

pvisu : un visualiseur d'images avancé

Quelques fonctionnalités mais il y en a d'autres

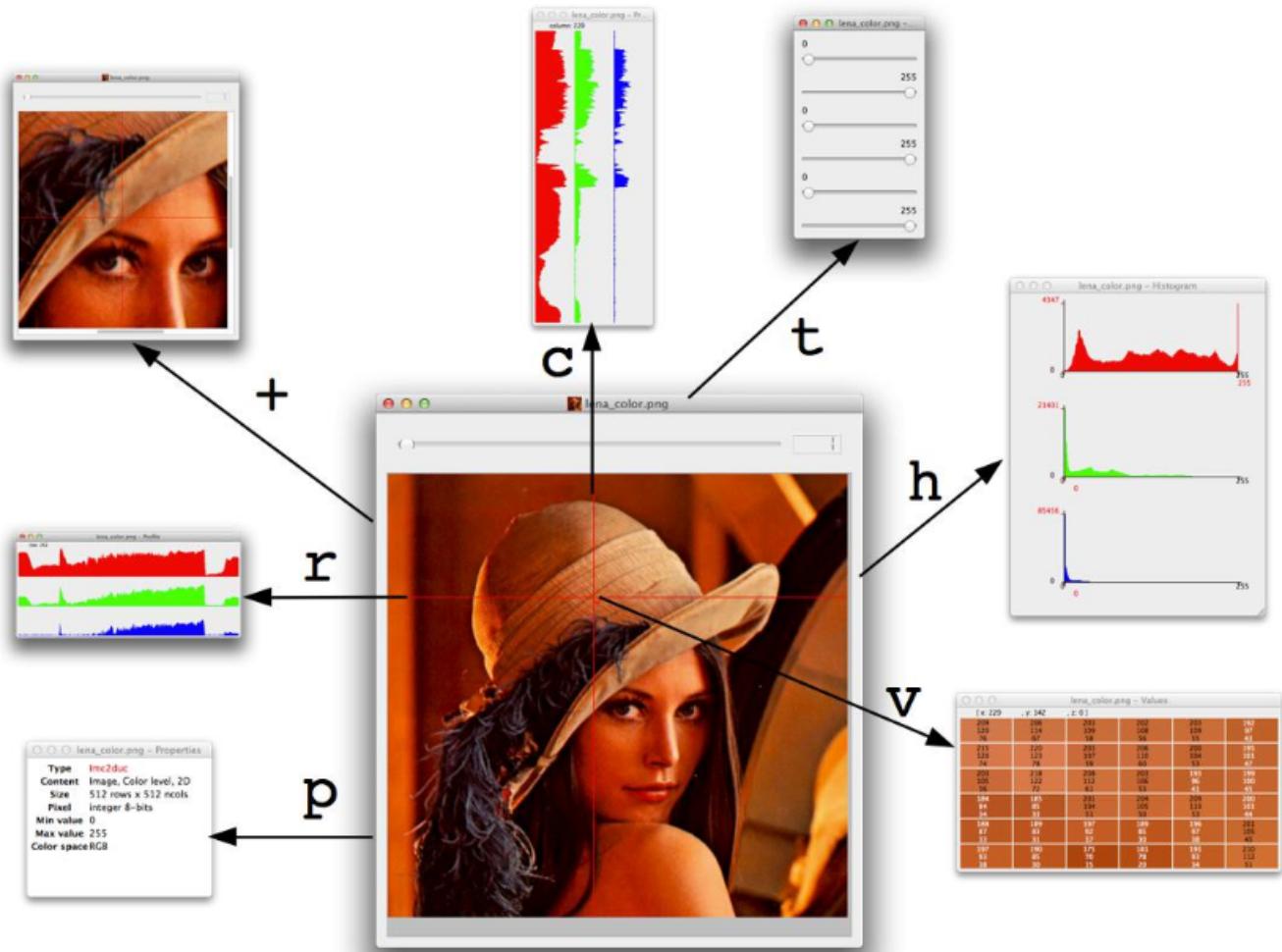
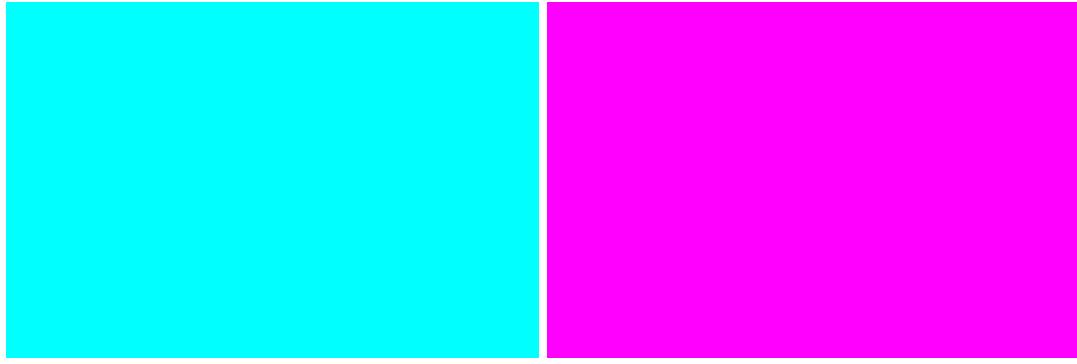


