3D GRAPHICS

USING THE PYTHON INTERFACE TO 2D GIST

Zane C. Motteler

Computer Scientist

Lawrence Livermore National Laboratory

■
P. O. BOX 808
LIIVERMORE, CA 94551
510/423-2143
FAX 510/423-9969

3D PLOTTER ORIGINALLY WRITTEN IN YORICK (Dave Munro, Steve Langer)

YORICK: AN INTERPRETED LANGUAGE DEVELOPED BY D. MUNRO

- HEAVILY VECTOR-ORIENTED
- MANY VECTOR FUNCTIONS AND OPERATIONS
- BUT: COLUMN MAJOR VECTORS, INDEXED BEGINNING AT 1
- ODD CONVENTIONS ON LOCAL/GLOBAL

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P. O. BOX 808
LIIVERMORE, CA 94551
510/423-2143
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SOME YORICK VECTOR FUNCTIONS

```
histogram (list [, weight])

digitize (x, bins)

interp (y, x, xp)

sort (x)
```


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SOME YORICK ARRAY OPERATIONS

`x (i)` means the ith entry in x as stored in memory.

Assignment to `x (<list of subscripts>)`

```
where((fs<0.0)(sum:1:8,1,1,)&7)
```

```
x (,,zcen,)
```

```
x (,dif,,)
```

```
x (,-) * y (-,,)
```

etc.

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Example Plots

```
plwf (z, y, x)

draw3(1)
```


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```
plwf(z,y,x,shade=1,ecolor="red")

draw3(1)
```


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```
plwf(z,y,x,shade=1,edges=0)

draw3(1)
```


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```
light3(diffuse=.2,specular=1)

limits_(square = 1)

draw3(1)
```


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FAX 510/423-9969

```
making_movie = 1

movie(demo5_light)

making_movie = 0
```


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