

## NAME

**mxwldmn** - filter rays based upon their weight

## PARAMETERS

**mxwldmn** uses the standard parameter interface

### **input** *file*

Input ray stream. If the filename is the string `stdin`, it reads the UNIX standard input stream. It accepts rays in **bpipe** format.

### **output** *file*

Output ray stream. If the filename is the string `stdout`, it writes to the UNIX standard output stream. It writes rays in **bpipe** format.

### **seed1** *unsigned int*

The first seed for the random number generator.

### **seed2** *unsigned int*

The second seed for the random number generator.

### **block** *unsigned int*

The block in the random number sequence at which to start using random numbers. (There are 1,048,576 blocks of 1,073,741,824 random numbers each).

### **version** *boolean*

Print out **mxwldmn**'s version and exit.

### **help** *boolean*

Print out help and exit.

### **debug** *list*

A list of debug flags. None are presently defined.

## DESCRIPTION

**mxwldmn** reads a ray stream in **bpipe** format and discards rays based upon their weight. It generates a uniformly distributed random number (using **ranlib**'s **genunf** function) between 0 and 1, and discards the ray if its weight is less than the random number. The weights of rays which are not discarded are set to unity; their polarization information is discarded as well.

It writes out a **bpipe** formatted ray stream.

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