

中文摘要：

深度學習技術可用於自動判釋航攝影像中的資訊，例如用辨別農田裡的農作物。儘管它是前瞻的技術，但在水稻語意分割或產生高精準作物標註資料等仍然具有挑戰，面對這個任務，本團隊經過三年的水稻判釋研究，已提出幾個使用深度學習技術的水稻自動判釋模型，為了讓這些模型在未來能更方便於使用者操作和應用，甚至是完成更多種作物的判釋，本提案將提出兩個目標：首先，使用航照影像用於建置水稻辨識模型之落地計畫；其次，建立可區分三種不同區域作物的判釋模組。因此，今年度將完成部署水稻模型在國網中心大數據運算平台的任務，並也會延續目前團隊的深度學習技術，增加模型能判釋作物的種類。

英文摘要：

Deep learning techniques can be used to automatically interpret information from aerial images, such as identifying crops in a field. Although it is a forward-looking technology, it still faces challenges in rice semantic segmentation or generating high-precision crop annotation data. Faced with this task, our team has proposed several automatic rice interpretation models with deep learning techniques after three years of rice interpretation research. In order to make these models more convenient for users to operate and apply in the future, and even to complete the interpretation of more crops, this proposal will propose two goals. First, the productization of the rice parcels interpretation model. Second, the development of the interpretation model for three different regional crops. Therefore, this year, the task of deploying the rice interpretation model on the big data computing platform of TWCC will be completed, and the current team's deep learning technique will be continued to increase the types of crops that the model can interpret.