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Abstract:

In this document, we explore aspects of the different distribution families exhibited by the data for the three use-case providers. Based on these findings and the expert knowledge provided, we present preliminary use-case-tailored model classes that address the application scenarios identified in Deliverable 1.2. Building on the commonalties of these specific model classes, we introduce the AMIDST modelling framework, which defines a probabilistic model class intended to support data-driven learning and integration of potential domain knowledge.

Keyword list: AMIDST modelling framework, application scenarios, preliminary models, data analysis, Bayesian networks, dynamic Bayesian networks, conditional linear Gaussian models.