



AEMIX: Semantic Verification of Weather Forecasts on the Web



Angel Luis Garrido, María G. Buey, Gema Muñoz
 IIS Department, University of Zaragoza (Spain)
José Luis Casado Rubio
 AEMET - Spanish Meteorological Service, Madrid (Spain)



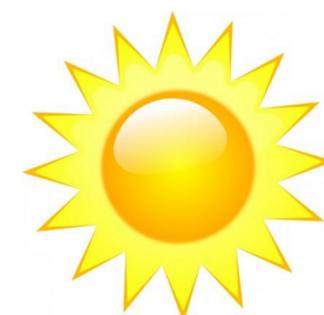
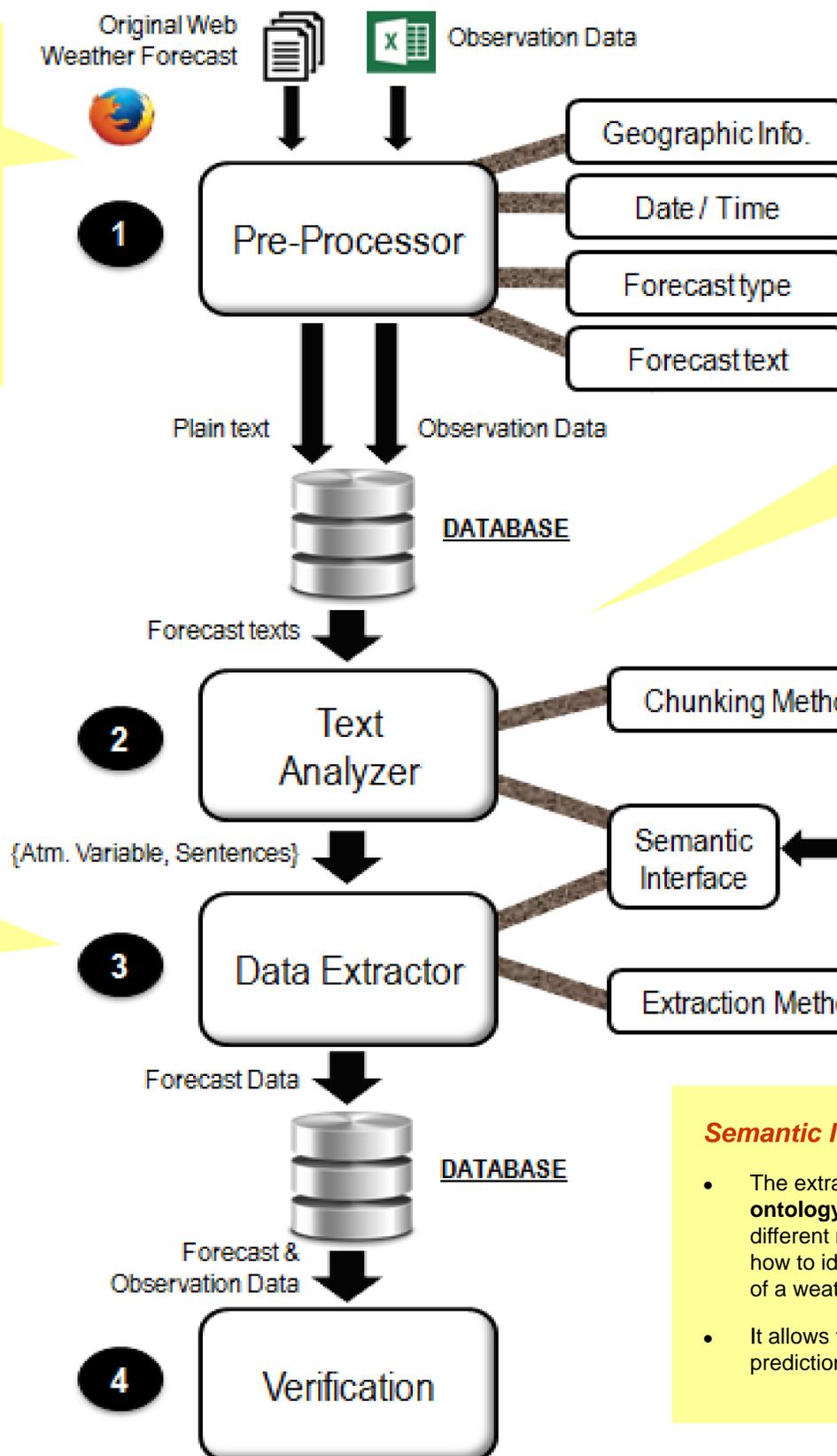
Problem

- Verification of weather forecast: worded prediction against observational data from meteorological stations.
- Verifying forecasts is still performed manually by people, which is expensive, time-consuming, and subjected to human errors.



Information Extraction

- The three most relevant variables to verify are the **temperature**, the **precipitation** and the **wind**.
- Using the knowledge of the atmospheric variable features depicted on the **ontology**, the system identifies the sentence format, and consequently, it uses **regular expressions** to recover the accurate data.



Forecast Analysis

- The forecasts are downloaded from the web. The special format is processed in order to **clean the texts**.
- The system **identifies** the different possible meteorological **variables**.
- AEMIX uses the most suitable method for **cutting off the texts**.



Semantic Information

- The extraction process is guided by an **ontology** containing the **knowledge** about different **meteorological variables**, and how to identify and extract them in the text of a weather forecast.
- It allows to address different types of predictions with **minimal effort**.

References

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Contact

Angel Luis Garrido - garrido@unizar.es

Research group SID - <http://sid.cps.unizar.es>

The GENIE Project - <http://sid.cps.unizar.es/SEMANTICWEB/GENIE>

