Product Generator in CHPS

Hank Herr

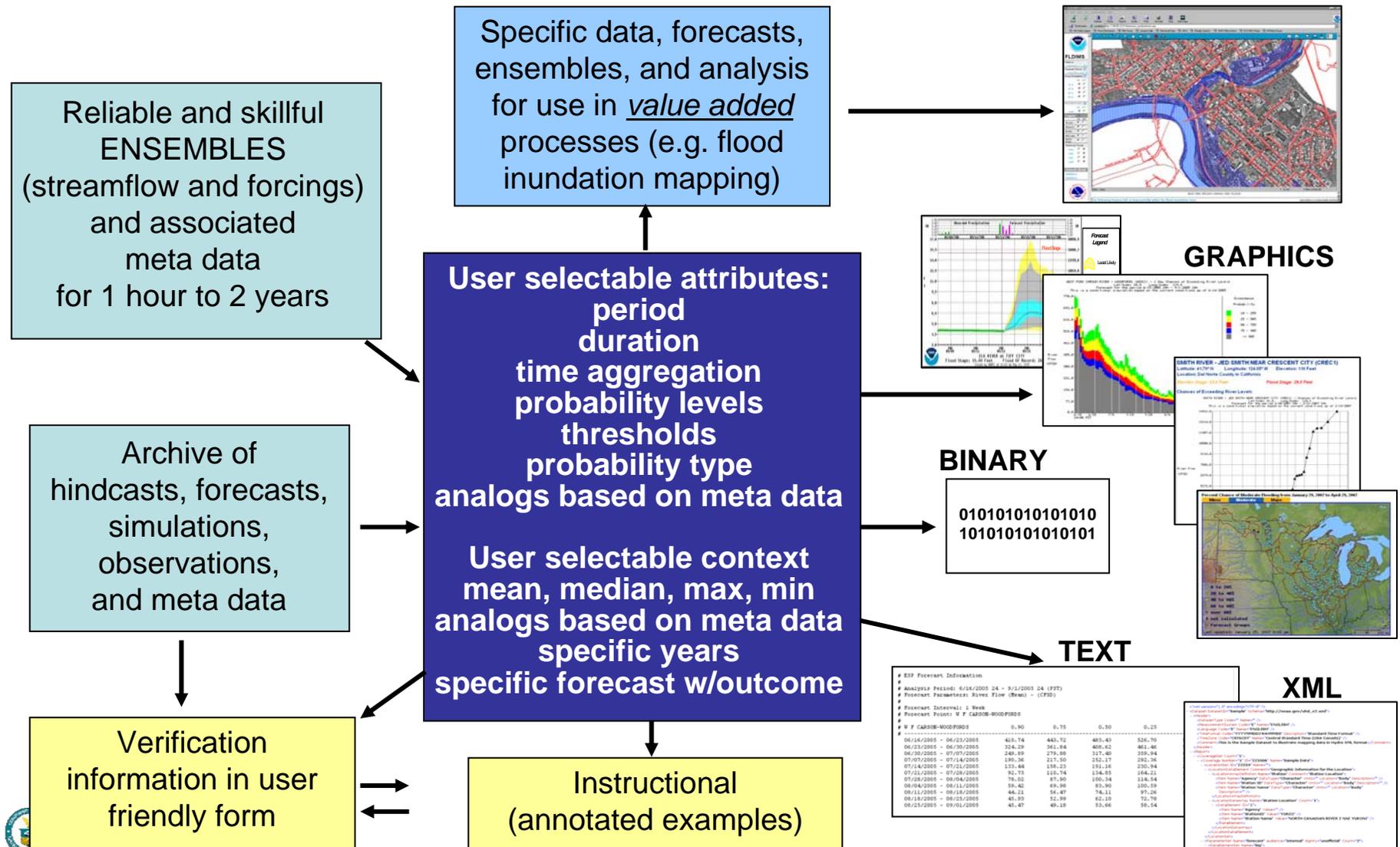*2nd RFC Verification Workshop, November 18-20 2008*

Ensemble Product Generator (EPG)

- EPG will have
  - Product generation subsystem
  - Batch interface
  - Ensemble user interface
  - Web interface

