

## **Modified modeling metadata elements**

Intended to be the minimal description necessary for Data Discovery

1. Title
2. Modeling ID = Institution running model + model name(s) + version(s) + run ID
3. Modeling scope = Regulatory/Research + Directive (if applic) + Regulatory Authority Codelist (if applic)
4. Modeling method
  - a. Originator
  - b. Model Name(s)
  - c. Model Type(s) [specific tags to be determined from a managed vocabulary: e.g., Regional, Global, Local, AQ, Climate, Met, Emissions, Transport, ...]
  - d. Simulation Type(s) [also need managed vocabulary, e.g. Forecast, Hindcast, Analysis, Off-line, On-line, ...] – type specific information also needed, e.g. forecast length, ...
  - e. Model Version(s)
  - f. Assimilated Observational Data [Define details...]
  - g. Link(s) to Documentation
5. Model **output** time period
  - a. Start time
  - b. End time
  - c. Model output frequency (highest output resolution, e.g. hourly)
  - d. Model output frequency type (e.g. average or instantaneous)
  - e. Dataset aggregation period (e.g. monthly, ...)
  - f. Number of time periods...[FINISH this later]
6. Model **output** spatial characterization
  - a. Geographic Bounding Box = lat/lon coordinates of output domain boundaries
  - b. Geospatial Bounding Box = 3D coordinates of output domain boundaries
  - c. Coordinate Reference System (e.g., horizontal reference = EPSG, OGC, ...; vertical reference = pressure, etc)
  - d. Horizontal resolution
  - e. Vertical resolution
  - f. Processing spatial characterization [FINISH later]