

VI.2A OPERATIONAL FORECAST SYSTEM GLOSSARY OF TERMS

This glossary contains definitions of some of the terms used in the OFS.

The letters in parentheses following some of the terms indicate the portion of the systems that the term pertains to:

- o FC - Forecast Component
- o HCL - Hydrologic Command Language
- o RES-SNGL - Single Reservoir Operation

Argument (HCL)

A mechanism to get information more complicated than integer values into a Function. Arguments are always associated with Techniques. Arguments can take on real, integer, logical, character, and date values. For example, a character Argument is used with the FGROUP Technique in the FCEXEC Function to specify which Forecast Group is to be run.

Carryover (FC)

The state variables (describe current conditions) of a model or procedure that need to be saved so that a subsequent run can start with no lack of continuity.

Carryover Group (FC)

A group of one or more regular Forecast Groups in a preassigned computational order. A regular Forecast Group can only belong to one Carryover Group. All forecast groups in a Carryover Group will have carryover stored for the same dates because Carryover Group can only be saved when a carryover group is run.

Forecast Group - Regular (FC)

A group of Segments in a preassigned computational order. A Segment can only belong to one regular forecast group.

Forecast Group - Special (FC)

A forecast group that cannot be assigned to a Carryover Group. A Segment may be part of any number of special forecast groups.

Function (HCL)

Computer code that it is linked to the Hydrologic Command Language. Functions can be preprocessors, forecast procedures, extended streamflow prediction techniques or utility routines. All input to a Function is provided through HCL.

Hydrologic Command Language (HCL)

The user-oriented language through which forecasters control the Operational Forecast Program (FCST). HCL allows all of the Functions in the FCST program to be run with a common set of commands. Also see Function, Technique, Argument and MOD.

MOD (HCL)

MODs are instructions that are used to make run-time modifications to

values within specific Functions. MODs are entered through HCL and then passed to specific Functions or computational groups within a Function. MODs can be used to input special data, change data values, change state variables or in a few cases change parameters.

Non-Universal (HCL)

A type of Technique whose value can vary from one computational group within a Function to another.

Operation (FC)

A portion of the forecast computations that uses input time series data and produces either output time series or displays. Operations can be:

- o hydrologic or hydraulic models (e.g., snow, soil-moisture accounting, reservoir simulation and channel routing)
- o updating or adjustment techniques
- o displays (plots, tabular, statistics, etc.)
- o time series manipulation algorithms (e.g., add, subtract, weight, and change time interval)

Operations Table (FC)

A list of Operations in computational sequence used to produce a certain product, such as forecast guidance at a point on a river.

Preprocessor Data Base

A data base containing station and grid network data. The Preprocessor Data Base contains mostly observed data, but also forecast and some crudely processed data are held in the files.

Preprocessor Parametric Data Base

A data base containing parametric data for the Preprocessor Functions.

Procedure (HCL)

A named set of ordered HCL commands that can be executed by specifying the procedure name.

Processed Data Base

A data base containing processed data values in time series form.

Scheme (RES-SNGL)

A computational method for producing discharge, pool elevation, and storage contents at the end of a computational period for a particular type of reservoir regulation.

Segment (FC)

A group of Operations performed as a unit. The Operations Table is part of the Segment definition along with information on time series needed and parametric data for each Operation. In many cases a Segment will contain the computations needed to compute flow at a specific point on a river, but can contain any group of Operations.

Technique (HCL)

An indicator within HCL that allows the user to turn options on or

off within a Function. Techniques can also be used to set an integer value within a Function (such as the unit number for printer display).

Universal (HCL)

A type of Technique that applies to an entire Function.

Utility (RES-SNGL)

A computational aid to assist in controlling the simulation of a reservoir's regulating plan. A utility does not produce simulation results at the end of a computational period.