VI.5.3C-FCEXEC-TECH   PROGRAM FCST FUNCTION FCEXEC HCL TECHNIQUES

This Section describes the Hydrologic Command Language (HCL)
Techniques used by the Operational Forecast Program Function FCEXEC.

A detailed description of each Technique is in Section VI.5.3D
[Hyperlink].

The Techniques used by Function FCEXEC can be categorized as those:
    o often used
    o not often used
    o not used for forecasting

    Technique Notes   Description

    Techniques Often Used

    Techniques to specify the type of run (specify only one): 3/

    CGROUP   1/ 2/   Specifies that run is a Carryover Group run and
                        sets the name of the Carryover Group

    FGROUP   1/ 2/   Specifies that run is a Forecast Group run and
                        sets the name of Forecast Group

    LISTFGS   2/   Specifies that run will be made for several
                        Forecast Groups and sets the list of Forecast
                        Groups to be run

    ONESEG   1/ 2/   Specifies that run is a one Segment run and sets
                        name of Segment to be run

    LISTSEGS   2/   Specifies that run will be made for several
                        Segments and sets the list of Segments to be run

    Techniques to specify the run period:

    STARTRUN   1/ 2/   Sets the time for start of run

    ENDRUN   1/ 2/   Sets the time for end of run

    LSTCMPDY   1/ 2/   Sets the time for end of computational (observed
                        data) period

    LSTALLOW   1/ 2/   Sets the future time limit for the Technique
                        LSTCMPDY

    Carryover save Techniques:

    NUMCOSAV   2/   Sets dates for saving carryover

    SAVETDY   2/   Sets whether or not to save carryover for TODAY

    Display control Techniques:

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Technique  Notes   Description

PLOTHYD    1/ 2/   Sets whether to display hydrograph plots

PRINTOUT   1/ 2/   Sets whether display any printer output

PRINTSMA   1/ 2/   Sets whether to display output from rainfall-
                   runoff Operations

PRINTSNW   1/ 2/   Sets whether to display output from the snow
                   Operations

PRTDAYS    2/      Controls the days to be displayed for the
                   LIST-MSP Operation

PRTRCI     2/      Sets whether to display optional Rating Curve
                   information on the PLOT-TUL Operation output

PRTRO      2/      Sets the display criteria for the LIST-MSP
                   Operation

TABLES     1/ 2/   Sets whether to display tabular output

Process control Techniques:

ASSIM      2/      Sets whether Assimilator (ASSIM) Operations are
                   to be run

FFG        2/      Sets whether to compute Flash Flood Guidance
                   information

SACSNOW    2/      Sets whether or not the states of the SAC-SMA and
                   SNOW-17 Operations should be output to files
```

Techniques Not Often Used

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Techniques to control seasonal computations:

SNOW       2/      Sets whether to perform snow computations

FROST      2/      Sets whether to perform frozen ground
                   computations

UPSC       2/      Sets whether to use observed areal extent of snow
                   cover data to update the snow Operations

UPWE       2/      Sets whether to use observed snow water
                   equivalent data to update the snow Operations

Techniques to control timing and data units for run time
modifications:

MODTZC     1/ 2/   Sets the time zone to be used when a date is
                   entered with an hour but no time zone code on MOD
                   commands
```

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     Technique  Notes   Description

  MODUNITS   1/ 2/   Sets the units of data input to most MOD commands

  MODSACUN   2/      Sets the units of data input to the MOD commands
                     that change parameters or carryover for soil
                     moisture accounting Operations

  MODAPIUN   2/      Sets the units of data input to the MOD commands
                     that change parameters or carryover for the API
                     Operations

  Techniques to control the printing of warning messages:

  MODWARN    2/      Sets whether to print warning messages from the
                     MOD subroutines

  RWWARN     2/      Sets whether to print warning messages from
                     read/write subroutines

  General control Techniques:

  FUTPRECP   2/      Sets whether to set future precipitation to zero
                     or read from PDB

  METRIC     1/ 2/   Sets the English/Metric option for output

  NOUTDS     1/ 2/   Sets if output should be in daylight or standard
                     time

  NOUTZ      1/ 2/   Sets the time zone number for output

  PAGESIZE   2/      Sets the number of lines printed per page for
                     LIST-MSP Operation
```

Techniques Not Used for Forecasting

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  Debug control Techniques:

  FCDEBUG    2/      Sets the debug options for Forecast Component
                     Operation routines

  SYSDEBUG   2/      Sets the debug options for Forecast Component
                     system routines
```

Notes:

1/ The Technique is used by other Functions and will apply to all
    Functions unless changed between COMPUTE commands.

2/ Techniques are either Universal or Nonuniversal depending on
    whether their values can be changed during the COMPUTE of a
    Function. Universal Techniques are assigned a single value for the
    COMPUTE of a Function. Nonuniversal Techniques can be changed
    within the COMPUTE of a Function.

The Universal Techniques are:

     ASSIM
     CGROUP
     ENDRUN
     FFG
     FGROUP
     FUTPRECP
     LISTFGS
     LISTSEGS
     LSTALLOW
     LSTCMPDY
     METRIC
     MODAPIUN
     MODSACUN
     MODTZC
     MODUNITS
     MODWARN
     NOUTDS
     NOUTZ
     NUMCOSAV
     ONESEG
     PAGESIZE
     PRTDAYS
     RWWARN
     SAVETDY
     STARTRUN

The Nonuniversal Techniques are:

     FCDEBUG
     FROST
     PLOTHYD
     PRINTOUT
     PRINTSMA
     PRINTSNW
     PRTRCI
     PRTRO
     SACSNOW
     SNOW
     SYSDEBUG
     TABLES
     UPSC
     UPWE

3/ If more than one is specified then the ONESEG or LISTSEGS Technique
   will be used if it is specified or else the FGROUP or LISTFGS
   Technique will be used.