VI.3.3B-DUMP  PROGRAM PPINIT COMMAND DUMP

Purpose

Command DUMP is used to output Area, Basin, Station, Computational Order and general user parametric information.

The output format can be in either printer or card image format. The card image output is in the form that can be used as input to the DEFINE command.

Format

@DUMP [ PRINT\(^{\circ}\) PUNCH BOTH ] [ UNITS\(\text{ENGL}^{\circ}\) ] [ PLOT\(\text{NO}^{\circ}\) ] [ PRNTEST\(\text{YES}^{\circ}\) ]

[ SUMMARY\(\text{NO}^{\circ}\) ] [ LEVEL\(1^{\circ}\) ] [ SORT\(\text{ID}^{\circ}\) DESC NUM ]

[ SPACING\(\text{SINGLE}^{\circ}\) ] [ DEGMIN\(\text{YES}^{\circ}\) ] [ OUTPUT(charstring:unit) ]

\{
  AREA
  BASIN
  NAMES
  NETWORK
  ORDER
  STATION
  STATS
  USER
\}

\{ options \}
If the group AREA is specified then the options are: 

\[
\begin{align*}
\text{FMAP} & \quad \text{MAP} \\
\text{MAPE} & \quad \text{MAPX} \\
\text{MAT} & \\
\{\text{identifier}\} \\
\end{align*}
\]

If the group BASIN is specified then the options are:

\[
\begin{align*}
\text{PUFORMAT} & \quad \text{PACKED} \\
\text{FIXED} & \quad \text{ONEPERCARD} \\
\text{PUMAXDEC} & \quad \left(2^\text{maxdec}\right) \\
\{\text{identifier}\} \\
\end{align*}
\]

If the group NAMES is specified then the options are:

\[
\begin{align*}
\text{ALL}^* \\
\{\text{identifier}\} \\
\end{align*}
\]

If the group NETWORK is specified then the options are:

\[
\begin{align*}
\text{ALL}^* \\
\text{NTWK} \\
\text{OP24} \\
\text{OPVR} \\
\text{OT24} \\
\text{QK24} \\
\text{OQRS} \\
\text{OG24} \\
\text{GP24} \\
\end{align*}
\]

If the group ORDER is specified then the options are:

\[
\begin{align*}
\text{ALL}^* \\
\text{MAP} \\
\text{MAPX} \\
\text{FMAP} \\
\text{ORDR} \\
\end{align*}
\]

If the option MAP is specified then the following additional options are available:
If the group **STATION** is specified then the options are:

\[
\begin{align*}
&\text{INCOMPL }\begin{cases} \text{YES}^o & \text{NO}^o \\ \text{ONLY} & \text{ONLY} \end{cases} \\
&\text{NEWPAGE }\begin{cases} \text{YES}^o & \text{NO}^o \\ \text{NO} & \text{YES} \end{cases} \\
&\text{PCPNFORM }\begin{cases} \text{YES}^o & \text{NO}^o \\ \text{NO} & \text{YES} \end{cases} \\
&\text{RRSPUNCH }\begin{cases} \text{NO}^o & \text{YES}^o \\
\end{cases}
\end{align*}
\]

If the group **STATS** is specified then the options are:

\[
\begin{align*}
&\text{ALLPARM} \\
&\text{STAN}^o \\
&\text{PCPN} \\
&\text{TEMP} \\
&\text{PE} \\
&\text{RRS} \\
&\text{STATE }\begin{cases} \text{state} & \text{ALL}^o \\
\end{cases}
\end{align*}
\]

If the group **USER** is specified then the options are:

\[
\begin{align*}
&\text{NEWPAGE }\begin{cases} \text{YES}^o & \text{NO}^o \\
\end{cases} \\
&\text{ALL}^o \\
&\text{PCPN} \\
&\text{RRS} \\
&\text{STATE }\begin{cases} \text{state} \\
\end{cases}
\end{align*}
\]