- EPG will
  - perform statistical analysis of ensembles
  - generate products/information for customers/partners
  - generate information/visualization for internal decision support (e.g. flood forecasting)
  - integrate with verification system to provide context information (e.g. reliability relative to specific product requested/generated)
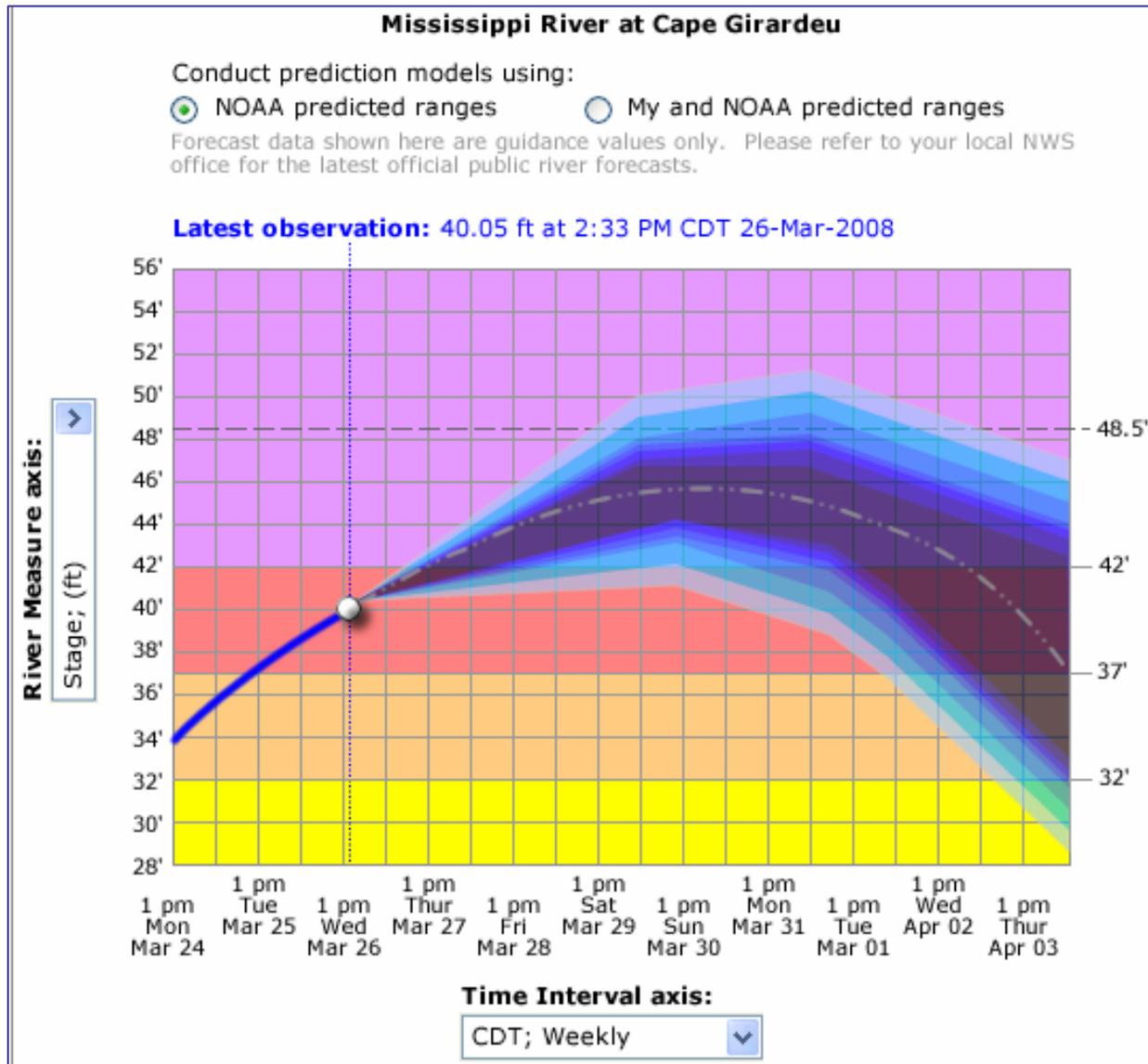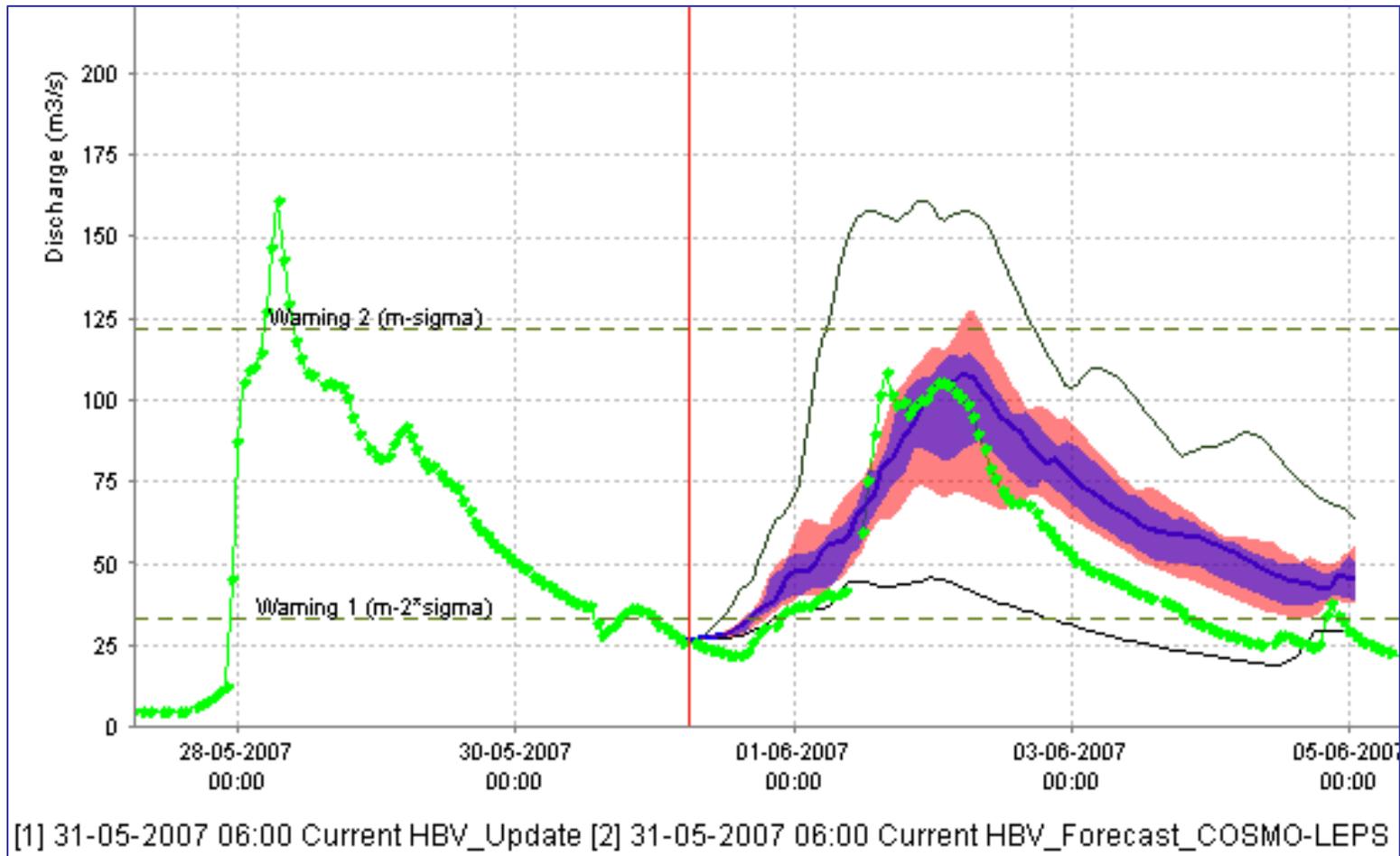
Ensemble Product Generator

