VI.5.3D OPERATIONAL FORECAST PROGRAM (FCST) TECHNIQUES

This Section contains a description and the form of the input for the Techniques that are available in the Operational Forecast Program (FCST) [Hyperlink].

Some of the Techniques are only used by one Function and some are used by more than one Function.

Section VI.5.3C [Hyperlink] describes the Functions.

Section VI.5.3D [Hyperlink] describes the Techniques that can be used with the Functions.

Each of the Techniques are categorized by whether they are Universal or Nonuniversal.

Universal Techniques are assigned a single value for a given computation of a Function.

The value of a Universal Technique cannot be changed within a given Function but can be changed between computations of Functions.

The value of a Nonuniversal Technique can be changed within a Function. Thus Nonuniversal Techniques can have different values from one area, Segment or Forecast Group to another within a single computation of a Function.

Local defaults can be set for Techniques and/or Arguments when the global default is not the desired value. Local defaults are set using HCL command SETLDFLT [Hyperlink].

Techniques and Arguments can be printed using command HCL command DUMPSYS [Hyperlink].

The Techniques are:

        Technique   Description

1.   ADJSIM   Sets whether an adjusted simulation will be performed
                      [Hyperlink]

2.   AREA   Sets the identifiers for the areas to be run by the
                      MAP Function [Hyperlink]

3.   ASSIM   Sets whether Assimilator (ASSIM) Operations are to be
                      run when running Function FCEXEC [Hyperlink]

4.   ASSMPAR   Sets whether soil moisture states and/or precipitation
                      are to be adjusted by the assimilator [Hyperlink]

5.   ASSMRUN   Sets the type of assimilation run that is to be
                      performed [Hyperlink]

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    Technique   Description                                          [Top]
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6.   BASEPER   Sets whether a base period analysis is to be performed
                 for the observed values [Hyperlink]

7.   BLENPREC   Overrides the criteria values specified using the
                 BLEND-TS option in the program ESPINIT for all
                 precipitation time series [Hyperlink]

8.   BLENTEMP   Overrides the criteria values specified using the
                 BLEND-TS option in the program ESPINIT for all
                 temperature time series [Hyperlink]

9.   CGROUP   Sets the Carryover Group identifier for a Carryover
                 Group run [Hyperlink]

10.   CONVEC   Sets whether the convective option is to be used in
                 Function MAP [Hyperlink]

11.   CRITERIA   Sets whether the options selected for output variable
                 types NDTO or NDIS in program ESPINIT are to be
                 changed [Hyperlink]

12.   DISPOFF   Sets whether Function ESP displays will be output
                 [Hyperlink]

13.   DIURNAL   Selects from a list of predefined sets of weights used
                 to disaggregate the daily maximum and minimum
                 temperatures into 6 hour values [Hyperlink]

14.   ENDRUN   Sets the ending date for the run [Hyperlink]

15.   ESPADJQ   Sets whether Operation ADJUST-Q will be used in the
                 ESP Conditional Simulation [Hyperlink]

16.   ESTTULSA   Sets whether the Tulsa method is used in Function MAP
                 to estimate missing daily station amounts from
                 surrounding stations using 1/D2 weights [Hyperlink]

17.   FCPRECP   Sets whether actual future precipitation values (if
                 available) or zero future precipitation values will
                 be used in creating mean areal precipitation time
                 series with Function ESP BLEND-TS option
                 [Hyperlink]

18.   FFG   Sets whether flash flood guidance values are to be to
                 computed [Hyperlink]

19.   FGROUP   Sets the Forecast Group identifier for a Forecast
                 Group run [Hyperlink]

20.   FREECGRP   Sets the Carryover Group identifier of the Carryover
                 Group for which a date of carryover is to be freed
                 [Hyperlink]

21. FREEDATE   Sets the date of carryover to be freed [Hyperlink]

22. FREQPLOT   Sets whether frequency plots will be produced by
                Function ESP [Hyperlink]

23. FROST   Sets whether the frozen ground computations in
                Operation SAC-SMA will be performed [Hyperlink]

24. FUTPRECP   For Function FCEXEC Technique FUTPRECP sets whether
                the future precipitation values that are linked to
                Mean Areal Precipitation time series will be used,
                partly used or set to zero
                For Function MAPX Technique FUTPRECP sets whether
                future MAP time series data will be appended to the
                portion of the MAPX time series derived from
                gridded data
                [Hyperlink]