Parameter Description
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Required/Optional</th>
<th>Maximum Characters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRINT</td>
<td>O</td>
<td></td>
<td>Output definitions to the line printer (default)</td>
</tr>
<tr>
<td>PUNCH</td>
<td>O</td>
<td></td>
<td>Output definitions to card punch</td>
</tr>
<tr>
<td>BOTH</td>
<td>O</td>
<td></td>
<td>Output definition to both line printer and card punch</td>
</tr>
<tr>
<td>UNITS</td>
<td>O</td>
<td>4</td>
<td>Units in which parametric data is to be output: ENGL = English (default) METR = Metric</td>
</tr>
<tr>
<td>PLOT</td>
<td>O</td>
<td>3</td>
<td>Option to plot parametric data</td>
</tr>
<tr>
<td>PRNTEST</td>
<td>O</td>
<td>3</td>
<td>Option to print PCPN estimator stations</td>
</tr>
<tr>
<td>SUMMARY</td>
<td>O</td>
<td>3</td>
<td>Option to print definitions in summary table</td>
</tr>
<tr>
<td>LEVEL</td>
<td>O</td>
<td>1</td>
<td>Print level: 1 = normal printout 2 = additional printout</td>
</tr>
<tr>
<td>SORT</td>
<td>O</td>
<td></td>
<td>Specifies how output is to be sorted: ID = by identifier (default) DESC = by description NUM = by user specified station number (valid only when processing stations) NO = do not sort</td>
</tr>
<tr>
<td>SPACING</td>
<td>O</td>
<td>6</td>
<td>Option to control spacing of output when SUMMARY(YES) has been specified</td>
</tr>
<tr>
<td>SINGLE</td>
<td>O</td>
<td></td>
<td>Print output single spaced</td>
</tr>
<tr>
<td>DOUBLE</td>
<td>O</td>
<td></td>
<td>Print output double spaced</td>
</tr>
<tr>
<td>DEGMIN</td>
<td>O</td>
<td>3</td>
<td>Option to output station location as degrees and minutes</td>
</tr>
<tr>
<td>OUTPUT</td>
<td>O</td>
<td></td>
<td>Option to output character strings</td>
</tr>
<tr>
<td>Parameter</td>
<td>Required/ Optional</td>
<td>Maximum Characters</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------</td>
<td>--------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>CHARSTRNG</td>
<td></td>
<td></td>
<td>Character string to be output - if an underscore is entered, it will be converted to a blank before being output</td>
</tr>
<tr>
<td>UNIT</td>
<td>0</td>
<td></td>
<td>Output unit number - if not specified then the default punch unit will be used</td>
</tr>
<tr>
<td>NAMES</td>
<td>0</td>
<td></td>
<td>Print alphabetical list of names for specified parameter type</td>
</tr>
<tr>
<td>options</td>
<td>0</td>
<td></td>
<td>Options for processing specified parameter group</td>
</tr>
<tr>
<td>identifier</td>
<td>0 8</td>
<td></td>
<td>Area, basin, station, Carryover Group or Forecast Group identifier</td>
</tr>
<tr>
<td>IDRANGE</td>
<td>0</td>
<td></td>
<td>Identifier range - information for all identifiers in the alphabetical range id1 through id2 will be printed - ':' indicates to process all identifiers that match the characters before or after the colon</td>
</tr>
<tr>
<td>C</td>
<td>0</td>
<td></td>
<td>Type of identifier:</td>
</tr>
<tr>
<td>F</td>
<td></td>
<td></td>
<td>C = Carryover Group</td>
</tr>
<tr>
<td>C</td>
<td>0</td>
<td></td>
<td>F = Forecast Group</td>
</tr>
<tr>
<td>NOSORT</td>
<td>0</td>
<td></td>
<td>Print identifiers in forecast component computational order</td>
</tr>
<tr>
<td>SORT</td>
<td>0</td>
<td></td>
<td>Print identifiers in alphabetical order</td>
</tr>
<tr>
<td>state</td>
<td>0 2</td>
<td></td>
<td>Name of state to be processed</td>
</tr>
<tr>
<td>STATS</td>
<td>0</td>
<td></td>
<td>Print statistics for 24-hour PCPN and RRS stations</td>
</tr>
<tr>
<td>NEWPAGE</td>
<td>0</td>
<td></td>
<td>Go to top of new page</td>
</tr>
<tr>
<td>PUFORMAT</td>
<td>0 10</td>
<td></td>
<td>Option to control format used to punch basin boundary points:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>PACKED = rightmost zeros are removed</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>FIXED = values are printed in a fixed field</td>
</tr>
<tr>
<td>Parameter</td>
<td>Required/Optional</td>
<td>Maximum Characters</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------</td>
<td>--------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>width</td>
<td></td>
<td></td>
<td>ONEPERCARD = values are printed in a fixed field width with one lat/lon pair per card</td>
</tr>
<tr>
<td>PUMAXDEC</td>
<td>0</td>
<td></td>
<td>Option to control the number of decimal places to be used to punch basin boundary points - valid values are 0 through 4</td>
</tr>
<tr>
<td>RRSPUNCH</td>
<td>0</td>
<td>3</td>
<td>Option to control whether the minimum days to be retained and typical number of observations values are to be punched for RRS stations: YES = outputs values stored in parameter array NO = do not output - when station is defined, values will be obtained from the URRS parameters</td>
</tr>
<tr>
<td>INCOMPL</td>
<td>0</td>
<td>3</td>
<td>Option to process incomplete stations: YES = process both complete and incomplete stations NO = process only complete stations ONLY = process only incomplete stations</td>
</tr>
<tr>
<td>PCPNFORM</td>
<td>0</td>
<td>3</td>
<td>Option to print form for tabulating data for stations with PCPN data</td>
</tr>
</tbody>
</table>

