Exercise 1

1. Choose a dielectric, complex and homogenous shape(s), and use orientation averaging.

2. Change equal-volume-sphere size parameter between 0.1 and 10.

- 3. Change dipole spacing kd between 0.1 and 1.0.
- 4. Change the grid size between 10 and 100.
- Compare the scattering and backscattering cross sections, and asymmetry parameters to similar Rayleigh/Mie approximations, plot relative differences as a function of size parameter, grid size and dipole spacing.
- 6. Find a suitable combination of grid size and dipole spacing, and applicability range of Rayleigh/Mie solutions

Exercise 2

- 1. Choose a conductive (|m| > 10), complex and homogenous shape(s), and use orientation averaging.
- 2.-6. Same as in Exercise 1.

Exception: dipole spacing kd varies between 0.01 and 0.1. Addition: also vary the polarizability definition from LDR (default) to FCD

Notice that FCD needs both -pol and -int options in A-DDA.