25. HISTSIM   Sets whether an historical simulation will be
                performed by Function ESP [Hyperlink]

26. HISTWYRS   Sets the historical water years to be simulated by
                Function ESP [Hyperlink]

27. KPTIME   Set whether precipitation adjustments from the
                previous Operation ASSIM run should be used or a
                constant value of 1.0 should be assumed [Hyperlink]

28. LISTFGS   Sets the Forecast Group identifiers to be run
                [Hyperlink]

29. LISTSEGS   Sets the Segment identifiers to be run [Hyperlink]

30. LSTALLOW   Sets the number of hours past the current clock time
                that Technique LSTCMPDY can be set [Hyperlink]

31. LSTCMPDY   Sets the date of the last day of observed data (last
                computational day) for the run [Hyperlink]

32. METRIC   Sets whether data are input and printed in English or
                metric units [Hyperlink]

33. MODAPIUN   Sets whether English or Metric units are used for
                input to the MOD commands which make changes to the
                API Operations [Hyperlink]

34. MODSACUN   Sets whether English or Metric units are used for
                input to the MOD commands which change parameters
                or carryover for a soil moisture accounting
                Operation [Hyperlink]

35. MODTZC   Sets the time zone to be used when a date is entered
                with an hour but not time zone code as MOD input

                    [Hyperlink]

36. MODUNITS   Sets whether English or Metric units are used for
                input to most of the MOD commands [Hyperlink]

37. MODWARN   Sets MODWARN sets whether warning messages are to be
                printed from the MOD routines [Hyperlink]

38. NOEST6HR   Sets whether missing 6 hour distribution values will
                ever be estimated from surrounding stations in
                Function MAP [Hyperlink]

39. NOUTDS   Sets the daylight savings time switch [Hyperlink]

40. NOUTZ   Sets the output time zone [Hyperlink]

41. NUMCOSAV   Sets the dates for which carryover will be saved
                [Hyperlink]

42. OBSFUTWN   Sets whether warning messages will be printed if the
                specified last hour of observed data does not match
                the contents of the Preprocessor Data Base
                [Hyperlink]

43. ONESEG   Sets the Segment identifier for a single Segment run
                [Hyperlink]

44. PAGESIZE   Sets how many lines are printed per page [Hyperlink]

45. PLOTHYD   Sets if hydrographs are to be printed by the Forecast
                Component Operations [Hyperlink]

46. PP24MAX   Sets the maximum precipitation amount that will be
                allowed for any day in the run [Hyperlink]

47. PP24TIME   Sets whether the time associated with precipitation
                totals is checked against the specified last
                computational date or last hour of observed data
                [Hyperlink]

48. PQPFTIME   Sets if Function ESP is to run on NWSRFS internal time
                and not in local standard time [Hyperlink]

49. PREADJ   Sets whether Function ESP is to use the calibration
                input from directory ($calb_area_ts_dir)/pre
                [Hyperlink]

50. PRINTOUT   Sets whether print output is to be generated by
                Forecast Component Operations [Hyperlink]

51. PRINTSMA   Sets whether detailed print output is to be generated
                by rainfall-runoff model Operations [Hyperlink]

52.   PRINTSNW   Sets whether print output is generated by the snow
                 Operations [Hyperlink]

53.   PRLASTDY   Sets whether Preprocessor Component data will be
                 printed for all days in the run or whether only the
                 last observed data day plus any future days will be
                 printed [Hyperlink]

54.   PRNTCGRP   Sets the Carryover Groups for which carryover data is
                 to be printed [Hyperlink]

55.   PRNTDATE   Sets the dates for which carryover will be printed
                 [Hyperlink]

56.   PRNTFGRP   Sets the Forecast Groups for which carryover is to be
                 printed [Hyperlink]

57.   PRNTFMAP   Sets whether FMAP time series are to be printed
                 [Hyperlink]

58.   PRNTLAST   Sets how many of the most recent dates of carryover
                 will be printed [Hyperlink]

59.   PRNTOPER   Sets the Operation types for which carryover will be
                 printed [Hyperlink]

60.   PRSF   Sets whether to add an indicator to the ESP time
                 series header that is used by program ESPADP to
                 display the hours on the x axis [Hyperlink]

61.   PRTDAYS   Sets for which days in a run the tabulation from
                 Operation LIST-MSP is printed [Hyperlink]

62.   PRTMAP   Sets whether Mean Areal Precipitation values are to be
                 printed [Hyperlink]

63.   PRTMAPE   Sets whether Mean Areal Potential Evaporation (MAPE)
                 values are to be printed [Hyperlink]

64.   PRTMAT   Sets whether Mean Areal Temperature (MAT) values are
                 to be printed [Hyperlink]

65.   PRTPP24   Sets what precipitation data is to be printed for
                 stations that only have daily amounts [Hyperlink]

