

IX.3.3B-SYSTEM-FLOOPR SUBROUTINE FLOOPR

Description

Subroutine FLOOPR makes stage-discharge conversions while considering the variable energy slope (due to varying discharge) which causes a loop in the stage-discharge Rating Curve.

Calling Sequence

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CALL FLOOPR (RCID,ICONV,ITSPOS,NVALS,DELTAT,QDATA,HDATA,
            LOCPTR,T1,METHOD,NEEDEX,CARRYO,JULDAY,INITHR,
            IRCHNG,IERR,IBUG)
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Argument List

<u>Argument</u>	<u>Input/ Output</u>	<u>Type</u>	<u>Dimension</u>	<u>Description</u>
RCID	Input	A8	1	Rating Curve identifier
ICONV	Input	I*4	1	Conversion indicator: 1 = convert stage to discharge 2 = convert discharge to stage
ITSPOS	Input	I*4	1	Position in QDATA and HDATA arrays where the first value to be converted is located
NVALS	Input	I*4	1	Number of stage or discharge values to be converted
DELTAT	Input	R*4	1	Time interval of discharge and stage data (units of HR)
QDATA	Input (ICONV=2) Output (ICONV=1)	R*4	*	Discharge data time series (units of CMS)
HDATA	Input (ICONV=1) Output (ICONV=2)	R*4	*	Stage data time series (units of M)
LOCPTR	Input	I*4	*	Work space for pointer array
T1	Input	R*4	*	Work space for timing array
METHOD	Output	I*4	1	Conversion method indicator: 1 = loop Rating Curve used

<u>Argument</u>	<u>Input/ Output</u>	<u>Type</u>	<u>Dimension</u>	<u>Description</u>
NEEDEX	Output	I*4	1	Extension indicator: 0 = no extension necessary 2 = hydraulic extension used
CARRYO	Both	R*4	4	Carryover array: CARRYO(1) = previous stage CARRYO(2) = previous discharge CARRYO(3) = change in previous discharge if ICONV=1 CARRYO(3) = change in previous stage if ICONV=2 CARRYO(4) = number of missing values prior to ITSPOS
JULDAY	Input	I*4	1	Julian day (internal clock) of initial value to be converted
INITHR	Input	I*4	1	Hour (internal clock) of initial value to be converted
IRCHNG	Output	I*4	1	Rating Curve change indicator: 0 = no change occurred 1 = run exceeded last effective date of Rating Curve
IERR	Output	I*4	1	Error indicator: 0 = no error encountered 1 = error encountered
IBUG	Input	I*4	1	Debug indicator: 0 = do not print debug message 1 = print debug message