

Leveraging Automation for Efficient Flood Mapping: Generating Mapping Outputs

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SUMMARY

In this presentation, we explore an automation to generate detailed flood mapping outputs from TUFLOW simulations for Melbourne Water. The integration of FME with TUFLOW enhances the efficiency and accuracy of flood risk assessments, providing critical insights for urban planning and water management. Flood modelling is a topic of interest in the media in Melbourne since the Maribyrnong Flood Event in 2022. □ We will delve into the technical workflow, highlighting how FME automates the extraction, transformation, and loading (ETL) of TUFLOW data into user-friendly flood maps. Key challenges: □ • Large complex raw flood outputs □ • Prescriptive methodology for deriving outputs from TUFLOW outputs □ • Interdisciplinary Collaboration: Effective flood modelling often requires collaboration between hydrologists, flood engineers, GIS specialists, and other experts. □ This presentation presents the automated process to enhance the efficiency and accuracy of flood mapping projects, supporting Melbourne Water's efforts to better communicate flood risks and protect the community. □