

VI.3.5-DEFSEG-ANALYSIS PROGRAM ESPINIT COMMAND DEFSEG SUBCOMMAND  
ANALYSIS

Purpose

Command DEFSEG subcommand ANALYSIS defines output variables and displays for analysis in an ESP Segment.

Input Summary

<u>Card</u>	<u>Format</u>	<u>Columns</u>	<u>Contents</u>
1		1-8	'ANALYSIS'
2	A4	1-4	Output variable type:  'MXMD' = maximum mean daily value and days to maximum mean daily value  'MNMD' = minimum mean daily value and days to minimum mean daily value  'MD ' = mean daily value  'SUM ' = cumulative value  'MXIN' = maximum instantaneous value and days to maximum instantaneous value  'MNIN' = minimum instantaneous value and days to minimum instantaneous value  'NDTO' = if IOPT=1 number of days until time series gets above VALUE if IOPT=2 number of days until time series gets below VALUE  'NDIS' = if IOPT=1 number of days time series is greater than VALUE if IOPT=2 number of days time series is less than VALUE
	6X,A8	11-18	Output variable identifier
	2X,I5	21-25	Number of time series (maximum 2)

Card    Format    Columns    Contents

I5            26-30        Number of displays

A20           31-50        Heading information

The following are needed for output variable types NDTO and NDIS.

I5            51-55        Output variable option (IOPT):

For output variable type NDTO:  
 IOPT=1 number days until a time series gets above VALUE  
 IOPT=2 number of days until a time series gets below VALUE

For output variable type NDIS:  
 IOPT=1 number of days a time series is greater than VALUE  
 IOPT=2 number of days a time series is less than VALUE

F10.0        56-65        Value (must be entered in standard metric units)

3            A8            1-8           Time series identifier

3X,A4        12-15        Time series data type code

3X,I2        19-20        Time series data time interval

1X,A4        22-25        Time series type indicator:  
               'OBS ' = observed  
               'SIM ' = simulated

2X,A8        28-35        Time series value name (used only for time series that have more than one value per data time interval):

<u>Data Type</u>	<u>Order</u>	<u>Name</u>
ROCL	1	'TCHANINF<
	2	'IMP-RO<
	3	'DIR-RO<
	4	'SUR-RO<
	5	'INTERFLO<
	6	'SUPBASE<
	7	'PRIMBASE<
SMZC	1	'UZTDEF<
	2	'UZFWC<
	3	'LZTDEF<
	4	'LZFSC<
	5	'LZFPC<

Repeat card type 3 for each time series (maximum 2).

A8            1-9           Display type:

Card    Format    Columns    Contents

'FREQUENCY' = print frequency table and plot  
'SUMMARY'    = print summary table

If display type is 'SUMMARY' no additional input is needed.

If display type is 'FREQUENCY' then cards 5-7 are needed.

5	I5	1-5	Indicator for input of exceedance probability values: 0 = default; use 0.90, 0.50 and 0.10 1 = read exceedance probability values
	I5	6-10	Number of exceedance probability values selected by user (needed if column 5 is 1)
	I5	11-15	Type of distribution desired (the empirical distribution is the only valid option for output variable types NDT0 and NDIS): 1 = empirical only (frequency values are calculated using $p=m/(n+1)$ where p=probability, m=rank and n=number of values) 2 = log-normal (data are fit to a log-normal distribution) 3 = normal (data are fit to a normal distribution)
	I5	16-20	Plot indicator: 0 = no plot 1 = plot
	I5	21-25	Indicator for including output variable in run summary: 0 = do not include 1 = include

Card 6 is needed when column 5 on card 5 is 1.

6	10F5.2	1-50	Frequency values
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Repeat card 6 if more than 10 frequency values.

Card 7 is needed when column 20 on card 5 is 1.

7	I5	1-5	Indicator for including sample points on plot: 0 = do not include 1 = include
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Indicators to include time series type on plot (only those time series available)

Card    Format    Columns    Contents

will be included):  
0 = do not include  
1 = include

I5	6-10	Historical simulated time series
I5	11-15	Adjusted simulated time series
I5	16-20	Conditional simulated time series
I5	21-25	Observed time series
I5	26-30	Base period observed time se

Repeat cards 2 thru 7 for each output variable type.

Last                    1-3            'END'