5.2.3 The Archive (reference 3.0)

The current HPD archives (TD3240 and TD3260) provide for the following data measurement and data quality flag assignments:

**FLG1**

<table>
<thead>
<tr>
<th>Flag</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Accumulated period and amount. This flag occurs in pairs. The first indicates the start of an accumulated period. The value for this first pair sequence is 99999. The second member of the pair sequence contains the accumulated value for the period covered.</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>Delete flag. This flag (should be) always occurs in pairs. The first indicates the start of a deleted period; the second indicates the end of the deleted period. The inference is that data for this period was erroneous.</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>Missing flag. Analogous to &quot;D&quot; above. Data in this case are/were not available for the periods covered.</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>Incomplete data. Daily totals only.</td>
<td></td>
</tr>
</tbody>
</table>

The TD3240/TD3260 dataset provides for two flags; a data measurement flag and a data quality flag. These are known as FLAG1 (measurement) and FLAG2 (quality). FLAG2 is not used, i.e., always left blank. The current schema use of only the data measurement flag is not consistent with the use of this flag in other datasets such as TD3200 and TD3280. The following flag schema uses both flags and is consistent with other NCDC element archives.
New flag system for 3240/3260 effective beginning with January 1, 1996 data is as follows. Note that historical data will later be processed to follow this schema also.

FLG1 a Begin accumulation. A value of 99999 accompanies this flag. For TD3240, it indicates that the accumulation has begun sometime during the hour.

FLG1 A End accumulation (amount is associated with this flag). For TD3240, it indicates the accumulation has ended sometime during the hour.

FLG1 , The "," flag is used at the beginning of a data month when an accumulation is in progress. This enables a data month to be examined as a singularly context consistent entity. (suggested by OH). The post 1983 processing system does not provide for accumulations to span data months. The "," flag is intended to correct erroneous flag sequences in the historical data.

FLG1 [ Begin missing period during the hour (inclusive)

FLG1 ] End missing period during the hour (inclusive)

note... [ ] replace the present paired M context dependent flags. TD3240 and TD3260.

FLG1 { Begin deleted period during the hour (inclusive).

FLG1 } End deleted period during the hour (inclusive)

note... { } replace the present paired D context dependent flags.

note... the ] and the [ and the } and the { will be placed on monthly boundaries when the period covered crosses a monthly boundary. In this way, a given months data will "stand on it's own two feet".

FLG1 g Accompanies the Zero "day one" value.

FLG1 T Indicates a "trace" amount. Data value will be zero. "T" flags appear on NWS First Order data
only.

FLG2 Z Indicates probable amounts as a result of melting frozen precip. When assigned to a daily total, it indicates some or all of the total contains values assigned a flag of Z. This flag may be used to identify those sites that are deficient in which the manner the snow shields are employed. Flag appears in both TD3240 and TD3260.

FLG2 R Indicates data values are suspect with regard to the times or period of occurrence. When assigned to a daily total, it indicates data with suspect "times" are included in the daily amount. Flag appears in both TD3240 and TD3260.

FLG1 B A single missing datum. (TD3260 only)
(Not used... possible future use)

FLG2 Q A single erroneous datum (value will be present).
This flag appears in TD3260. Data are not used for TD3240 hourly totals. Hourly values in TD3240 will be assigned "q".

FLG2 P A daily total excludes erroneous value(s) (flagged Q). (TD3240 and TD3260)

FLG2 q An hourly value (TD3240 only) excludes one or more 15 minute periods marked with a Q flag.

FLG1 I Incomplete data. Daily totals only. (TD3240 and TD3260)

5.2.4 GAGE data flags.

TD3260 will contain the archive of the original gage translation data. These data are in units of gage weight. The element is QGAG (counterpart of QPCP). The measurement and data quality flags are:

5.2.4.1 FLAG1 (measurement)

a begin accumulation (indicates measurement
periods from one tape to the next have overlapped)
A  End accumulation.
[  Begin Missing
]  End Missing
{  Begin Delete
}  End Delete
S  gage reset
N  New tape

5.2.4.2 FLAG2 (Quality)

Q  Questionable value. Data not used.
P  Punch mechanism failure, missing punch assumed. Assumed punch value being used.
V  Evaporation likely. Gage value has dropped. Data are being used.