Supplementary material
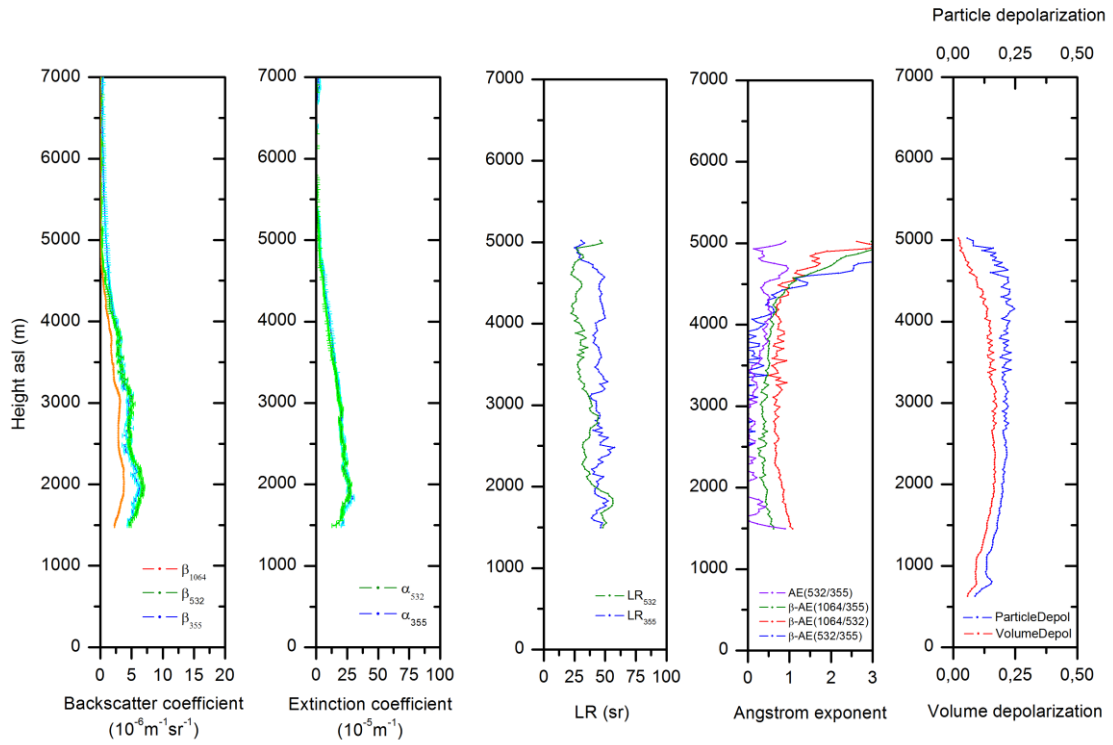
Fig. S1. Backscatter coefficient, extinction coefficient, lidar ratio, Ångström exponents and particle and volume depolarization profiles at 00:00 UTC on 22, February 2017 at Évora.
