VIII.3.3-RSNWELEV RAIN-SNOW ELEVATION OPERATION

Identifier: RSNWELEV

Operation Number: 42

Variable

<u>Parameter Array</u>: The FORTRAN identifier used for the parameter array is PO. The contents of the PO array are:

Position	Contents
1	Operation version number - integer
2	Data time interval and time interval of all time series - integer
3-4	Air temperature time series identifier
5	Air temperature time series data type code
6	Elevation associated with the air temperature time series (M)
7	Lapse rate during precipitation periods (DEGC/100M)
8	Threshold temperature (DEGC)
9-10	Rain-snow elevation time series identifier
11	Rain-snow elevation time series data type code
12	Freezing level time series indicator: 0 = time series not used 1 = time series used
13-14	Freezing level time series identifier: blank = not used
15	Freezing level time series data type code: blank = not used
16-20	Unused (set to 0.01)

<u>Carryover Array</u>: The FORTAN identifier used for the carryover array is CO. Carryover is only needed when a freezing level time series is used. The contents of the CO array are as follows:

## Position Contents

1 Previous value of the freezing level time series

<u>Subroutines Names and Functions</u>: The subroutines associated with this Operation are:

<u>Subroutine</u>	Function
PIN42	Input cards, makes checks and stores values in PO and CO arrays
TAB42	Makes Operation Table entries
PRP42	Print parametric data
PRC42	Print carryover data
PUC42	Output cards in the format which can be read by routine PIN42

- COX42 Perform carryover transfer
- EX42 Execute the Operation

Subroutines PIN42, PRP42, COX42, and PUC42 have the standard argument lists for these subroutines as given in Section VIII.4.3. Subroutine PRC42 only has the CO array as an argument.

<u>Function</u>: This is the execution subroutine for the Operation RSNWELEV.

Argument List:

Variable	Input/	Turno	Dimongion	Description
variable	Output	туре	DIMENSION	Description
PO	Input	R*4	20	Parameter array
CO	Input	R*4	1	Carryover array
ТА	Input	R*4	Variable	Air temperature data (DEGC)
RSEL	Output	R*4	Variable	Rain-snow elevation values (M) (set to -100.0 when NOSNOW=1)
ZELV	Input	R*4	Variable	Freezing level data (M)

SUBROUTINE TAB42 (TO, LEFT, IUSET, NXT, LPO, PO, LCO, TS, MTS, LWORK, IDT)

 $\underline{Function}$ : This is the Operations Table entry subroutine for Operation RSNWELEV.

<u>Argument List</u>: The arguments are similar to the arguments for the Operations Table entry subroutines for other Operations. A description of the arguments is in Section VIII.4.2-TAB.

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

Position	Contents
1	Operation number
2	The location in the T array of the next Operation to be executed
3	Location of the PO array in the P array
4	Location of the CO array in the C array: 0 = carryover not needed
5	Location of air temperature data in the D array
6	Location to put the rain-snow elevation data in the D array
7	Location of freezing level data in the D array: 0 = freezing level data are not used