Purpose

Run-time modifications (MODs) are used by Function FMAP to enter estimated future precipitation data values.

Two FMAP MODs are available:
  - FMAP24 is used to enter estimated 24 hour precipitation
  - FMAP6 is used to enter estimated 6 hour precipitation

Syntax

Both FMAP MODs use free format card image form for input.

The columns the data are in does not matter but the following syntax rules apply:

1. data are entered by fields separated by blanks and/or a comma
2. fields must be in columns 1-72
3. the first field must be .FMAP24 or .FMAP6

All identifiers or ranges of identifiers must begin on a new card image.

The asterisk (*) date form indicating TODAY cannot be used.

See Section VI.5.2C [Hyperlink] for a description of the command format symbols.

**FMAP24 MOD**

Format:

```
.FMAP24  date  [NUMBER]  [M]  [/distribution-1]
           identifier[-identifier]  value  [/distribution-2]
```

Parameter Description:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Required or Optional</th>
<th>Maximum Characters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>date</td>
<td>R</td>
<td>12</td>
<td>Beginning date data values (see Section VI.5.2B for a description of date formats; an asterisk cannot be used)</td>
</tr>
</tbody>
</table>

05/19/2004 VI.5.3C-FMAP-MODS-1 rfs:653c_fmap_m.wpd
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Required or Optional</th>
<th>Maximum Characters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>0</td>
<td>N/A</td>
<td>Identifier type indicator; NUMBER indicates that future MAP areas will be identified by computational order number; Future MAP identifiers are the default type; a computational order list can be printed using program PPINIT command DUMP ORDER</td>
</tr>
<tr>
<td>M</td>
<td>0</td>
<td>N/A</td>
<td>Metric indicator; Metric input is in units of MM; English is in units of IN; The default is English</td>
</tr>
<tr>
<td>distribution-1</td>
<td>0</td>
<td>N/A</td>
<td>Default distribution of 24 hour amount for all future MAP areas that follow; if not specified then the default is uniform distribution</td>
</tr>
<tr>
<td>identifier</td>
<td>R</td>
<td>8</td>
<td>Future MAP area identifier or computational order number; a range may be specified by using a hyphen between beginning and ending identifiers</td>
</tr>
<tr>
<td>value</td>
<td>R</td>
<td>N/A</td>
<td>Daily precipitation data value; only one day can be entered for each FMAP24 MOD</td>
</tr>
<tr>
<td>distribution-2</td>
<td>O</td>
<td>N/A</td>
<td>Distribution of 24 hour amounts into four 6 hour periods for the identifiers specified</td>
</tr>
</tbody>
</table>

Note:

1/ For FMAP24 data the first data value will always correspond to the end of the first 6 hour period for the hydrologic day ending on the input date. For example, the end of the first 6 hour period for the hydrologic day ending March 20 at 6 CST would be March 19 at 12 CST. If an hour is provided with the input date it must be the last hour of the hydrologic day. If the hour provided is not the last hour of hydrologic day, an error message will be printed and that MOD will not be processed.

Examples:
The following example enters estimated future precipitation data values for the hydrologic day ending on September 22, 1983. An amount of 2.00 inches will be entered for all areas between FMAP14 and FMAP17 (inclusive) on the computational order list. Note that FMAP 15 and FMAP16 are not necessarily between FMAP14 and FMAP17 on the computational order list. Since no distribution is specified, the 2.00 inches will be evenly divided among four 6 hour periods.

```
.FMAP24  092283
FMAP14-FMAP17  2.00
```

The following example enters estimated future precipitation data values for the hydrologic day ending on November 24, 1982. The N indicates the identifiers that follow are computational order numbers instead of future MAP area identifiers. Note that when order numbers are specified in a range, such as 12-17, areas that appear in positions 12, 13, 14, 15, 16, and 17 of the computational order list will be included. A precipitation estimate of 50 millimeters for area numbers 12-17 inclusive will be distributed in four 6 hour periods as indicated after the slash.

```
.FMAP24  112482  N  M
12-17 50  / .50 .25 .0 .25
```

The following example enters estimated future precipitation data values for the hydrologic day ending on December 12, 1982 for area numbers 10-15. A distribution for all areas is specified in the first card image. The second card image specifies a different estimated future precipitation data value and distribution for area number 12. Since the distribution input doesn't sum to one, it will be normalized before being used. The second line will override the first for area 12.

```
.FMAP24 121282 N  / .15  .20  .25  .40
10-1  2.5
12    3.0 / 2 1
```

**FMAP6 MOD**

**Format:**

```
.FMAP6  date  [NUMBER]  [M]
identifier[-identifier]  values
```

**Parameter Description:**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Required or Optional</th>
<th>Maximum Characters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>date</td>
<td>R</td>
<td>12</td>
<td>Beginning date data values 1/</td>
</tr>
<tr>
<td>NUMBER</td>
<td>0</td>
<td>N/A</td>
<td>Identifier type indicator; NUMBER indicates that</td>
</tr>
</tbody>
</table>

05/19/2004 VI.5.3C-FMAP-MODS-3 rfs:653c_fmap_m.wpd
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Required or Optional</th>
<th>Maximum Characters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>future MAP areas will be identified by computational order number; Future MAP identifiers are the default type</td>
</tr>
<tr>
<td>M</td>
<td>0</td>
<td>N/A</td>
<td>Metric indicator; Metric input is in units of MM; English is in units of IN; default is English</td>
</tr>
<tr>
<td>identifier</td>
<td>R</td>
<td>8</td>
<td>Future MAP area identifier or computational order number; a range may be specified by using a hyphen between beginning and ending identifiers</td>
</tr>
<tr>
<td>values</td>
<td>R</td>
<td>N/A</td>
<td>6 hour precipitation data value; more than one day can be entered for each FMAP6 MOD 2/</td>
</tr>
</tbody>
</table>

Notes:

1/ The date input corresponds to the first 6 hour value. If no hour is entered the value will be assigned to the end of the first 6 hour period for the hydrologic day input. If an hour is input then it must correspond to the end of a 6 hour period for the local input time zone code. If the hour input does not correspond to the end of a 6 hour period then it will be reset to the end of the closest 6 hour period. A message will be printed to indicate the action taken.

2/ Values can be continued onto multiple cards by using a '&' as the last field on a card and continuing the data values on the next card.

Example:

The following example enters 6 hour precipitation values beginning September 22 at 6 PM CST for areas in the range FMAP14-FMAP7. Note that more than one day of data is entered.

```
.FMAP6 092218CST
FMAP14-FMAP7 .50 .50 .75 1.0 .75 .50
```