Figure 2. First case study: CESAR site, Cabauw, The Netherlands, 2 May 2012–4 Jun 2013 (2646 data points). The results of EQSAM4Clim-v12 (green, squares) in comparison with E-AIM (pink, cross) using the data provided by Pye et al. (2020). Both models use the T [K] (panel a) and RH [0-1] (panel b) together with the lumped ion concentrations [µg/m³(air)] of Mg²⁺, Ca²⁺, K⁺, Na⁺, HCl+Cl⁻, NH₃+NH₄⁺, HNO₃+NO₃⁻, H₂SO₄+SO₄²⁻+HSO₄⁻ as input to calculate the aerosol water mass, H₂O [µg/m³(air)] (panel c) and aerosol pH [-] (panel d), assuming the metastable aerosol phase (no solid/liquid, only gas/liquid partitioning aerosol partitioning). Additionally, the E-AIM output for the free pH (pH_F, orange X) is included (see Pye et al. (2020)).