FIGURE 1 – \$> pvisu .../data/lena-color.png

bcl-base

```
print-ppm <r> <g> <b> <rows> <cols>
```



```
./print-ppm 0 255 255 200 300 > my-ppm.ppm
```

```
./print-ppm 255 0 255 200 300 > my-ppm.ppm
```

```
test1 <rows> <cols> <imd>
```

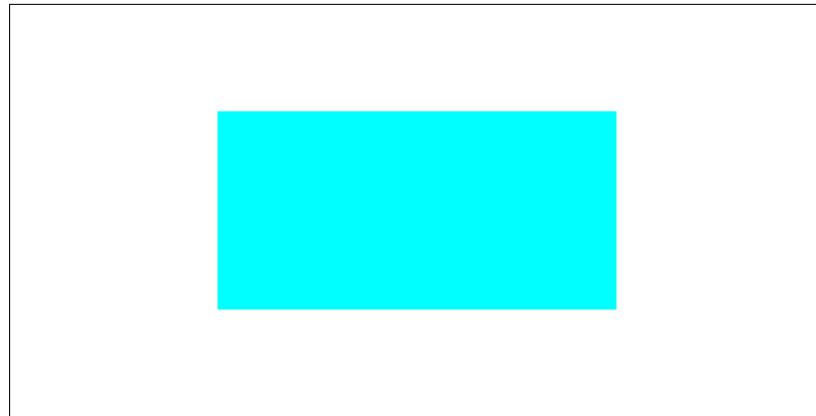


FIGURE 2 – ./test1 250 500 a.ppm

```
extract-subimage <i> <j> <rows> <cols> <ims> <imd>
```



```
./extract-subimage  
100 100 200 100  
../data/lena-color.ppm  
a.ppm
```



```
./extract-subimage  
100 100 100 200  
../data/lena-color.ppm  
b.ppm
```

```
extract-channel <num> <ims> <imd>
```



```
./extract-channel 0  
../data/lena-color.ppm r.ppm
```



```
./extract-channel 1  
../data/lena-color.ppm g.ppm
```



```
./extract-channel 2  
../data/lena-color.ppm b.ppm
```

