

VIII.3.3-ADJUST-Q ADJUST SIMULATED DISCHARGE OPERATION

Identifier: ADJUST-Q

Operation Number: 14

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

<u>Position</u>	<u>Contents</u>
1	Operation version number (integer value)
2-6	Name of flow point
7	Indicator if observed instantaneous discharge time series used: <u>1</u> / 0 = no 1 = yes
8	Indicator if observed mean daily discharge time series used: <u>2</u> / 0 = no 1 = yes
9-10	Identifier for simulated discharge time series
11	Data type for simulated discharge time series
12	Data time interval for simulated discharge time series
13-14	Identifier for adjusted time series
15	Data type for adjusted discharge time series
16	Data time interval for adjusted discharge time series
17	Number of steps for blending
18	Number of carryover values in carryover array
19	Carryover option: 0 = use default carryover values 1 = read in carryover values
20-24	Unused

The size of array PADJ varies from 24 to 33 positions depending upon whether observed instantaneous discharge and observed mean daily discharge time series are used.

Notes:

- 1/ If position 7 equals 1 the next 5 positions contain:
- o identifier for observed instantaneous discharge time series (2 positions)
 - o data type for observed instantaneous discharge time series
 - o data time interval for observed instantaneous discharge time series
 - o type of adjustment when using observed instantaneous discharge:
 - 0 = adjustments based on ratio of observed to simulated discharge
 - 1 = adjustments based on difference between observed and simulated discharge

- 2/_If position 8 equals 1 the next 4 positions contain:
- o error tolerance for comparing computed and observed mean daily discharge volumes
 - o identifier for observed mean daily discharge time series (2 positions)
 - o data type for observed mean daily discharge time series

Carryover Array: The Fortran identifier used for the carryover array for this operation is CADJ. The contents of the CADJ array are:

<u>Position</u>	<u>Contents</u>
1 to N	Simulated discharge values for the last computational day, 2400-2400 (values beyond the last period are not used)
N+1	Difference between observed and simulated discharge at last observed ordinate prior to carryover date
N+2	Number of ordinates between last observed ordinate and carryover date (equals the number of ordinates completed in the blend)
N+3	Observed discharge at last observed ordinate prior to carryover date

where $N = 24/DT+1$
 DT = data time interval

The number of carryover values varies from 5 to a maximum of 28. The default initial carryover values are zeroes.

Subroutines Names and Functions: Subroutines associated with this Operation are:

<u>Subroutine</u>	<u>Function</u>
PIN14	Input cards and stores values in PADJ and CADJ arrays
PRP14	Print information in PADJ array

Subroutine Function

PRC14	Print information in CADJ array
EX14	Execute the Operation
COX14	Perform carryover transfer
PUC14	Punch information in PADJ and CADJ arrays
TAB14	Make entry into the operations table

Subroutines PIN14, PRP14, PRC14, PUC14 and COX14 have the standard argument lists for these subroutines as given in Section VIII.4.3

SUBROUTINE EX14 (PADJ,CADJ,QIN,QME,SQIN,QINE,QS,MISS,SQME,QI)

Function: This is the execution subroutine for Operation ?OPNAME?.

Argument List:

<u>Variable</u>	<u>Input/ Output</u>	<u>Type</u>	<u>Dimension</u>	<u>Description</u>
PADJ	Input	R*4	Variable	Contains parameters and other information
CADJ	Both	R*4	Variable	Contains carryover values
QIN	Input	R*4	Variable	Observed instantaneous discharge time series data
QME	Input	R*4	Variable	Observed mean daily discharge time series data
SQIN	Input	R*4	Variable	Simulated instantaneous discharge time series data
QINE	Output	R*4	Variable	Adjusted instantaneous discharge time series data
QS	-	R*4	Variable	Work space for simulated discharge
MISS	-	R*4	Variable	Work space for missing data indicators
SQME	-	R*4	Variable	Work space for computed mean daily discharge data
QI	-	R*4	Variable	Work space for instantaneous observed discharge data

SUBROUTINE TAB14 (TADJ,LEFT,IUSET,NXT,LPADJ,PADJ,LCADJ,TS,MTS,NWORK,
NDD,LWORK,IDT)

Function: This is the Operations Table entry subroutine for
Operation ?OPNAME?.

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.

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

<u>Position</u>	<u>Contents</u>
1	Operation number
2	The location in the T array of the next operation to be executed
3	The location of the parameter array for this operation in the P array
4	The location of the carryover array for this operation in the C array
5	Location of observed instantaneous discharge data in the D array
6	Location of observed mean daily discharge data in the D array
7	Location of simulated instantaneous discharge data in the D array
8	Location of adjusted discharge data in the D array
9	Location of work space in the D array
10	Length of work space for instantaneous discharge
11	Length of work space for daily discharge