

Bitmap Definition

The bitmap specification is that defined for dissemination purposes in appendix 3 of ECMWF Meteorological Bulletin M3.1: "The dissemination of ECMWF products to Member States", D.Jokic. revision 3 9/97.

The specification is an ASCII text description of a rectangular area bitmap; the specification is held in a unix file.

The bitmap specification takes the form of a set of command-like definitions containing the following:

SPEC, a stand-alone command at the start of a bitmap specification.

SIZE=yy:xx, where yy indicates the number of rows, and xx indicates the number of points per row.

VALUES=OFF (default) or ON indicates whether subsequent changes to the bitmap are with respect to a bitmap preset to OFF (ie 0 bits) or to ON (ie 1 bits).

POINTS=jj:kk, where jj indicates the row number, and kk indicates which point(s) within the row take the opposite value to the value preset by VALUES. kk can take the general form of a list of values: k1/k2/k3/./kn where the format of a value is:

kk	depicting a single point
k1-k2	indicating points from K1 to K2 inclusive
0	no points

END, a stand-alone directive ending the specification.

For example:

```
SPEC,SIZE=10:10,VALUES=OFF,
POINTS=01:03-08/10,
      03:02-04/07-09,
      04:02/03/08/09,
      06:0,
      07:01-03/08-10,
      09:01-10
END
```

Gives the bitmap:

```
0 0 1 1 1 1 1 1 0 1
0 0 1 1 1 1 1 1 0 1
0 1 1 1 0 0 1 1 1 0
0 1 1 0 0 0 0 1 1 0
0 1 1 0 0 0 0 1 1 0
0 0 0 0 0 0 0 0 0 0
1 1 1 0 0 0 0 1 1 1
1 1 1 0 0 0 0 1 1 1
1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1
```