



**Figure 9.** (a) Instantaneous MODIS AOT retrievals over the Eastern Mediterranean basin from 30 July to 6 August 2008. Concurred CMAQ simulated AOT made by using GFAS1.0 (b), GFAS1.1 (c), LSA SAF (d) and WF\_ABBA (e) based fire emission inventories. Pearson's R coefficients between MODIS observed and CMAQ simulated AOT are given below.