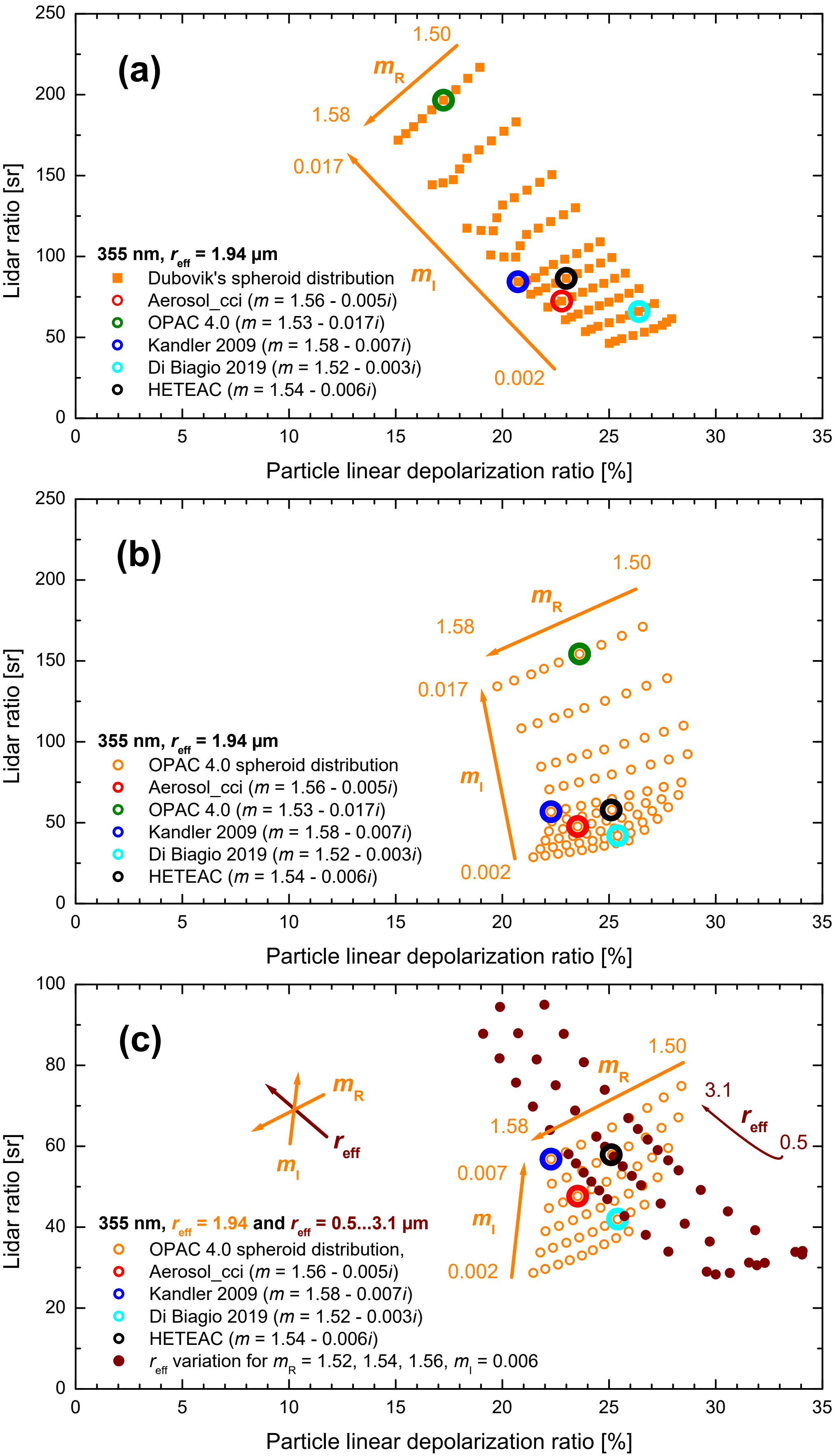
(a)
355 nm, r_{eff} = 1.94 µm
Dubovik's spheroid distribution
Aerosol_cci (m = 1.56 - 0.005i)
OPAC 4.0 (m = 1.53 - 0.017i)
Kandler 2009 (m = 1.58 - 0.007i)
Di Biagio 2019 (m = 1.52 - 0.003i)
HETEAC (m = 1.54 - 0.006i)
m_R
1.50
1.58
m_I
0.017
0.002
Lidar ratio [sr]
Particle linear depolarization ratio [%]
(b)
355 nm, r_{eff} = 1.94 µm
OPAC 4.0 spheroid distribution
Aerosol_cci (m = 1.56 - 0.005i)
OPAC 4.0 (m = 1.53 - 0.017i)
Kandler 2009 (m = 1.58 - 0.007i)
Di Biagio 2019 (m = 1.52 - 0.003i)
HETEAC (m = 1.54 - 0.006i)
m_R
1.50
1.58
m_I
0.017
0.002
Lidar ratio [sr]
Particle linear depolarization ratio [%]
(c)
355 nm, r_{eff} = 1.94 and r_{eff} = 0.5...3.1 µm
OPAC 4.0 spheroid distribution,
Aerosol_cci (m = 1.56 - 0.005i)
Kandler 2009 (m = 1.58 - 0.007i)
Di Biagio 2019 (m = 1.52 - 0.003i)
HETEAC (m = 1.54 - 0.006i)
r_{eff} variation for m_R = 1.52, 1.54, 1.56, m_I = 0.006
m_R
r_{eff}
m_I
1.50
1.58
3.1
0.5
0.007
0.002
Lidar ratio [sr]
Particle linear depolarization ratio [%]