Notes:

1/ To have each MAP area printout begin on a new page, use the NEWPAGE(YES) option of the SETOPT command.

2/ If the option PLOT(YES) is specified on either the DUMP or the SETOPT command and BASIN parameters are being printed, a map of the basin boundaries, centroid and grid points will be plotted for each basin.

3/ If the SUMMARY option is chosen, a one line summary of the AREA, BASIN or STATION definition is printed.
If the BASINS are being dumped the following information is printed:

- identifier
- description
- centroid
- elevation
- user specified area
- computed area
- MAP area that uses the basin boundary
- MAT area that uses the basin boundary

If FMAP areas are being dumped the following information is printed:

- identifier
- description
- centroid

If MAP areas are being dumped the following information is printed:

- identifier
- description
- centroid
- basin identifier
- type of timing weights
- type of station weights
- MDR usage indicator
- Future MAP area identifier

If MAPE areas are being dumped the following information is printed:

- identifier
- description
- centroid
- type of station weights

If MAPX areas are being dumped the following information is printed:

- identifier
- description
- number of basins
- basin identifiers
- Future MAP area identifier

If MAT areas are being dumped the following information is printed:

- identifier
- description
- centroid
- basin identifier
- type of station weights
If STATIONS are being dumped the following information is printed:

- identifier
- description
- state
- station number
- latitude
- longitude
- elevation
- data group codes
- data entry source codes

4/ If LEVEL(2) is specified then the following additional information will be printed:

<table>
<thead>
<tr>
<th>For</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>DUMP STATION PCPN</td>
<td>Closest PPVR stations used for station estimation</td>
</tr>
<tr>
<td>DUMP STATION TEMP</td>
<td>Closest MXMN, INST and FMM stations used for station estimation</td>
</tr>
<tr>
<td>DUMP NETWORK</td>
<td>Alphabetical order parameters (ORRS, OP24, OPVR, OT24 and OE24)</td>
</tr>
<tr>
<td>DUMP ORDER</td>
<td>Basin line segments information</td>
</tr>
</tbody>
</table>

5/ Sorted output is always sorted first by state and then by specific sort option.

Sample Input

Print general user parameters:

@DUMP PRINT USER

Print all general station parameter:

@DUMP STATION STAN

Print selected PCPN station parameters:

@DUMP STA PCPN DULLES DCA BAL

Print all basin parameters:

@DUMP BASIN ALL

Print Future MAP order information:

@DUMP ORDER FMAP

Print MAP order information for carryover group POTOMAC:

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rfs:633b_dump.wpd
@DUMP ORDER MAP C(POTOMAC)

Print list of all identifier names used. Sort list by station number:

@DUMP NAMES SORT(NUM)

Print all of the above example using one command:

@DUMP
    USER STATION STAN
    STA PCPN DULLES DCA BAL
    BASIN ALL
    ORDER FMAP
    ORDER MAP C(POTOMAC)
    NAMES SORT(NUMBER)

Punch all MAP area definitions in metric units:

@DUMP PUNCH UNITS(METR) AREA MAP

Print all station definitions in metric units, sorted by station description:

@DUMP UNITS(METR) SORT(DESC) STA ALLPARAM ALL