Though the abundance of narrative sources in Italy in the Late Middle Ages is hard to compare to their relative scarcity in Eastern Central Europe, both larger regions have very much in common in regard to research on environmental crises and their societal impact: There is in Italy and Eastern Central Europe, with notable exceptions for Hungary, hardly any historiography concerned with these topics. While severe environmentally caused impacts like the Great Famine have been well understood for North-Western Europe, climate-induced crisis has been neglected for both Southern and Eastern Central Europe. In my paper I want sketch the possibilities for a historiography sensitive to natural conditions to rethink the influx of meteorological extreme events on the shape of history. Therefore I focus on the effects of two globally influential volcano eruptions, the Samals eruption in 1257 and the eruption of Kuwae in 1464. Additionally I plan to characterize what events like the millennium flood of 1342 or the meteorologically troubled years 1346-47 could have had on larger processes like the end of medieval colonization in Eastern Central Europe at the eve of the Black Death in 1348. I hope to find that both regions in focus are therefore closer connected, coping with the same problems, as we might think without looking at natural extreme events. If such an approach can really fulfill the high demands of histoire croisée or even a Global History of the Middle Ages is yet to see. On the other hand, global or continental environmental events seem like a perfect starting point to test these concepts for the European Middle Ages. In this way Eastern Central Europe’s Middle Ages would be reconnected not only to European histories, but maybe even to a Global History of the centuries we know as the Late Middle Ages.