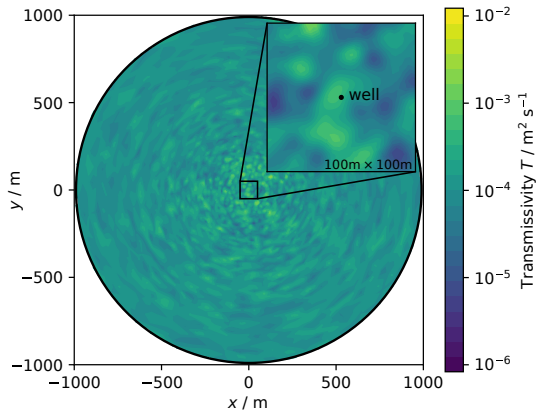


```

var = [1.0, 2.25]
len_scale = [10, 20]
# parameter sets with S, T, var, len_scale
para_set = np.array([[1e-4, 1e-4, v, ls]
    for v in var for ls in len_scale])
seed = gs.random.MasterRNG(0)
for para in para_set:
    # init cov model
    cov = gs.Gaussian(
        dim=2, var=para[2], len_scale=para[3])
    # init spatial random field class
    srf = gs.SRF(
        model=cov,
        mean=np.log(para[1]),
        normalizer=gs.normalizer.LogNormal,
        upscaling="coarse_graining")
    # run the ensemble
    for i in range(ens_size):
        # generate new transmissivity field
        srf.mesh(
            model.msh,
            seed=seed(),
            point_volumes=model.msh.volumes_flat)

```

(a)



(b)