

LoopConverter: A Tool to Standardise Geological Data for 3D Geological Modelling

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The Loop platform, like any modelling system, requires input datasets to be correctly formatted to process the data and perform the necessary computations to deconstruct geological data and generate 3d geological models. Geological data integrated in GIS databases are distributed in non-standardised datasets. Manually formatting and correcting GIS datasets from different sources becomes time-consuming, especially when dealing with regional geological maps and data. The LoopConverter Python package is designed to solve this problem by allowing the implementation of data converters that would enable automated formatting of any GIS database. We will discuss how to implement a converter to prepare a dataset for ingestion by Map2Loop, using the Henbury geological map from the Northern Territory as an example. Our example showcases the complete Loop workflow that allows increased automation in 3d modelling, subsequently rapid hypothesis testing by generating 3d models while avoiding time-consuming manual data formatting.