

**Texas A & M University and U.S. Bureau of Reclamation
Hydrologic Modeling Inventory
Model Description Form
July 1999**

Name of Model:

Integrated Hydro Meteorological Model (IHMM)

Model Type:

Spatially-lumped, process-based, uncertainty-explicit

Model Objective(s):

Ensemble forecasting of basin rainfall and outflow

Agency and Office:

Hydrologic Research Center (HRC)

Technical Contact and Address:

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Model Structure or Mathematical Basis:

Components for rainfall prediction, soil moisture estimation, channel flow prediction, real-time updating from rain and flow, ensemble forecasting

Model Parameters:

Physically meaningful

Spatial Scale Employed in the Model:

10km² - 50km²

Temporal Scale Employed in the Model:

1 hr - 12 hours

Input Data Requirements:

Convective available potential energy, surface mixing ratio, surface relative humidity, potential ET

Computer Requirements:

PC Windows, LINUX and Workstation UNIX

Model Output:

Ensemble forecasts of basin flow and rain for multiple lead times

Parameter Estimation / Model Calibration:

From physical data and refinement by interactive calibration

Model Testing and Verification:

New model, not tested yet with real-world data

Model Sensitivity:

As described in Chapter in this book

Model Reliability:

As described in Chapter in this book

Model Application / Case Studies:

Flash-flood prediction

Documentation:

Chapter in this book and reference therein

Other Comments: