

NAME

`lsrun`, `dumprun` – list run files and run header contents, or frame contents

SYNOPSIS

lsrun [-l] [-t] [-h] [-r] [name] ...

dumprun [-f] [-t] [-m] [-s] [-d divisor] [-c columns] [-csv] name ...

DESCRIPTION

Lsrun prints a list of *run file* names, one per line. If no *name* is specified, the run files in the current directory are listed. Otherwise, for each given *name*, the run files beginning with that name are listed. If the *name* refers to a directory, the run files in that directory are listed.

If any of the run files listed have a *run description* (a line of text which may be entered after a run is captured), this description follows the run file name in the listing.

With the `-l` option, *lsrun* will display the run length, in seconds, following the run file name.

With the `-t` option, *lsrun* will display the run's start time, as recorded in the run header (if available), or an estimate of the start time based on the modification time of the least-recently modified file associated with a run, minus the run length. In the case where the time must be estimated, it is shown followed by a "~" (tilde) character.

With the `-h` option, *lsrun* will output its results as an HTML table.

With the `-r` option, *lsrun* will recursively search through all specified directories, or the current directory if no *name* is specified, and list the run files found in these directories and subdirectories.

Dumprun prints out all the contents of the run header for each named run. Each *name* specified as an argument may be either the name of a frame file, or the name of a run without the `.frm` suffix. Several lines will be printed to the standard output for each run, starting with general information about the run, and followed by the calibration information for each stored trace and waveform.

With the `-f` option, *dumprun* will dump out the frame header for each frame, following the run header contents. With the `-t`, it will dump out not only the frame headers, but also the trace data within each frame, as decimal integer values representing the raw A/D levels recorded. This gives an ASCII text representation of the entire frame file. With the `-m`, it will dump out the frame headers and trace data, as for the `-t` option, but trace data will be scaled to **mV** using the trace calibration information in the run header. The `-s` option can be used to suppress any frames in the run that were flagged as deleted by the *frmsel*(1) program, whether they were deleted manually or automatically. The `-d` option can be used to downsample the trace data that is dumped out, dividing the effective sampling rate of each trace by the specified divisor. The frame size, number of points and divisor for each trace are adjusted accordingly in the run header that is displayed. By default, the trace data will be presented as a single column, one number per line. A greater number of columns can be selected with the `-c` option. The samples should be read along rows rather than down the columns. However, with the `-csv` option the traces will be dumped as comma-separated values (CSV format), using a common sampling rate that works for all trace sampling rate divisors: traces are upsampled by repeating samples so that the data are all output using the base sampling rate divided by the GCD of all trace rate divisors.

Start time field handling

As of March 2015, *dumprun* will show the run file's start time, if this is recorded in the run header. Confusion can occur if run files move across time zones: the date is stored internally in UTC, and converted to local time when displayed. The displayed time should still be accurate, but may surprise you if you're expecting the local time of the time zone where it was captured. You can get the time displayed in another time zone by overriding it in software when running *dumprun*. E.g.:

```
TZ=Europe/Warsaw dumprun run015
```

BUGS

Before the November 2015 version, *lsrun* would display the whole `*.txt` file for the run description, even if this file happened to contain multiple lines of text. Now it only shows the first line.

FILES

*.frm frame files
*.txt corresponding run descriptions

SEE ALSO

cap(1), dsepr(1), frmset(1), analysis(1)