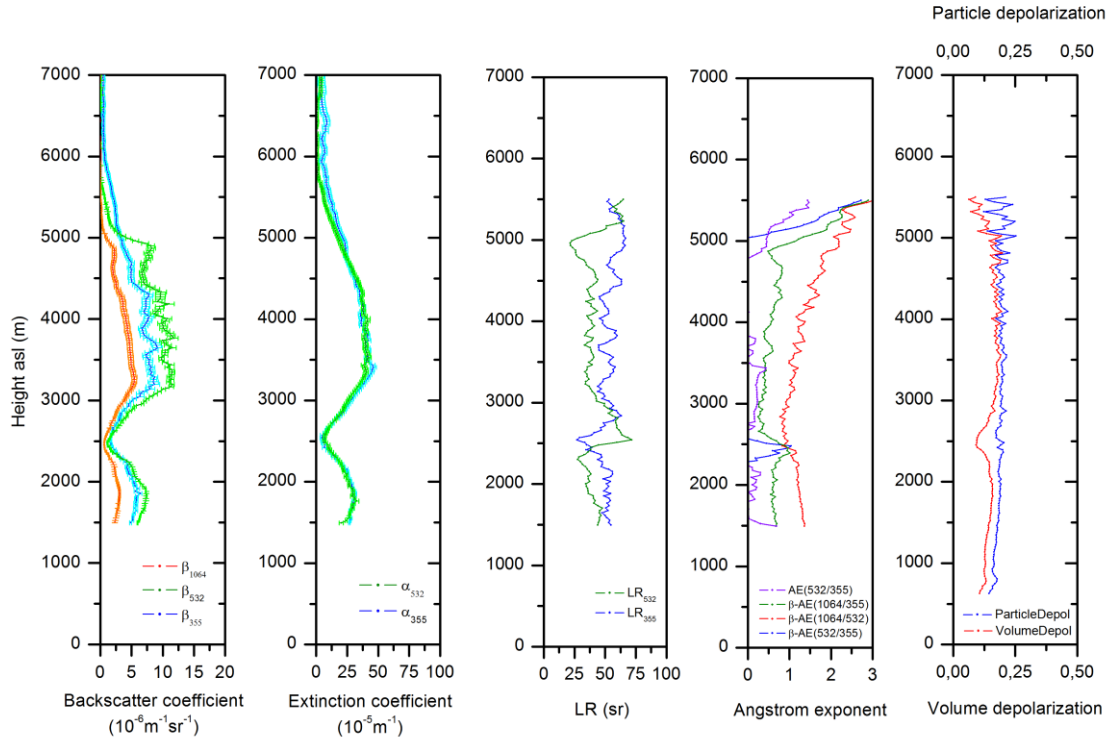
Fig. S2. Backscatter coefficient, extinction coefficient, lidar ratio, Ångström exponents and particle and volume depolarization profiles at 00:00 UTC on 23, February 2017 at Évora.
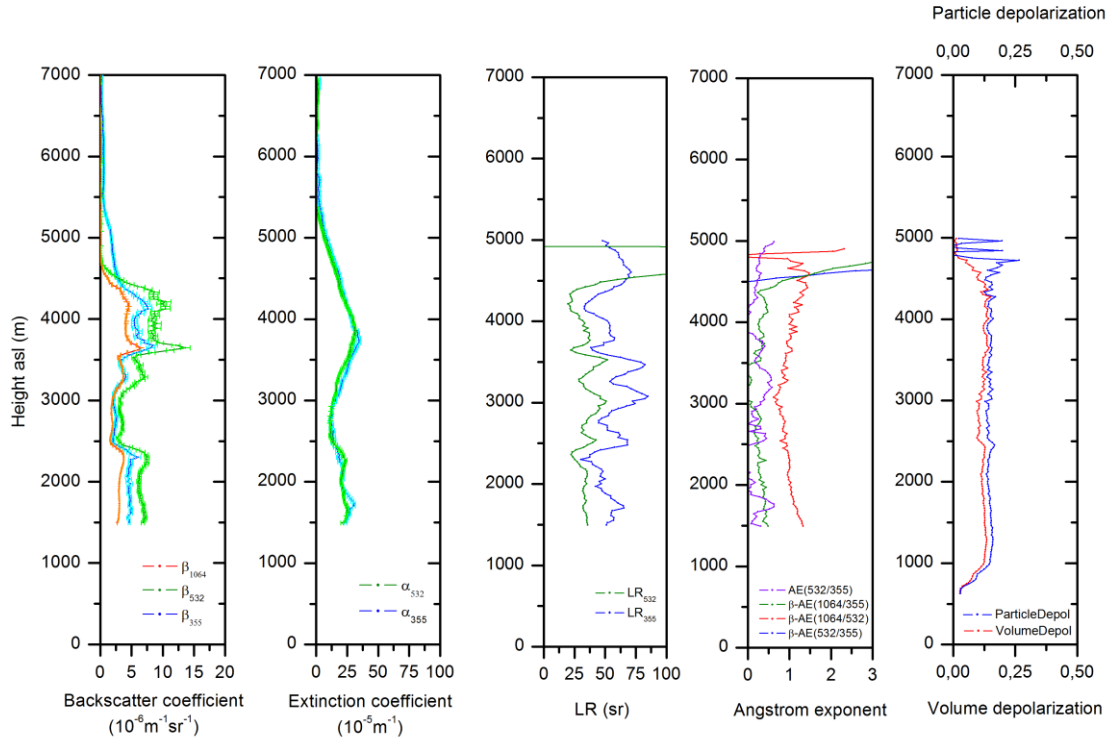
Fig. S3. Backscatter coefficient, extinction coefficient, lidar ratio, Ångström exponents and particle and volume depolarization profiles at 23:29 UTC on 23, February 2017 at Évora.
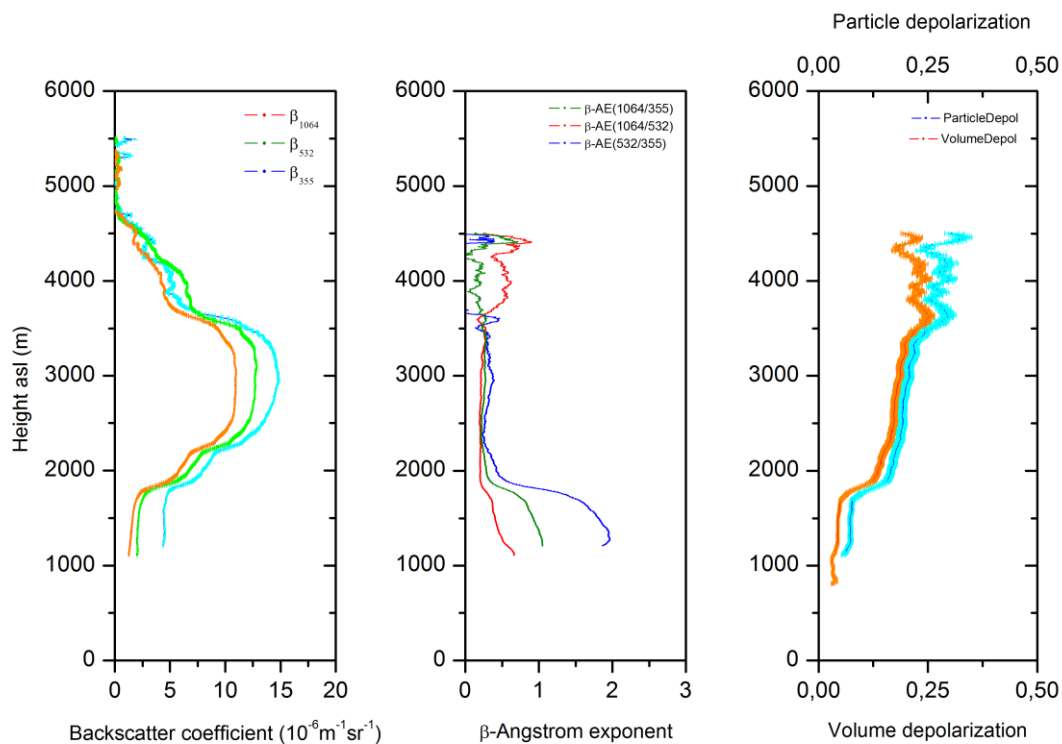
Fig. S4. Backscatter coefficient, β-Ångström exponent, particle and volume depolarization profiles at 13:30 UTC on 20 February 2017 at Granada.