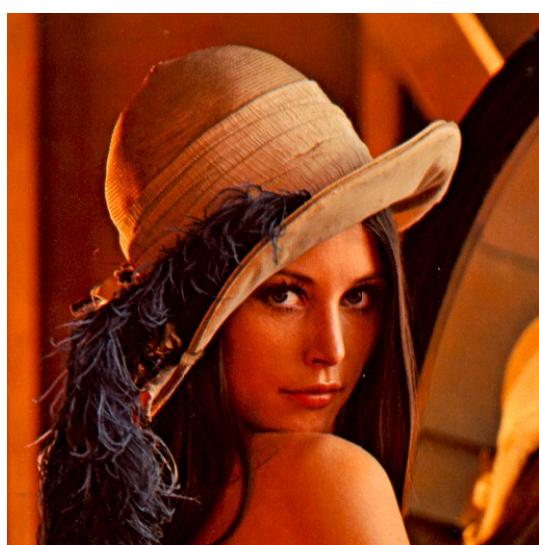
```
gray2color <ims0> <ims1> <ims2> <imd>
```



r.ppm

g.ppm

b.ppm



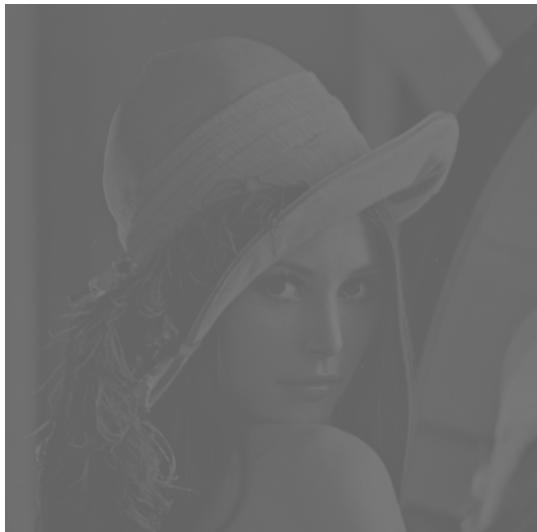
./gray2color r.ppm g.ppm b.ppm a.ppm

```
color2mean <ims> <imd>
```

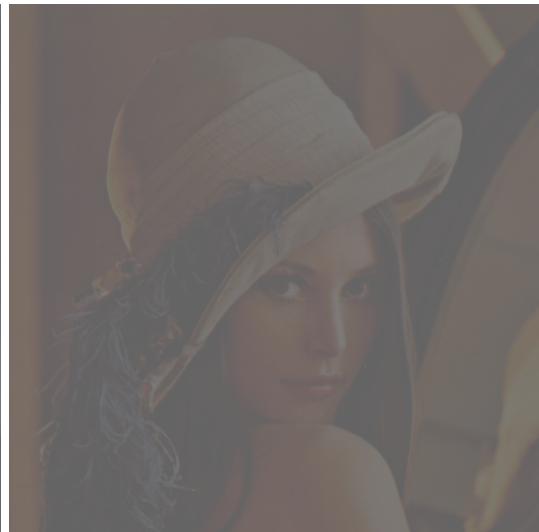


```
./color2mean ../datat/lena-color.ppm gray.ppm
```

```
normalize <min> <max> <ims> <imd>
```



```
./normalize 100 125 gray.ppm a.ppm
```



```
./normalize 100 125  
../data/lena-color.ppm a.ppm
```

