

VIII.3.3-LOOKUP 2 VARIABLE TABLE LOOKUP OPERATION

Identifier: LOOKUP

Operation Number: 39

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	Number of spaces used by this Operation (integer)
3	Number of pairs of table lookup points (integer)
4	Input units indicator (integer): 0 = English 1 = Metric
5-10	Unused
11-12	Input time series identifier
13	Input time series data type
14	Input time series data time interval (integer)
15-16	Output time series identifier
17	Output time series data type
18	Output time series data time interval (integer)

The following positions are repeated for each pair of points:

19-20	Lookup point 1:
21-22	o first value is for the input time series o second is for output

Carryover Array: This Operation does not have carryover.

Subroutine Names and Functions:

<u>Subroutine</u>	<u>Function</u>
PIN39	Input cards and stores values in the P array
PRP39	Print information in the P array

<u>Subroutine</u>	<u>Function</u>
EX39	Execute the Operation
PUC39	Punch cards with information from the P array which may be used as input by the PIN routine
TAB39	Make entries into the Operations Table

Subroutine PIN39, PRP39 and PUC39 have standard argument lists for these routines as described in Section VIII.4.3.

SUBROUTINE EX39 (P,DI,DO)

Function: This is the execution routine for Operation LOOKUP.

Argument List:

<u>Argument</u>	<u>Input/ Output</u>	<u>Type</u>	<u>Dimension</u>	<u>Description</u>
P	Input	R*4	Variable	Parameter and other information
DI	Input	R*4	Variable	Input time series data
DO	Output	R*4	Variable	Output time series data

SUBROUTINE TAB39 (TO, LEFT, IUSET, NXT, LPO, PO, TS, MTS, NWORK, NDD, LWORK, IDT)

Identification: This is the Operations Table entry routine for Operation LOOKUP.

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

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

<u>Position</u>	<u>Contents</u>
1	The number of this Operation
2	Location of next Operation in T array
3	Location of parameters in P array
4	Location of input time series in D array
5	Location of output time series in D array