- EPG Inputs: single-valued forecasts/hindcasts, simulations, ensemble forecasts/ hindcasts, observations, model states, rating curves, metadata…
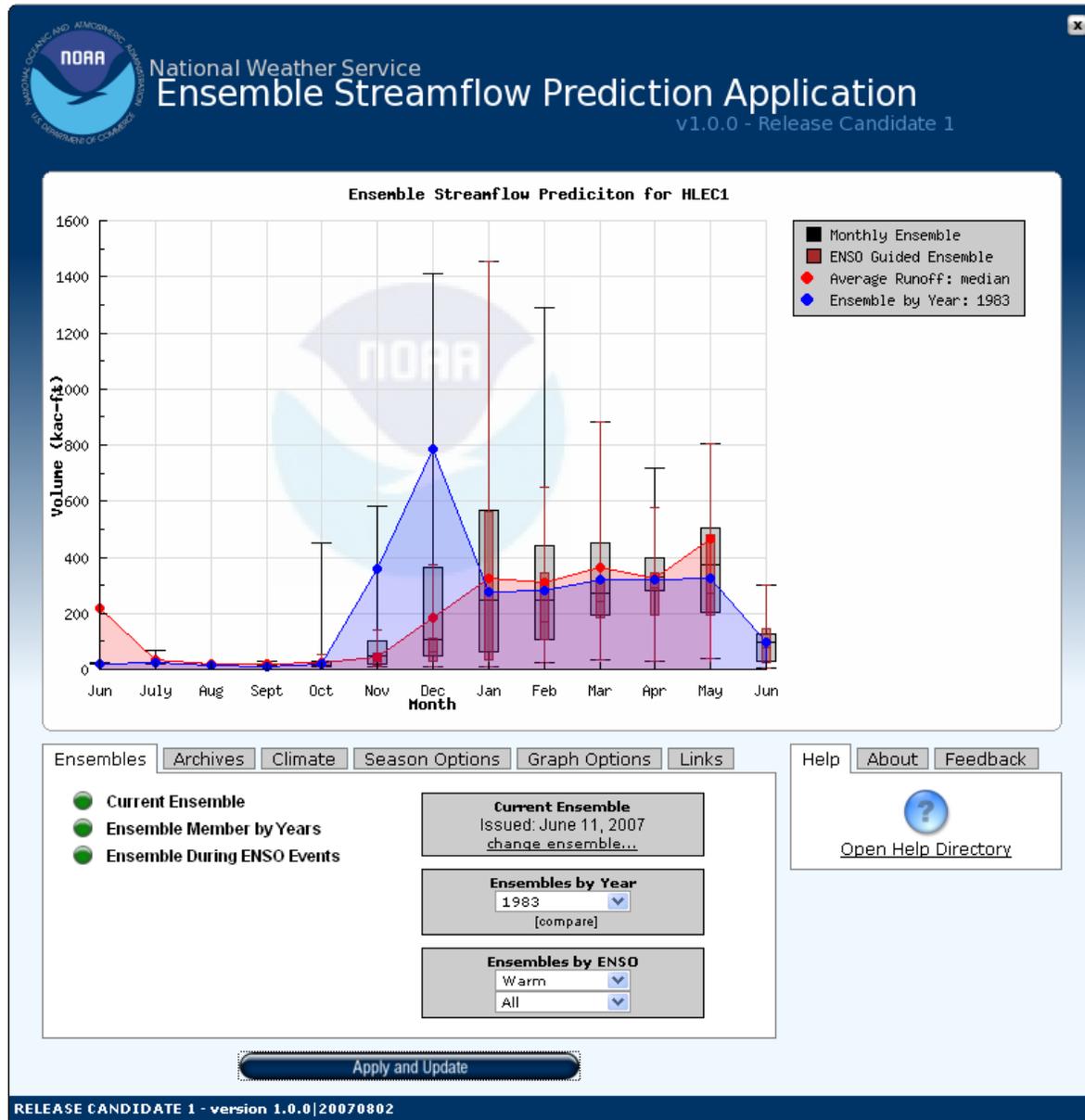
Reliable and skillful ENSEMBLES (streamflow and forcings) and associated meta data for 1 hour to 2 years

Archive of hindcasts, forecasts, simulations, observations, and meta data

Specific data, forecasts, ensembles, and analysis for use in *value added* processes (e.g. flood inundation mapping)

User selectable attributes:
period
duration
time aggregation
probability levels
thresholds
probability type
analogs based on meta data

User selectable context
mean, median, max, min
analogs based on meta data
specific years
specific forecast w/outcome

Verification information in user friendly form

Instructional (annotated examples)

GRAPHICS

BINARY

010101010101010
101010101010101

TEXT

XML

3

EPG Outputs: Examples

EPG Outputs: Examples

[1] 31-05-2007 06:00 Current HBV_Update [2] 31-05-2007 06:00 Current HBV_Forecast_COSMO-LEPS

EPG Outputs: Examples

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