domain

move <dx> <dy> <ims> <imd>



./move 0 30 ../data/pepper.ppm
a.ppm



./move 30 0 ../data/pepper.ppm
a.ppm



./move 30 30 ../data/pepper.ppm
a.ppm



./move -30 -30
../data/pepper.ppm a.ppm

scroll <dx> <dy> <ims> <imd>



./scroll 0 30
../data/pepper.ppm a.ppm



./scroll 30 0
../data/pepper.ppm a.ppm

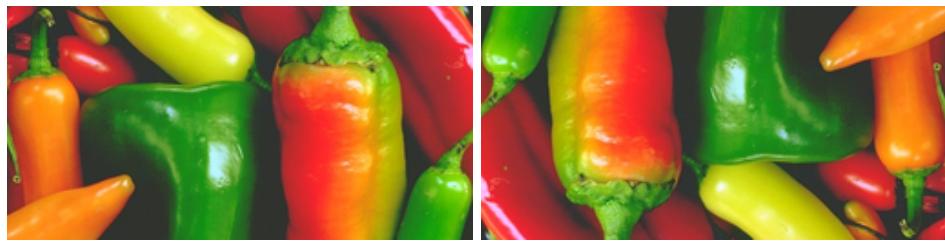


./scroll 30 30
../data/pepper.ppm a.ppm



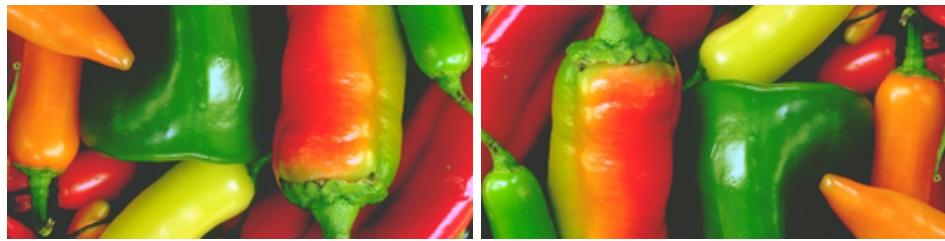
./scroll -30 -30
../data/pepper.ppm a.ppm

```
flip <dir> <ims> <imd>
```



```
./flip h ../data/pepper.ppm a.ppm
```

```
./flip v ../data/pepper.ppm a.ppm
```



```
./flip vh ../data/pepper.ppm a.ppm
```

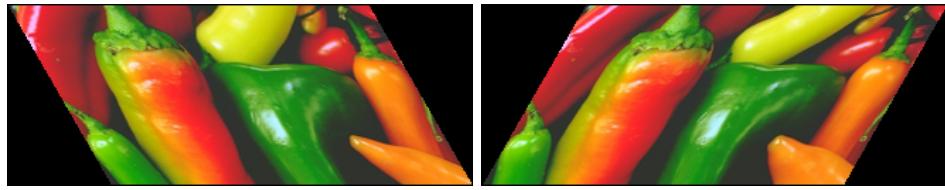
```
./flip hh ../data/pepper.ppm a.ppm
```



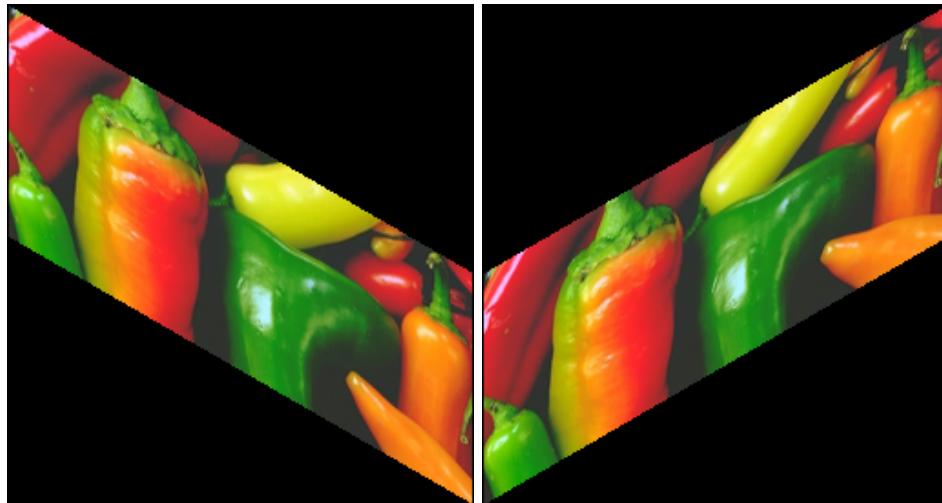
```
./flip t ../data/pepper.ppm a.ppm
```

```
./flip ht ../data/pepper.ppm a.ppm
```

```
shear <dir> <angle> <ims> <imd>
```

