



Training on Best Modeling Practices and Technical Aspects of Modeling



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Office of the Science Advisor**



Training Programs

- Regional Seminars
 - Webinars hosted by Regional Offices
 - “TMDL Temperature Modeling (*R10*)”
- Workshops
 - Day-long at Regional Offices
 - ‘Modeling 101’
- Online Training Modules



Web Modules

Purpose:

- Provide another outlet for the implementation of best practices suggested by the *CREM Guidance Document*
- Develop a simplified and comprehensive resource for the best modeling practices

Format:

- Online and interactive
- Self-guided lessons are stand-alone
- Links/Resources provided for further explanation on technical subjects
- Keywords are provided for each module and defined within
- EPA Web Design Template 4 and 3.2.1



Web Modules

- Environmental Modeling 101
- The Model Life-cycle
- Best Modeling Practices: Development
- Best Modeling Practices: Evaluation
- Best Modeling Practices: Application
- Sensitivity and Uncertainty Analyses

- Integrated Modeling 101
- Legal Aspects of Environmental Modeling
- QA of the Modeling Life-cycle
- Others?

GENERAL



SPECIFIC





QA for Modeling Life-cycle Module

- Discuss findings and recommendations of CREM report on QA for modeling
- Provide guidance on QAPP development
- Define graded approaches to model QA
- Provide insight into dynamic QA practices throughout the life-cycle of a model



Processing

- Individual modules are structured linearly
- Tangents
 - Connections to other modules
 - Additional Resources
 - Case Studies
 - Modeling Caveats
 - Roll-over Definitions
 - Clarifications



Additional Resources

Guidance for Quality Assurance Project Plans for Modeling QA/G-5M. 2002. EPA/240/R-02/007. Office of Environmental Information, US Environmental Protection Agency.
<http://www.epa.gov/quality/qs-docs/g5m-final.pdf>



Additional Web Resource:

For a continuation of the model evaluation topic see:

Best Modeling Practices: Evaluation

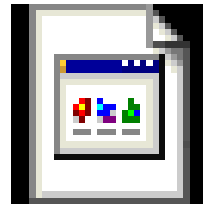


A Modeling Caveat

The EPA recommends using the terms 'precision' and 'bias,' rather than 'accuracy,' to convey the information usually associated with accuracy (the closeness of a measured or computed value to its 'true' value)



Demonstration



Modeling CREM US EPA.mht



Timeline

- Internal review (CREM Members)
- Internal usability testing
- Launch completed modules Fall 2010

