1926年12月-1927年3月低溫事件

凃函君¹ 談珮華¹ 孟憲康¹ 陳家琦² 黃文亭²

國立嘉義大學 應用歷史學系¹ 中央氣象局 臺灣南區氣象中心²

摘 要

本研究使用日治時期天氣圖、測站資料、報紙與私人日記,來分析1926年12月8日迄1927年3 月16日的低溫天氣現象,以及寒流來襲對人文經濟的影響。研究期間本島測站的最冷月是1926 年12月,臺北、臺中、臺南、花蓮及臺東都創下12月最低溫百年觀測史上前1-5名的極端紀錄。 臺北日最低溫資料顯示,寒害期間10℃以下低溫天氣共27天,七波寒流來襲,及每波寒流影 響天數最多可達9天。此寒害期間多處於北極震盪負相位和反聖嬰時期,有利於個案寒流強度 的增加。

文史資料亦顯示數波低溫導致平地多處結霜與結冰。11月-12月期間新高山、東巒大山、次高 山、李崠山、阿里山、卑南主山、大屯山與竹子山皆白雪皚白,3月下旬以新高山為中心的高 山降下大雪,能高富士岳積雪8尺,誠屬罕見,總督府攝影班登山拍攝能高郡大雪盛況。1926 年寒流比往年更早來襲,寒害衝擊農業與養殖漁業,低溫導致茶芽生長不佳,北臺灣茶季於 11月提早結束,茶葉價格上揚。北臺灣因寒雨時間久,早稻播種時程較往年推遲,稻農需數度 補植秧苗,全臺也陸續傳出地瓜與落花生等莊稼受凍。養殖漁業方面,臺南州與高雄州魚苗 大量凍斃,如臺南州新豐郡永寧庄塭養虱目魚苗多達12萬6,000尾浮肚。為強化人民的禦寒能 力,1927年1月4日迄10日間,臺北州理蕃課防寒用品供給班前往羅東郡與蘇澳郡販售原住民 禦寒物品,足見該年冬春低寒。

關鍵字:氣象災害,歷史文獻,低溫,寒害,社會影響

Cold surges during the period from December 1926 to March 1927

Abstract

This study is aimed to investigate the meteorological characteristics of the cold period from 8 December 1926 to 16 March 1927 and its impact on Taiwan based on historical weather maps, station data, government and newspaper reports. The coldest month was December 1926, which had set many records of low temperature for each station among December observations for the past 100 years such as Taipei, Taichung, Tainan, Hualien and Taitung (ranked 1st to 5th). During the cold period, daily low temperature data of Taipei showed that there were totally 27 days with temperatures below 10°C, seven times of cold surges, and mostly 9 days for one cold surge. Negative phases of Arctic Oscillation and El Niño favored the enhancement of cold surge intensity.

Historical documents showed that the low temperature caused frost and ice over plain areas. Many mountains snowed during November-December. In late March, areas around Mt. Shinkao had heavy snowfall and Mt. Fuji rarely received about eight feet of snow. The photography team of the Governor-General climbed mountain to shoot the pictures of heavy snow of Nankao County. Cold surges hit earlier than usual in 1926 and greatly affected the agriculture and aquaculture. The tea buds were in poor growth and tea season in northern Taiwan ended early in November, hence tea leaves jumped in price. The sowing date of early rice delayed and rice farmers needed to replant seedlings several times. Crops such as sweet potatoes and peanuts have been frozen. A large number of fishes in Tainan and Kaohsiung froze to death, such as 126,000 milkfishes in Yongning Village, Xinfeng County of Tainan. To increase people's ability to defend against the cold, the Aborigine Division of cold-proof supply team went to Luodong and Suao County from January 4th to 10th of 1927 to sell cold-proof products, which confirmed the obvious low temperature of winter and spring.

Key word: meteorological disaster, historical document, low temperature, cold surge, social impact