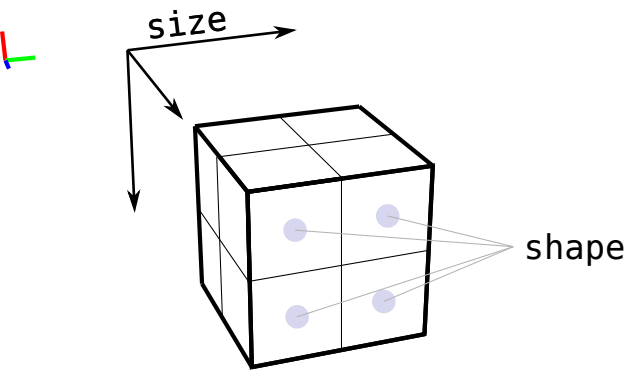
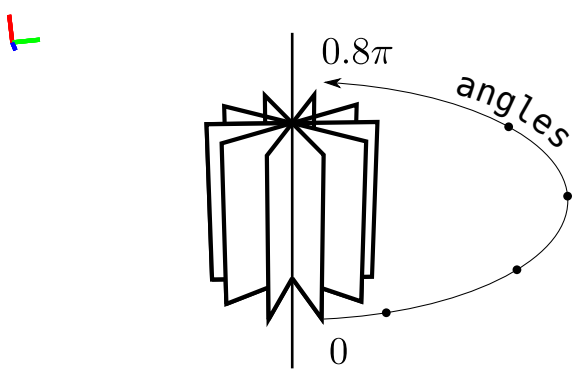
Standard geometries

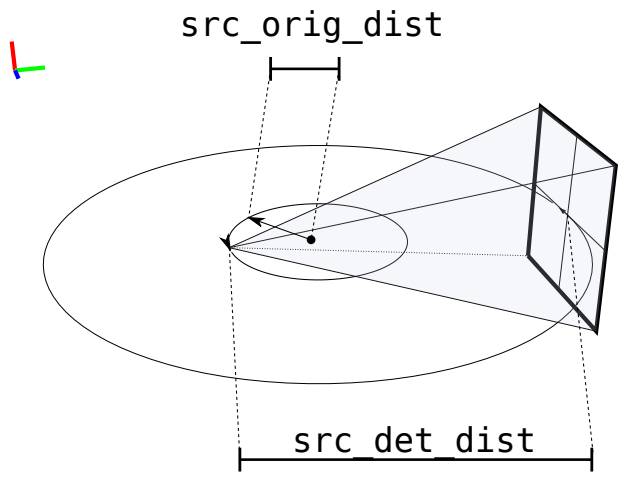
```
# Volume geometry
ts.volume(
    shape=(2, 2, 2),
    size=(2, 2, 2),
    pos=(0, 0, 0),
)
```




```
# Single-axis parallel beam
ts.parallel(
    angles=[0, .., 0.8 * np.pi],
    shape=(2, 2),
    size=(2, 2),
)
```

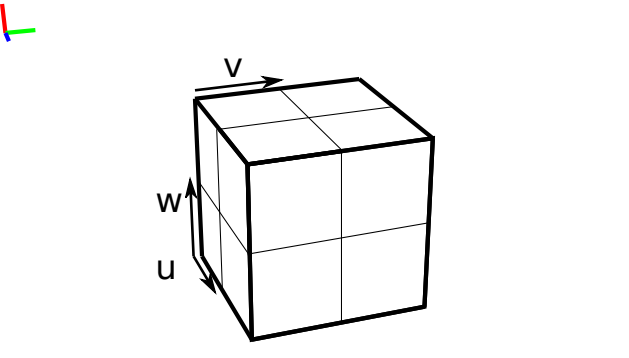



```
# Circular cone beam
cone_pg = ts.cone(
    angles=100,
    shape=2,
    src_orig_dist=1,
    src_det_dist=4,
)
```

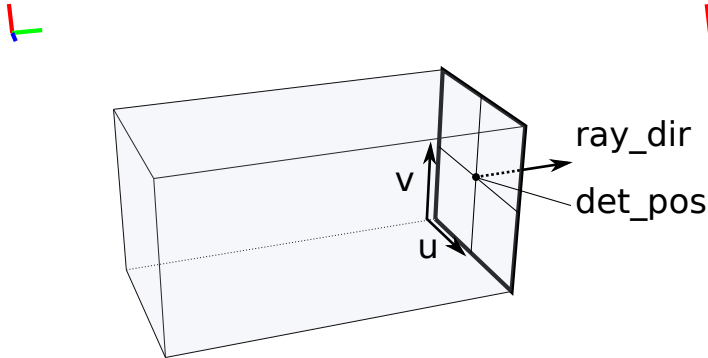


Vector (arbitrarily oriented) geometries

```
# Volume vector geometry
ts.volume_vec(
    shape=(2, 2, 2),
    pos=[(0, 0, 0)],
    w=[(1, 0, 0)],
    v=[(0, 1, 0)],
    u=[(0, 0, 1)],
)
```




```
# Parallel vector geometry
ts.parallel_vec(
    shape=(2, 2),
    ray_dir=[(0, 1, 0)],
    det_pos=[(0, 2, 0)],
    det_v=[(1, 0, 0)],
    det_u=[(0, 0, 1)],
)
```




```
# Cone vector geometry
ts.cone_vec(
    shape=(2, 2),
    src_pos=[(0, -2, 0)],
    det_pos=[(0, 2, 0)],
    det_v=[(1, 0, 0)],
    det_u=[(0, 0, 1)],
)
```