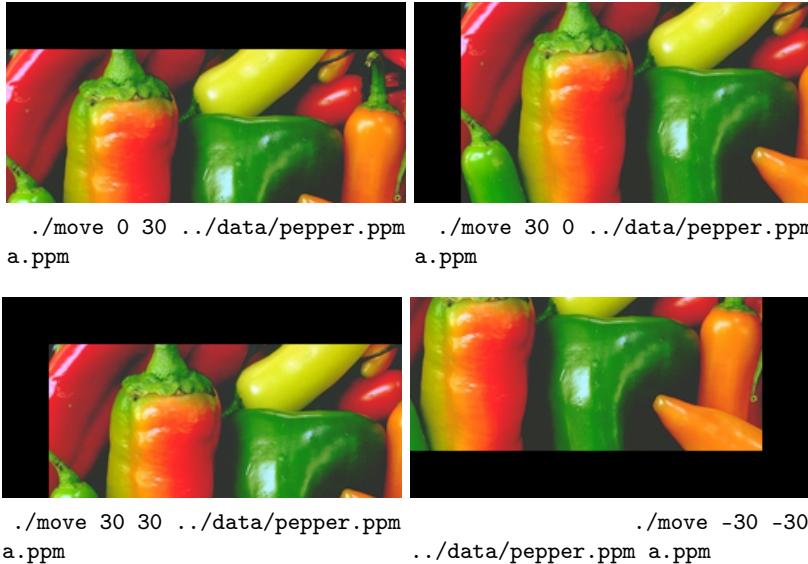


---

## domain

---

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



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

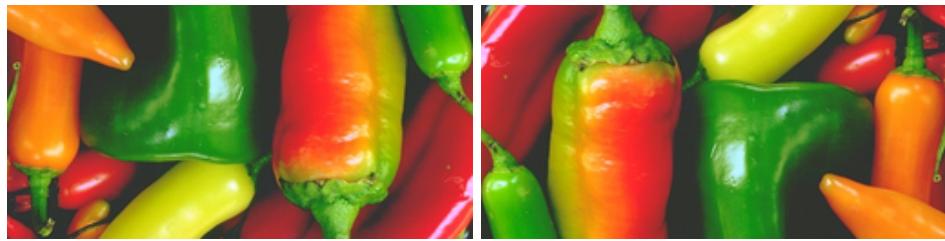


```
flip <dir> <ims> <imd>
```



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

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



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

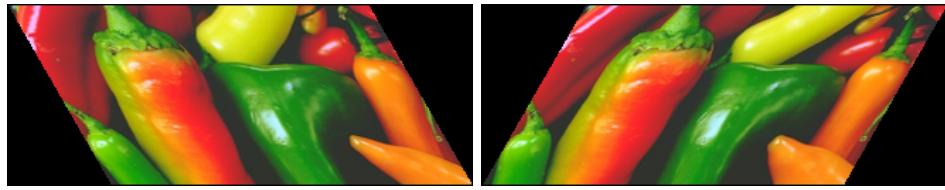
```
./flip hh ../data/pepper.ppm a.ppm
```



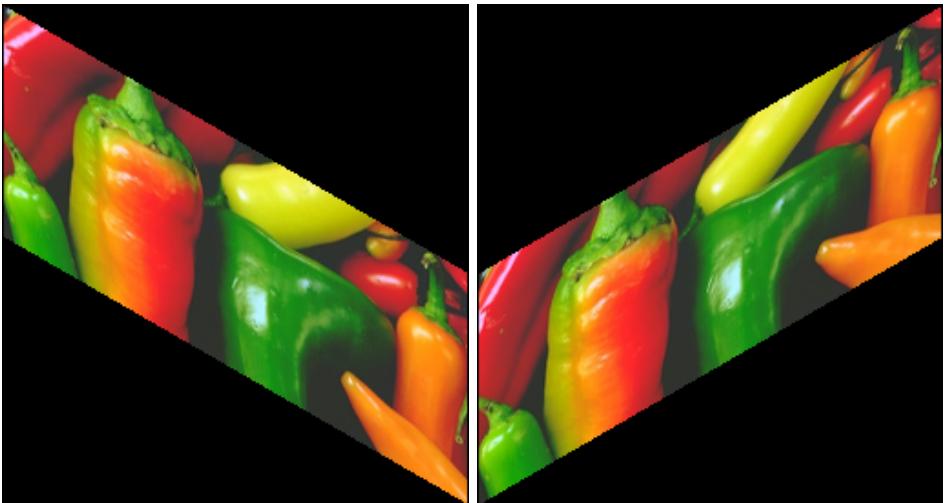
```
./flip t ../data/pepper.ppm a.ppm
```

```
./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
```

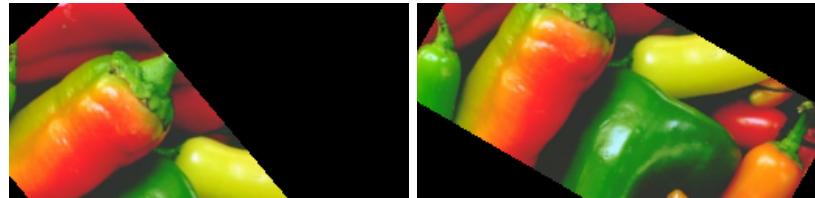


```
./shear v 30 ../data/pepper.ppm      ./shear v -30 ../data/pepper.ppm  
a.ppm                                 a.ppm
```

```
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
```

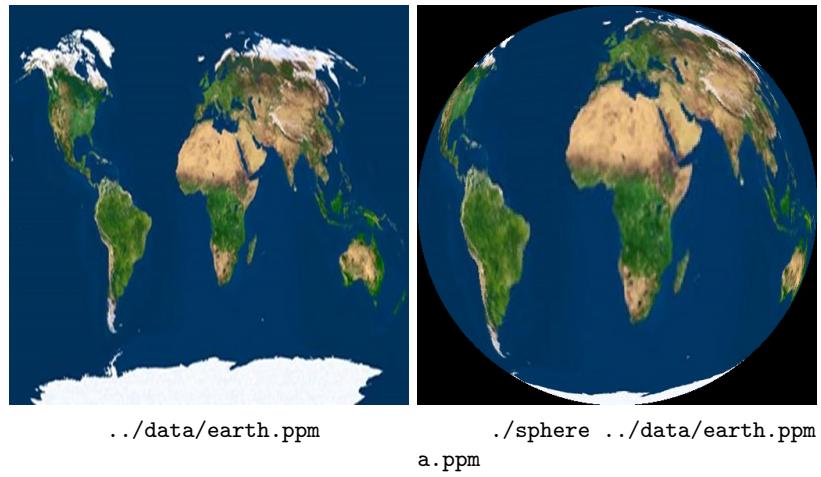


```
./shear h -15 d.ppm e.ppm
```

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



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



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

