

KNOWDIVE



KGE - Knowledge Graph Engineering

Trentino Weather

KGE 2023 Project Proposal

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1 Project Objective

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Project Objective

- This project considers the **Trentino** region as the environment in which data about **various weather facilities and their forecasts** should be integrated by building a **Knowledge Graph (KG)**.
- Such kind of data can encode information about *meteorological stations, automatic weather stations, temperature, precipitation, radiation* and other information supporting tourism in the region.
- The aim of the project is to create a KG which can provide information about the Trentino's weather observation sites and insight into its general weather. This objective will be achieved through the **iTelos methodology** which facilitates creation of a weather Knowledge Graph (KG) integrating data from different data sources.

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Purpose

The final KG can be used to provide a general purpose service helping the users (for example tourists/residents) to find information about the various weather observation sites and weather forecast in different parts of the region of Trentino. This purpose, for instance, can be described in the form of the following user request:

"A service which help the users to know about the various weather observation sites and weather forecast in different parts of the region of Trentino."

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Data Resources

The data resources provided to achieve the project's objective are:

- **Weather @ Trentino :**
[Trentino Weather](#)
- **Meteo Stations @ Trentino :**
[Meteorological Stations of Trentino](#)
- **Automatic Weather Stations @ Trentino :**
[Automatic Weather Stations of Trentino](#)
- **Forecast Data @ Trentino :**
[Weather Forecast of Trentino](#)

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Schema Resources

The reference schemas provided to achieve the project's objective are:

- **Home Weather Ontology (for modelling weather conditions) :**
[HW Ontology](#)
- **iCal (for modelling time) :**
[iCal](#)
- **INSPIRE (for modelling space) :**
[INSPIRE](#)
- **schema.org (for modelling common concepts) :**
[schema.org](#)
- **DCAT2 (for modelling metadata) :**
[DCAT 2](#)



KDI Knowledge and Data Integration



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**Trentino
Weather**