極端氣候災害情境推估與調適路徑評估方法

Disaster Scenario Projection for Extreme climate and Adaptation Path Evaluation

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摘要

因應氣候變遷，我國政府積極推動「溫管法」、「災害防救基本計畫」及「臺灣永續發展目標」等相關工作以資因應。國家災害防救科技中心長期發展氣候變遷災害風險評估技術，提供相關技術、知識及服務需求。本年度完成「氣候變遷推估大數據分析與防災應用」、「調適個案分析與調適路徑研擬」與「環境變遷整合模式應用分析」等 3 個主要成果。其中，透過氣候變遷大數據完成全臺與各縣市共 2,376 套淹水災害風險圖；並召開 5 場風險圖應用討論會議，以利此成果於下一階段各縣市國土計畫通盤檢討時可進一步使用。另以 102-106 年度「國家氣候變遷調適行動方案」中災害領域之調適行動計畫為對象，盤點具直接氣候變遷關聯性之計畫共計 23 項。配合出席 3 次環保署所舉辦的國家氣候變遷調適會議。最後，完成土地發展模式與二維淹水模式之整合，完整量化單就土地開發及考量環境變遷所帶來的淹水衝擊評估結果。希冀能透過此成果，有效提升我國氣候變遷調適之量能。

關鍵詞：氣候變遷、大數據、減災、調適、整合模型

Abstract

Taiwan government actively promotes "Greenhouse Gas Reduction and Management Act", "Plans of Disaster Prevention and Protection", and "Taiwan Sustainable Development Goals" to response the climate change. National Science and Technology Center for Disaster Reduction (NCDR) long-term develops disaster assessment method and provides related technologies, knowledge, and service in climate change. Three major achievements were completed: "Big Data Analysis and Disaster Prevention Application in Climate Change", "Climate Change Adaptation Case and Adaptation Path Study", and "Flood Simulation Application in Environmental Change Integrated Model". Among them, a total of 2,376 sets of flood hazard risk maps for the whole Taiwan and region were completed through climate change big data set; and 5 risk map application meetings were held to facilitate the overall review of Region Spatial Planning Act can be used in the next stage. In

addition, checking the "National Climate Change Adaptation Plan" as a target of the disaster field from 2012 to 2016, these have a total of 23 projects which are directly related to climate change. Cooperating to attend three times the national climate change adaptation conferences organized by the Environmental Protection Administration. Finally, the land development model and two-dimensional flooding model were integrated successfully, and complete the inundation impact assessment under environmental change scenario. It is hope through the results can effectively enhance the capability of climate change adaptation in Taiwan.

Keywords：climate change, big data, disaster risk reduction, adaptation, integrated model.