66.   PRTPP6   Sets whether values are printed for stations that have
                 both 6 hour sums and daily totals of precipitation
                 [Hyperlink]

67.   PRTRCI   Sets whether optional Rating Curve information
                 (comments, NWS-ID and datum) are to be included on
                 the hydrographs printed by Operation PLOT-TUL
                 [Hyperlink]

68.   PRTRO   Sets criteria for printing tabular output from
                   Operation LIST-MSP for the days specified by
                   Technique PRTDAYS [Hyperlink]

69.   PRTT24   Sets whether to print observed maximum/minimum
                   temperature data [Hyperlink]

70.   PRTTFUT   Sets whether to print forecast maximum and minimum
                   temperature data [Hyperlink]

71.   PRTTINST   Sets whether to print observed instantaneous
                   temperature data [Hyperlink]

72.   REGULATE   Sets whether to ignore reservoir Operations in
                   Function ESP by forcing the reservoirs to pass
                   inflow [Hyperlink]

73.   RRSALLOB   Sets whether observed river, reservoir and snow data
                   are to be printed [Hyperlink]

74.   RRSALLTS   Sets whether river, reservoir and snow time series
                   data are to be printed [Hyperlink]

75.   RRSINMOB   Sets whether observed instantaneous miscellaneous data
                   are to be printed [Hyperlink]

76.   RRSINMTS   Sets whether instantaneous miscellaneous time series
                   data are to be printed [Hyperlink]

77.   RRSINQOB   Sets whether observed instantaneous discharge data are
                   to be printed [Hyperlink]

78.   RRSINQTS   Sets whether instantaneous discharge time series data
                   are to be printed [Hyperlink]

79.   RRSMNMOB   Sets whether observed mean miscellaneous data are to
                   be printed [Hyperlink]

80.   RRSMNMTS   Sets whether mean miscellaneous time series data are
                   to be printed [Hyperlink]

81.   RRSMNQOB   Sets whether observed mean discharge data are to be
                   printed [Hyperlink]

82.   RRSMNQTS   Sets whether mean discharge time series data are to be
                   printed [Hyperlink]

83.   RRSRESOB   Sets whether observed reservoir data are to be printed
                   [Hyperlink]

84.   RRSRESTS   Sets whether reservoir time series data are to be
                   printed [Hyperlink]

85.   RRSSTGTS   Sets whether stage time series data are to be printed
                 [Hyperlink]

86.   RWWARN   Sets whether warning messages will be printed from the
                 read/write subroutines [Hyperlink]

87.   SACSNOW   Sets whether the states of the SAC-SMA and SNOW-17
                 Operations should be output to files [Hyperlink]

88.   SAVECGRP   Sets the identifier of the Carryover Group for which a
                 date of carryover is to be saved [Hyperlink]

89.   SAVEDATE   Sets the date of carryover to be saved [Hyperlink]

90.   SKIPBLND   Sets whether to skip the blending specified using the
                 BLEND-TS option in program ESPINIT for all
                 precipitation and temperature time series when
                 running Function ESP [Hyperlink]

91.   SNOW   Sets whether Operation SNOW-17 will be executed
                 [Hyperlink]

92.   SAVETDY   Sets that carryover will be stored for TODAY at 12Z
                 [Hyperlink]

93.   STARTESP   Sets the starting date for the Function ESP run
                 [Hyperlink]

94.   STARTRUN   Sets the starting date for the run [Hyperlink]

95.   STNPE   Sets whether station observations related to PE and
                 the estimated PE are to be printed by Function MAPE
                 [Hyperlink]

96.   TABLES   Sets whether tabular print output is to be printed by
                 Operations [Hyperlink]

97.   UPSC   Sets whether snow cover data will be used to update
                 Operation [Hyperlink]

98.   UPWE   Sets whether water equivalent data will be used to
                 update Operation SNOW-17 [Hyperlink]

99.   VAROFF   Sets whether output variables will be analyzed in
                 Function ESP [Hyperlink]

100. WINDOWS   Sets the number of windows desired in the Function ESP
                 run [Hyperlink]

101. WSUNITS   Sets whether water supply units are to be used in
                 Function ESP [Hyperlink]

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102. WTEST24   Sets whether estimated 24 hour precipitation totals
                are to be written to the Preprocessor Data Base
                [Hyperlink]

103. YRWEIGHT   Sets whether historical years are to be weighted
                differently in the analysis by Function ESP
                [Hyperlink]

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