

VIII.3.3-LAY-COEF LAYERED COEFFICIENT ROUTING OPERATION

Identifier: LAY-COEF

Operation Number: 11

Parameter Array: The FORTRAN identifier used for the parameter array for this Operation is P. The contents of the P array are:

<u>Position</u>	<u>Contents</u>
1	Operation version number (integer)
2-6	General name for the reach or point where the Operation is applied
7-8	Inflow time series identifier
9	Inflow time series data type
10	Inflow time series time interval (integer)
11-12	Outflow time series identifier (blank if routing at a point)
13	Outflow time series data type (blank if routing at a point)
14	Outflow time series time interval (integer): 0 = routing at a point
15	Carryover control indicator (integer): 0 = carryover set (default) 1 = carryover read in with data card
16	Number of layers (integer)

The remaining positions of the P array are filled as follows:  
o coefficients beginning with the bottom layer and increasing  
o upper flow limits, top layer not needed

Carryover Array: The FORTRAN identifier used for the carryover array is C. The contents of the C array are the residual flows for each layer. The residuals are put in order beginning with the bottom layer. The minimum size of the C array is 1 and there is no maximum size.

Subroutine Names and Functions:

<u>Subroutine</u>	<u>Function</u>
PIN11	Input cards and stores values in the P and C arrays
PRP11	Print information in the P array
PRC11	Print information in the C array
EX11	Execute the Operation
COX11	Perform carryover transfer
PUC11	Punch information in the P and C arrays
TAB11	Operation Table entry subroutine

Subroutines PIN11, PRP11, COX11 and PUC11 have the standard argument lists for these subroutines as given in Section VIII.4.3.

SUBROUTINE EX11 (P,C,QIN,QOUT,R)

Function: This is the execution routine for the LAY-COEF Operation.

Argument List:

<u>Argument</u>	<u>Input/ Output</u>	<u>Type</u>	<u>Dimension</u>	<u>Description</u>
P	Input	R*4	Variable	Parameters and other information
C	Input	R*4	Variable	Carryover values
QIN	Input	R*4	Variable	Inflow time series
QOUT	Output	R*4	Variable	Routed inflow time series
R	Input	R*4	Variable	Work space

SUBROUTINE TAB11 (TO,LEFT,IUSET,NXT,LPO,PO,LCO,TS,MTS,NWORK,NDD,LWORK, IDT)

Function: This is the Operations Table entry routine for the LAY-COEF Operation.

Argument List: The arguments for this routine are similar to the arguments for the Operations Table entry routines for other Operations. A description of the arguments is contained in Section VII.4.2-TAB.

Operation Table Array: The contents of the TO array are:

<u>Position</u>	<u>Contents</u>
1	The number of this Operation
2	Location in the T array of the next Operation to be executed
3	Location of the parameter array for this Operation in the P array
4	Location of the carryover array for this Operation in the C array
5	Location of inflow data in the D array
6	Location of outflow data in the D array: 0 = routing at a point
7	Location of work space for routed inflow
8	Location of work space in the D array for changing the time interval: 0 = not needed
9	Location of work space for temporary carryover values