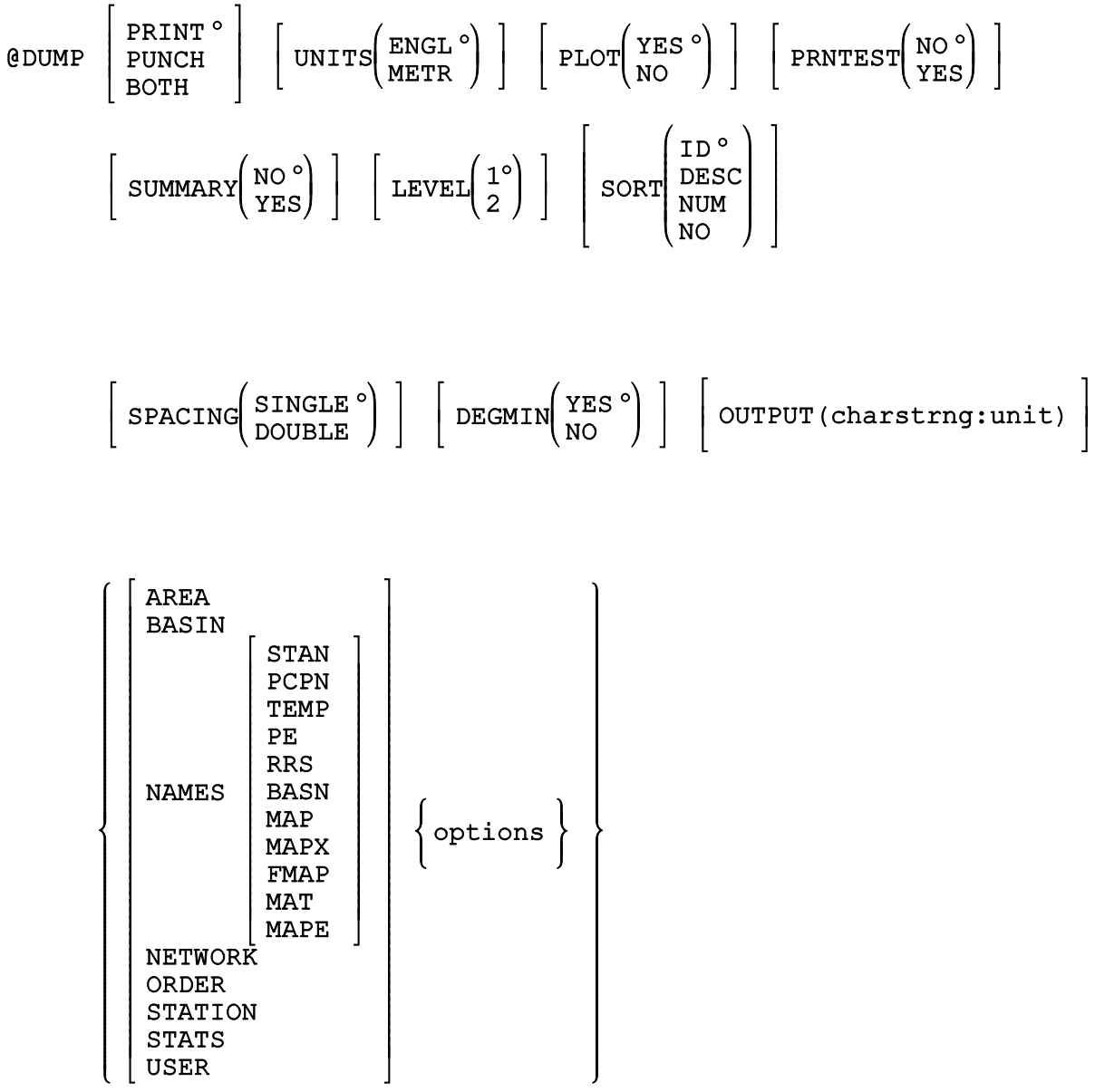
Purpose

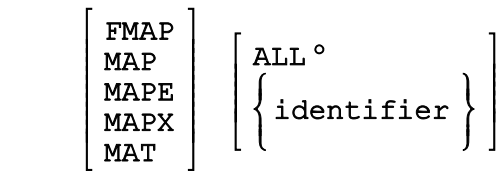
Command DUMP is used to output Area, Basin, Station, Computational Order and general user parametric information.

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.

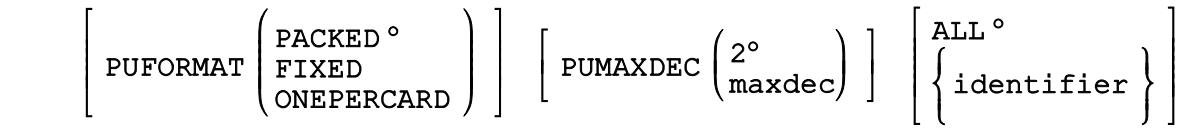
Format



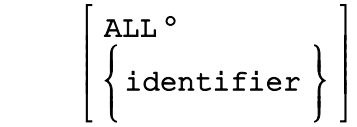
If the group AREA is specified then the options are: 1/



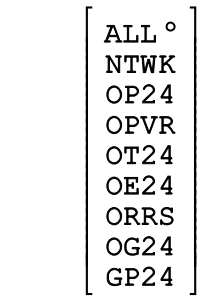
If the group BASIN is specified then the options are:



