名。整體而言，寒害期間使得許多測站出現多次 10°C 以下的低溫，可見天候相當冷冽，影響擴及本島與離島。但與其它寒害事件多在 2 月不同，由於受到北方大陸西伯利亞高壓南下，及日本本島附近低壓的存在與增強影響，以致 1922 年 11 月較 1923 年 2 月更寒冷，即秋末期間已出現冬季低溫，北方冷空氣提早爆發。

文史分析呈現 1922 年秋末天候冷寒，11 月 25-26 日在強烈東北季風影響下，基隆、臺北、嘉義、臺中氣溫低下，如 11 月 27 日上午 6 時，臺北測候所觀測氣溫值 1.11°C，11 月 25-27 日北臺灣結霜且出現罕見結冰現象，新竹州與臺中州降下冰雹。自 1896 年迄 1921 年冬季結霜共計 12 回，1922 年 11 月 27 日為結霜史上首次於 11 月發生霜況，北臺灣與中臺灣高山地區連日白雪。秋末低寒波及農業與養殖業，果樹、糧食作物與熱帶藥用植物在低溫下凋萎，臺南州與高雄州養殖業在來不及防範下受害甚鉅，11 月 27 日新竹州與臺中州於低溫之際罕見降下冰雹。1923 年 2 月上旬與下旬則迎來兩波寒潮，但整體視之，秋末寒潮對民生經濟影響為甚。

關鍵字：寒冷事件，日最低溫，霜害

Abstract

Several continuous waves of cold currents struck from November 26 of 1922 to February 28 of 1923, which were proven to be the bitterly cold autumn and winter in Taiwan's centenary meteorological observation history. Among them, November 27 of 1922 showed the lowest daily temperature record. Such as Taipei ranked fifth with 1.1°C, Taichung

ranked 12th with 1.4°C, Tainan ranked third with 2.9°C, Hualien ranked 21th with 8.1°C, and Taitung ranked 12th with 9.3°C, and an extreme record was set as the first or second lowest temperature in November. There was also a daily minimum temperature record on February 26 of 1923, Pengjiayu ranked 38th with 5.5°C and Penghu ranked 31th with 8.8°C. Overall, many measuring stations appeared multiple low temperature below 10°C during this cold wave, which revealed the quite cold status, and its impact has spread to the main island and off-shore island. However, distinct from other cold situation in February, November of 1922 was colder than February of 1923, because of the southward movement of the Siberian high atmospheric pressure in the northern continent and the existence and enhancement of low pressure near the main island of Japan, resulting in winter low temperature during late autumn, thus the north cold air broke out earlier.

Literary and historical analysis showed that the weather was frigid in the late autumn of 1922. Under the influence of the strong northeast monsoon from November 25 to 26, temperature in Keelung, Taipei, Chiayi, and Taichung were low. Such as the atmospheric temperature observed by the Taipei Weather Station on November 27 at 6 a.m. was 1.11°C, rare frosting and freezing phenomena occurred in northern Taiwan from November 25 to 27, and hail fell in Hsinchu and Taichung province. There were 12 frosts in winter from 1896 to 1921, November 27 of 1922 was the first frost in November in the frosting history. Snow fell constantly in the alpine regions of northern Taiwan and central Taiwan. The low cold in late autumn affected the agriculture and aquaculture, such as fruit trees, crops and tropical medicinal plants withered. The aquaculture in Tainan and Kaohsiung province suffered greatly without precautions. Hsinchu and Taichung province fell Hail rarely on November 27. There were two waves of cold in early and late February of 1923, the impact of the cold on people's livelihood and economy in late autumn was great.

Keywords: cold event, daily minimum temperature, frost damage