NAME

mbsegylist – List selected header values in segy format seismic data files.

VERSION

Version 5.0

SYNOPSIS

mbsegylist [**–A** **–D***decimate* **–H** **–G***delimeter* **–I***infilename* **–L***lonflip* **–O***output_format* **–U***check* **–V** **–Z***segment*]

DESCRIPTION

MBsegylist is a utility to output specified header values from segy seismic data files to stdout. The option **–O***output_format* is used to control the type and order of values output. By default, **mbsegylist** produces ASCII files in spreadsheet style, with data columns separated by tabs. Alternatively, the output can be binary, with each field represented as a double precision float (**–A** option).

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OPTIONS

–A
Causes the output to be binary (native double precision floating point) rather than ASCII. Some output options cannot be represented as single binary floats (e.g. time strings and longitude or latitude broken into degrees and minutes. These values are output as multiple fields as appropriate. Default: ASCII output with fields separated by tabs.

–D *decimate*
Sets the decimation of the output data. By default (i.e. *decimate*=1), every available data record is output. If *decimate*>1, then only every "*decimate*"th record will be output. Default: *decimate*=1.

–G *delimiter*
Sets the character(s) used to separate output fields when ascii columns are output. Default: tabs are used as delimiters.

–H This "help" flag cause the program to print out a description of its operation and then exit immediately.

–I *filename*
Sets the filename of the input segy seismic data file.

–L *lonflip*
Sets the range of the longitude values returned. If *lonflip*=–1 then the longitude values will be in the range from –360 to 0 degrees. If *lonflip*=0 then the longitude values will be in the range from –180 to 180 degrees. If *lonflip*=1 then the longitude values will be in the range from 0 to 360 degrees. Default: *lonflip* = 0.

–O *output_format*
Determines the form of the output; *output_format* is a string composed of one or more of the following characters:

/ special character: this causes the value indicated by the next character to be inverted. This applies only to simple numeric values such as depth and heading and not to values like time strings orpositions with hemisphere characters.

– special character: this causes the value indicated by the next character to be multiplied by −1. This applies only to simple numeric values such as depth and heading and not to values like time strings or positions with hemisphere characters.

C for CMP (or RP or CDP) gather number of a trace

c for trace number within a CMP (or RP or CDP) gather

D for trace start delay (seconds)

I for sample length (seconds)

i for time interval since last trace (seconds)

J for a time string (yyyy jd hh mm ss.ssssss) where jd is the day of the year

j for a time string (yyyy jd dm ss.ssssss) where jd is the day of the year and dm is the minute of the day

L for trace length (seconds)

M for unix (epoch) time in decimal seconds since 1/1/70 00:00:00

m for time in decimal seconds since first record

N for number of samples in the trace

n for trace counter (starts from 0)

R for range from source to receiver (m)

S for shot number

s for trace number within a shot gather

T for a time string (yyyy/mm/dd/hh/mm/ss)

t for a time string (yyyy mm dd hh mm ss)

U for unix time in integer seconds since 1/1/70 00:00:00

u for time in integer seconds since first record

V for shot or ping interval (decimal seconds)

X for longitude (decimal degrees)

x for longitude (degrees + decimal minutes + E/W)

Y for latitude (decimal degrees)

y for latitude (degrees + decimal minutes + N/S)

Z for source or sonar depth (positive downwards) (m)

z for depth (positive downwards) (m)

Default *output_format* = **TiXYSsCcDINL** (time, time interval, lon, lat, shot, shot trace #, cmp, cmp trace #, delay, sample length, number samples, trace length)

–V Normally, **mbsegylist** works "silently" without outputting anything to the stderr stream. If the **–V** flag is given, then **mbsegylist** works in a "verbose" mode and outputs the program version being used and all error status messages.

–Z *segment*
Causes the ascii output of different input segy files (e.g. when a datalist is specified with the **–I** option) to be separated by lines with *segment*. If *segment* is a single character, then the output is a multiple segment file of the sort accepted by the **GMT** program **psxy**. This option only works with ascii output, and is thus disabled when the **–A** option is specified. The most common usage is **–Z**I>**.**

EXAMPLES

Suppose one has a subbottom profiler segy data file called 20040722_152111.s7k.segy.

In order to obtain a listing of the shot number, time tag, and position of the traces in the file, use **mbsegylist** as follows:

```
mbsegylist –I 20040722_152111.s7k.segy –OSTXY
```

The output will be as follows:

```
56  2004/07/22/15/20/37.029000    –121.857289    36.775508
57  2004/07/22/15/20/37.590000    –121.857289    36.775514
58  2004/07/22/15/20/38.152000    –121.857289    36.775519
59  2004/07/22/15/20/38.713000    –121.857289    36.775525
60  2004/07/22/15/20/39.275000    –121.857289    36.775531
61  2004/07/22/15/20/39.837000    –121.857289    36.775536
62  2004/07/22/15/20/40.398000    –121.857289    36.775542
63  2004/07/22/15/20/40.960000    –121.857289    36.775547
64  2004/07/22/15/20/41.521000    –121.857289    36.775553
        .....
```

SEE ALSO

mbsystem(1), **mbextractsegy**(1), **mbsegyinfo**(1), **mbsegygrid**(1), **SIOSEIS**(http://sioseis.ucsd.edu/)

BUGS

Si. Oui. Ya. Da. Yes. Mess.