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Sommario/riassunto	This Special Issue of Atmosphere, "Atmospheric Aqueous-Phase Chemistry", comprises ten original articles dealing with different aspects of chemistry in atmospheric liquid water. Liquid water in cloud and fog droplets and in moist aerosol particles is ubiquitous in the atmosphere. Dissolved species from the soluble aerosol fraction, as well as soluble trace gases, undergo chemical reactions in the aqueous phase via different mechanisms, usually yielding different products from those in the gas phase. In addition to their different reactivity, the chemical species solubility determines their fate in the atmosphere, i.e., their involvement in gas-phase or aqueous-phase chemistry. The articles of this Special Issue can be divided into three groups: (i) the first is mostly based on field measurements and/or combined field and modeling studies giving insights into the chemical characterization of different atmospheric liquid water samples from various environments; (ii) the second group is focused on studies of aqueous-phase reactivity of some important atmospheric organic compounds; and (iii) the final group comprises articles based on predictive modeling and/or combined modeling and laboratory studies providing insight into aqueous secondary organic aerosol (SOA) formation.