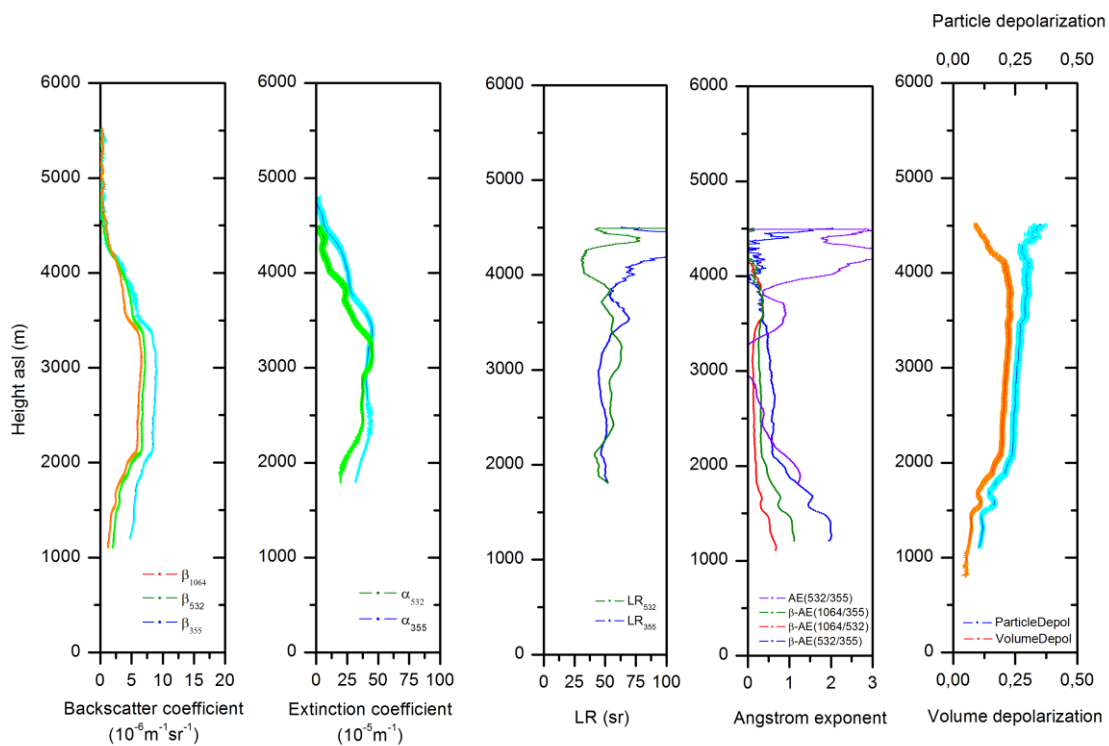
Fig. S5. Backscatter coefficient, extinction coefficient, lidar ratio, Ångström exponents and particle and volume depolarization profiles at 20:00 UTC on 20, February 2017 at Granada.
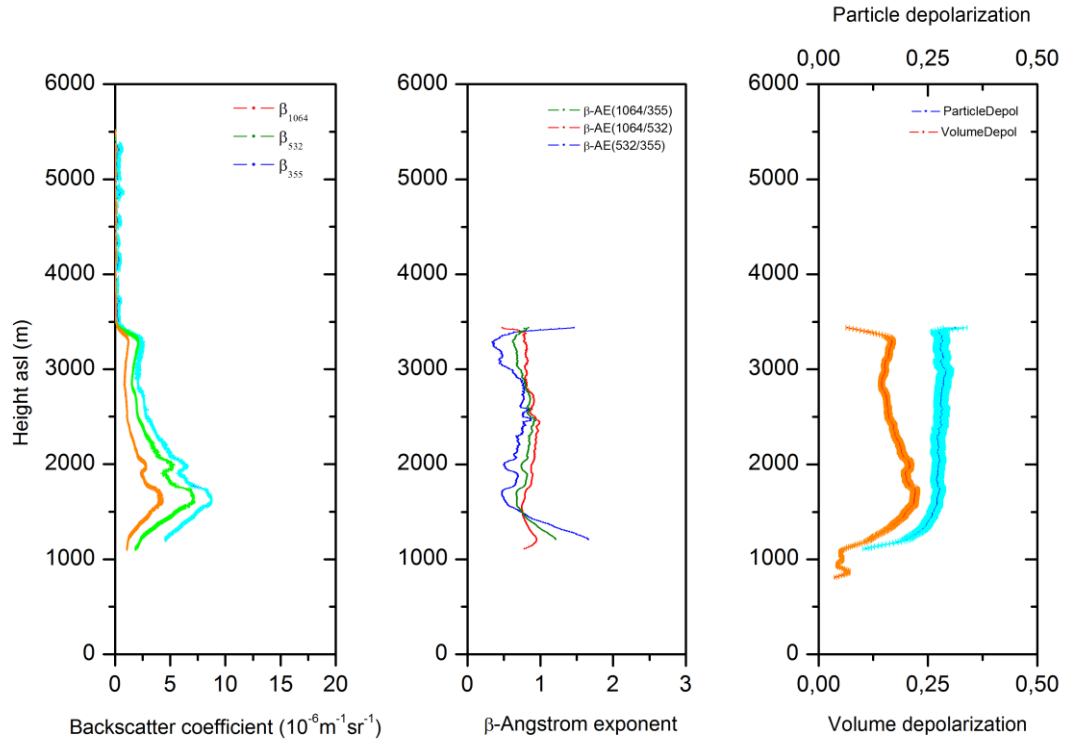
Fig. S6. Backscatter coefficient, β-Ångström exponent, particle and volume depolarization profiles at 07:31 UTC on 21 February 2017 at Granada.