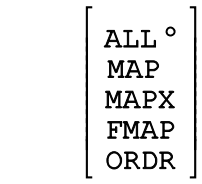
If the group NAMES is specified then the options are:



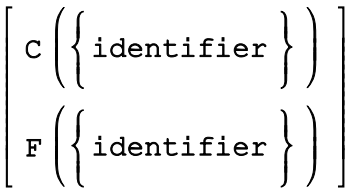
If the group NETWORK is specified then the options are:



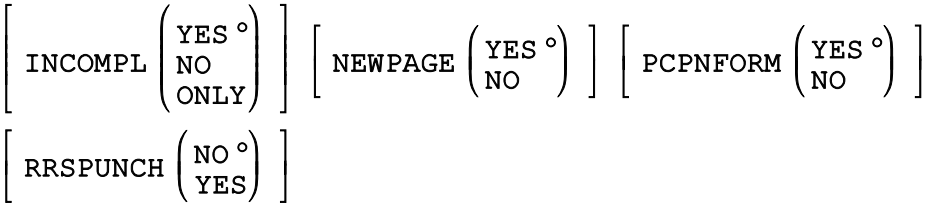
If the group ORDER is specified then the options are:

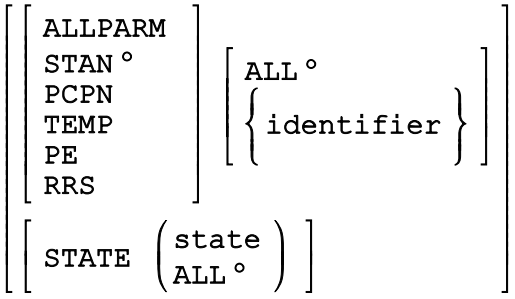


If the option MAP is specified then the following additional options are available:

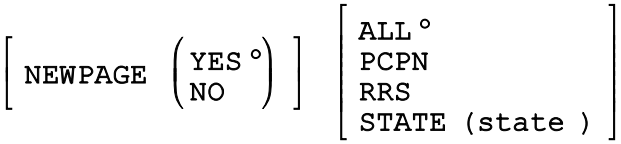


If the group STATION is specified then the options are:

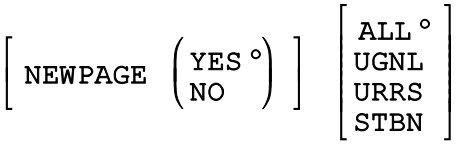




If the group STATS is specified then the options are:



If the group USER is specified then the options are:



Parameter Description

Parameter	Required/ Optional	Maximum Characters	Description
PRINT	O		Output definitions to the line printer (default)
PUNCH	O		Output definitions to card punch
BOTH	O		Output definition to both line printer and card punch
UNITS	O	4	Units in which parametric data is to be output: ENGL = English (default) METR = Metric
PLOT	O	3	Option to plot parametric data 2/
PRNTEST	O	3	Option to print PCPN estimator stations
SUMMARY	O	3	Option to print definitions in summary table 3/
LEVEL	O	1	Print level: 4/ 1 = normal printout 2 = additional printout
SORT	O		Specifies how output is to be sorted: 5/ ID = by identifier (default) DESC = by description NUM = by user specified station number (valid only when processing stations) NO = do not sort
SPACING	O	6	Option to control spacing of output when SUMMARY(YES) has been specified
SINGLE	O		Print output single spaced
DOUBLE	O		Print output double spaced
DEGMIN	O	3	Option to output station location as degrees and minutes
OUTPUT	O		Option to output character strings

Parameter	Required/ Optional	Maximum Characters	Description
CHARSTRNG			Character string to be output - if an underscore is entered, it will be converted to a blank before being output
UNIT	O		Output unit number - if not specified then the default punch unit will be used
NAMES	O		Print alphabetical list of names for specified parameter type
options	O		Options for processing specified parameter group
identifier	O	8	Area, basin, station, Carryover Group or Forecast Group identifier
IDRANGE	O		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
C F	O		Type of identifier: C = Carryover Group F = Forecast Group
NOSORT	O		Print identifiers in forecast component computational order
SORT	O		Print identifiers in alphabetical order
state	O	2	Name of state to be processed
STATS	O		Print statistics for 24-hour PCPN and RRS stations
NEWPAGE	O		Go to top of new page
PUFORMAT	O	10	Option to control format used to punch basin boundary points: PACKED = rightmost zeros are removed FIXED = values are printed in a fixed field

Parameter	Required/ Optional	Maximum Characters	Description
			width ONEPERCARD = values are printed in a fixed field width with one lat/lon pair per card
PUMAXDEC	O		Option to control the number of decimal places to be used to punch basin boundary points - valid values are 0 through 4
RRSPUNCH	O	3	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
INCOMPL	O	3	Option to process incomplete stations: YES = process both complete and incomplete stations NO = process only complete stations ONLY = process only incomplete stations
PCPNFORM	O	3	Option to print form for tabulating data for stations with PCPN data

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:

For	Items
DUMP STATION PCPN	Closest PPVR stations used for station estimation
DUMP STATION TEMP	Closest MXMN, INST and FMM stations used for station estimation
DUMP NETWORK	Alphabetical order parameters (ORRS, OP24, OPVR, OT24 and OE24)
DUMP ORDER	Basin line segments information

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:

```
@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 ALLPARM ALL
```