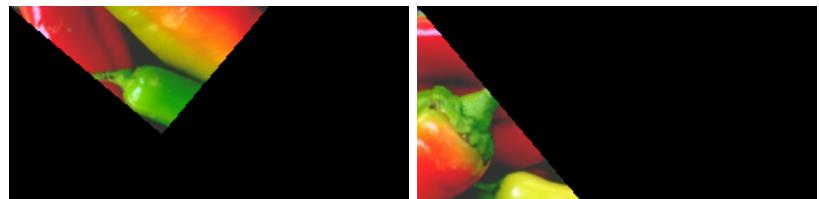


```
./shear h 30 ../data/pepper.ppm      ./shear h -30 ../data/pepper.ppm  
a.ppm                                a.ppm
```

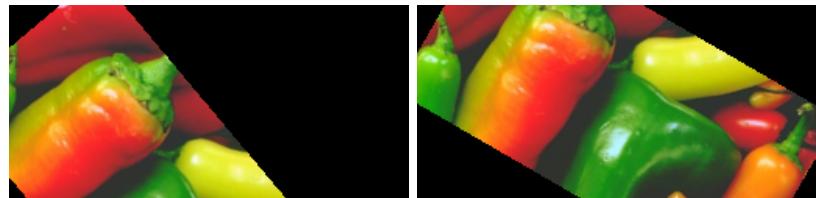


```
./shear v 30 ../data/pepper.ppm      ./shear v -30 ../data/pepper.ppm  
a.ppm                                 a.ppm
```

```
rotate <x> <y> <angle> <ims> <imd>
```



```
./rotate 0 0 50          ./rotate 0 0 -50  
..../data/pepper.ppm a.ppm ..../data/pepper.ppm a.ppm
```



```
./rotate 50 50 50          ./rotate 128 64 -30  
..../data/pepper.ppm a.ppm ..../data/pepper.ppm a.ppm
```

```
rotate 128 64 -30 pepper.ppm  $\simeq$  shear(s) + flip(s)
```



```
./shear h -15            ./shear v 26.57 b.ppm c.ppm  
..../data/pepper.ppm a.ppm ..../data/pepper.ppm a.ppm
```

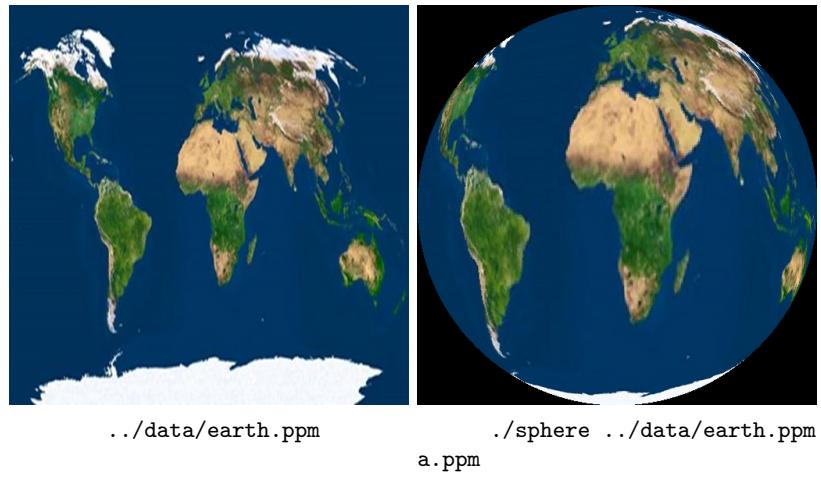


```
./shear h -15 d.ppm e.ppm
```

```
wave <tx> <ax> <ty> <ay> <ims> <imd>
```



```
sphere <ims> <imd>
```



```
..../data/earth.ppm                    ./sphere ..../data/earth.ppm  
a.ppm
```

