## Description

Subroutine EVAC08 is the eighth accumulator routine.
It finds the total number of days and the greatest number of consecutive days that a time series is greater (or less) than the specified criteria value. The time series data is converted to mean daily values if the output variable option is negative. This indicates that there are at least two time series in the ESP analysis for this Segment and that they are not instantaneous and the time scales or time intervals are not the same. Except for mean daily converted data if any value on a given day meets the criteria then that day is included in the number of days value.

## Calling Sequence

CALL EVAC08 ( $a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s)$

Argument List

| Argument | Input/ Output | Type | Dimension | Description |
| :---: | :---: | :---: | :---: | :---: |
| a | Input | I* 4 | 1 | First Julian day to be accumulated |
| b | Input | I * 4 | 1 | First Julian hour to be accumulated |
| C | Input | I* 4 | 1 | Last Julian day to be accumulated |
| d | Input | I * 4 | 1 | Last Julian hour to be accumulated |
| e | Input | R*4 | * | Array D containing the time series data |
| f | Input | $R * 4$ | * | Accumulator array; the first element is the total number of days and the second element is the greatest number of consecutive days; also if the output variable option is negative then the decimal fraction of the first element represents a carry over value which is the number of consecutive days meeting the criteria |

Input/
Argument Output Type Dimension Description

| 9 | Input | I * 4 | 1 | Number of days already accumulated for this time series. |
| :---: | :---: | :---: | :---: | :---: |
| h | Input | I* 4 | 1 | Number of hours already accumulated for this time series |
| i | Input | A8 | 2 | Time series identifier |
| j | Input | A 4 | 1 | Time series data type code |
| k | Input | I* 4 | 1 | Time series data time interval |
| 1 | Input | I* 4 | 1 | Number of values per data time interval |
| m | Input | A 4 | 1 | Time series time scale code |
| n | Input | I* 4 | 1 | Value of interest (needed for multi-valued time series) |
| $\bigcirc$ | Both | $\mathrm{R} * 4$ | 1 | Carryover value: <br> - if argument $p$ is positive then the number of consecutive days is stored in the 100's place and an indicator for if the criteria was met at any time on the last day (1=yes, $0=$ no) is stored in the units place <br> - if argument $p$ is negative then mean daily values are computed and this value is the sum of the data for the last day; if computations end at hour 24 then this sum value is reset to zero |
| p | Input | I * 4 | 1 | ```Output variable option: 1 = check for days time series is above criteria 2 = check for days time series is below criteria``` |
| q | Input | $\mathrm{R} * 4$ | 1 | Cutoff level for output variable (criteria value) |
| r | Input | R * 4 | * | Work array |
| S | Input | I * 4 | 1 | Length of work array |