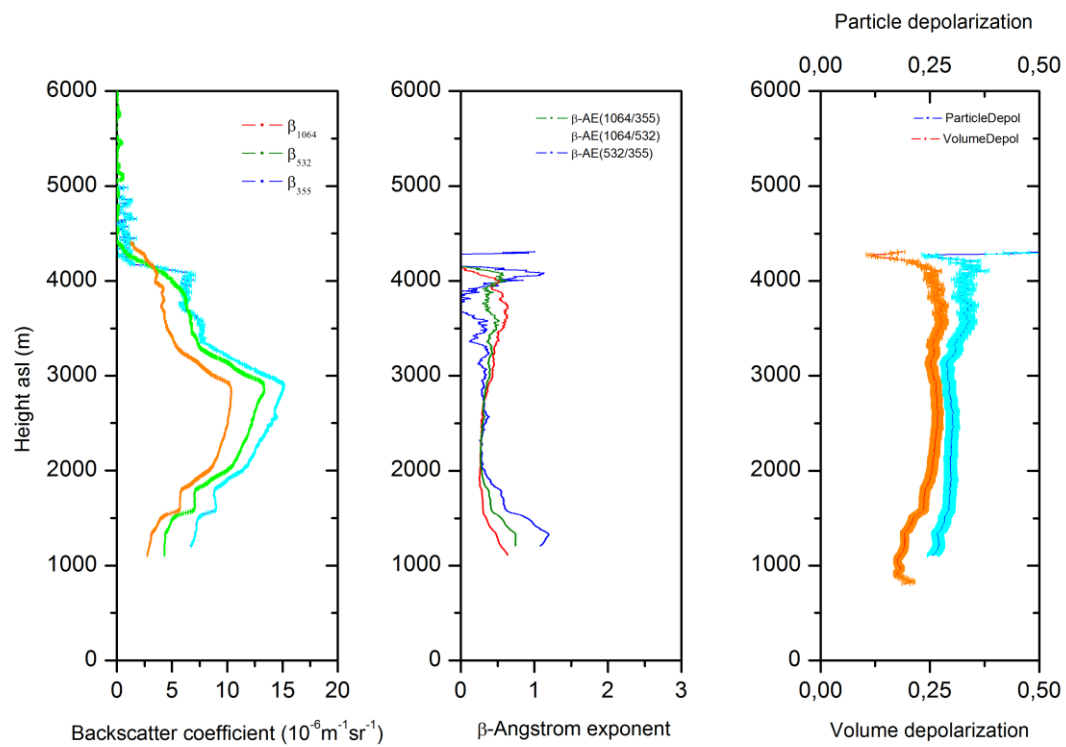
Fig. S7. Backscatter coefficient, β-Ångström exponent, particle and volume depolarization profiles at 12:30 UTC on 22 February 2017 at Granada.