NAME

dbmapevents – Make a map of events from a database

SYNOPSIS

dbmapevents *dbname* {*sta* | *orid* | *lat:lon*} *range [-c] [auth1 sym1 hue1 lit1 sat1 ...]*

DESCRIPTION

dbmapevents will make a map of events and stations from a v. 3.0 CSS database. A detailed world-wide cartography database is used to provide coastlines, shorelines, rivers and political boundaries. The level of cartographic detail is determined by the size of the map region. Maps are always drawn using an equal distance projection with an origin that is determined either by a station location (from the **site** table), a hypocenter (from the **origin** table) or a user specified latitude-longitude coordinate. The events are always taken from the **origin** table and can be optionally sifted and color-symbol coded by the **author** field within the **origin** table. An interactive mode can be optionally enabled that allows the user to pan and zoom the map after it is initially drawn. PostScirpt versions of the map are put into a file named dbmapevents.ps.

COMMAND LINE ARGUMENTS

dbname The name of the subject database. The database name is defined as the file name of one of the flat relation files without the .relname suffix. For example, if the .wfdisc relation file name is ./foo.wfdisc then ./foo is the database name. This argument is required.

sta | *orid* | *lat:lon* A coordinate origin definition. If a valid station code is specified, then the latitude-longitude of that station is used as the origin. If a valid **orid** value is specified, then the hypocenter latitude-longitude for that **orid** is used. If a latitude:longitude value is specified (with a : separating the two values), then that value is used. Latitudes and longitudes are specified in degrees with +/- values representing north and south latitudes, respectively, and east and west longitudes. This argument is required.

range The map plot range in degrees from the origin to the edges of the map. This argument is required.

-c If specified, then enter interactive mode after making the map. During interactive mode, a cross-hairs cursor appears in the plot window and can be manipulated with the mouse. If this argument is not specified, then the program will exit immediately after making the map.

auth1 sym1 hue1 lit1 sat1 ...
An optional list of hypocenter author sifting keys and color-plotting symbol codes for each author. Each element in the list consists of *auth*# which specifies an **author** field within the **origin** table, *sym*#, which specifies a plotting symbol and should be one of 'box', 'triangle', 'hexagon', or 'cross', *hue*#, which specifies the symbol color hue value (0.0 to 360.0), *lit*#, which specifies the symbol color lightness value (0.0 to 1.0), and *sat*#, which specifies the symbol color saturation value. If no author sifting keys are given, then all hypocenters are plotted with the same symbol and color.

PROGRAM INTERACTION

If the *-c* command line argument has been specified, then a cross-hair cursor will appear in the map area and the program will go into an interactive mode (after the initial map is made). Single key commands can then be typed while the cursor cross-hair is active. Single key commands are defined as follows (no RETURN is required):

? - Display help menu.
q - Quit and leave the window on the screen.
Q - Quit and destroy the window.
p - Pan.
i - Zoom in by a small increment.
I - Zoom in by a large increment.

o - Zoom out by a small increment.
O - Zoom out by a large increment.
e - Identify closest event.
s - Identify closest station.
t - Enter time range.
1 - Toggle orid labels on/off.
2 - Toggle depth symbol color coding on/off.
3 - Toggle shallow depth symbol color coding on/off.
4 - Toggle depth residual symbol color coding on/off.
5 - Toggle station symbols on/off.
6 - Toggle color coding of events in the PDE catalog on/off.
7 - Toggle magnitude symbol size coding on/off.
8 - Toggle display of distance circles on/off.

ENVIRONMENT

The cartography file must be resident at $JSPC/data/maps/mapdata. The JSPC environment varibale must be set appropriately. In addition the SCHEMA_DIR environment variable can be used (see jspcenv(5)).

SEE ALSO

jspcenv(5)