

program

This is an automatic marker-based alignment program. You may need the newstack module of IMOD to get the final aligned st (mrc) data (not must).

example

```
./markerauto -i BBa.st -a BBa.rawtlt -n BBa_new.tlt -o BBa_fin.xf -d -1
```

The software will automatic initialize the diameter, no fast mode, no log output.

```
./markerauto -i BBa.st -a BBa.rawtlt -n BBa_new.tlt -o BBa_fin.xf -d 8
```

User gives the initial diameter value, no fast mode, no log output.

```
./markerauto -i BBa.st -a BBa.rawtlt -n BBa_new.tlt -o BBa_fin.xf -d -1 -v
```

The software will automatic initialize the diameter, with log output.

```
./markerauto -i BBa.st -a BBa.rawtlt -n BBa_new.tlt -o BBa_fin.xf -d -1 -t
```

the software will automatic initialize the diameter, with fast mode.

To generate final stack:

```
for IMOD: newstack -input BBa.st -output BBa_fin.mrc -xf BBa_fin.xf
```

```
for AuTom: mrcstack -i BBa.st -o BBa_fin.mrc -x BBa_fin.xf
```

argument

-short_argument(--long_argument): usage

- -i(--input): specify the inputfile.

```
-i inputfile.st OR --input inputfile.st
```

- -o(--output):name the outputfile.

```
-o outputfile.xf OR --output outputfile.xf
```

- -h(--help): print help content,no extra argument needed.

- -a(--initangle): specify the init angle file.

```
-a initangle.rawtlt OR -initangle inintangle.rawtlt
```

- -d(--diameter):specify the marker diameter(pixel).

```
-d 8 OR --diameter 8
```

- -n(--newangle):name the new angle filename.

```
-n newanglefile.tlt OR --newangle newanglefile.tlt
```

- -r(--rotationangle): image rotation

```
-r 0 OR --rotationangle 0
```

- `-v`(`--verbose`): display verbose information.number greater than 1 enables this mode.If you do not provide this argument,it will run as `'-v 0'`.

`-v 1` OR `--verbose 0`

- `-t`: enable fast mode.