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import numpy as np
import gstools as gs
# load 3D anisotrope field
x, y, z, field = np.loadtxt("directional.txt")
# define main axes by yaw, pitch and roll
angles = np.deg2rad([90, 45, 22])
model = gs.Gaussian(dim=3, angles=angles)
main_axes = model.main_axes()
# estimate variogram along all axes
bin_center, dir_vario = gs.vario_estimate(
    (x, y, z), field,
    direction=main_axes,
    bandwidth=10,
    angles_tol=np.deg2rad(22),
)
# fitting directional variogram
model.fit_variogram(bin_center, dir_vario)

```

