



Large Language Model Agent to interact with Earth Observation

Final Report

Study

Open Discovery Ideas Channel

Activity page: <https://activities.esa.int/4000142408>

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Activity summary:

In this study we explore the potential of Large Language Models (LLMs) to interact with Earth Observation (EO) data with some promising first results. We source a first testing set for the BIG Bench framework. With 20+ subtasks, we aim for a large variety of questions which are currently beyond the capabilities of LLM and other models. Further, we implement a methodology to test proprietary state of the art models where token distribution may not be available. Finally, we set a new baseline performance with our geospatial intelligent agent GIA, which improves LLMs ability to reason, and enables them to use tools. This activity serves as a first step towards measuring the capabilities of LLM in an EO setting, establishing various performance metrics and setting a baseline.