

floatround() — Round to float precision

Syntax	Description	Remarks and examples	Conformability
Diagnostics	Also see		

Syntax

real matrix floatround(*real matrix x*)

Description

floatround(*x*) returns *x* rounded to IEEE 4-byte real (float) precision. floatround() is the element-by-element equivalent of Stata's `float()` function. The Mata function could not be named `float()` because the word `float` is reserved in Mata.

Remarks and examples

stata.com

```
: printf(" %21x\n", .1)
+1.999999999999999aX-004
: printf(" %21x\n", floatround(.1))
+1.99999a0000000X-004
```

Conformability

```
floatround(x):
  x:      r × c
  result:  r × c
```

Diagnostics

floatround(*x*) returns missing (.) if $x < -1.ffffeX+7e$ (approximately $-1.70141173319e+38$) or $x > 1.ffffeX+7e$ (approximately $1.70141173319e+38$).

In contrast with most functions, floatround(*x*) returns the same kind of missing value as *x* if *x* contains missing; . if *x* == ., .a if *x* == .a, .b if *x* == .b, ..., and .z if *x* == .z.

Also see

[M-4] [utility](#) — Matrix utility functions