

Volcanic Ash Resuspension in Patagonia: Numerical Simulations and Observations (Supplementary Material)

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September 11, 2020

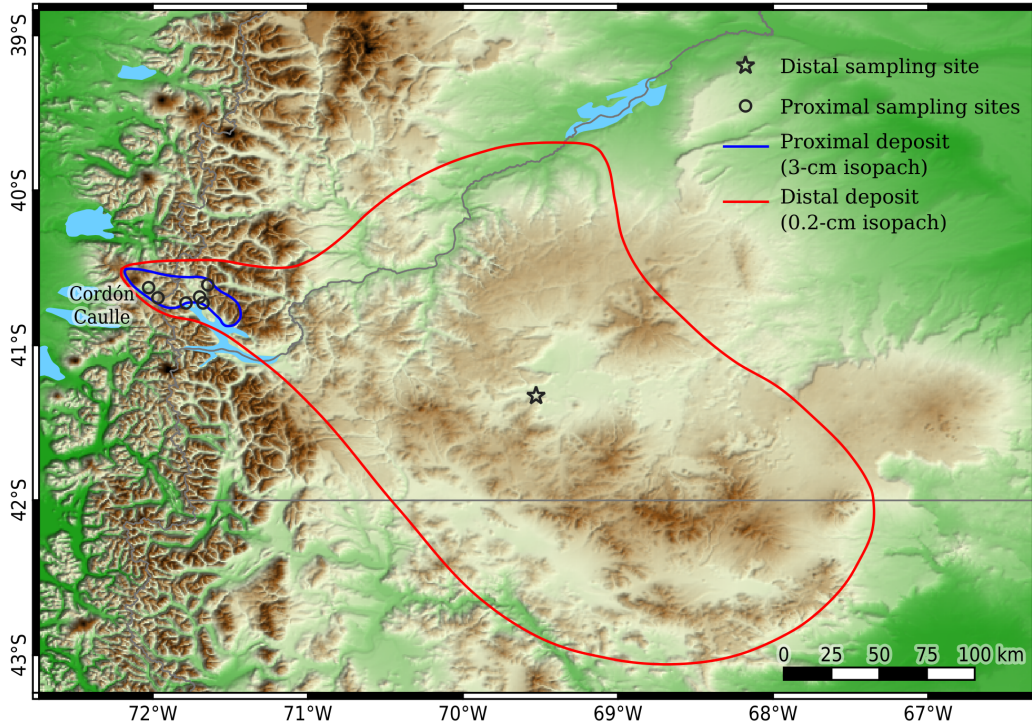


Figure S1: Map of the source area showing proximal sampling sites (circles) and the distal sampling site (star) locations. In this work, emission sources were constrained in an area delimited by the 0.2-cm isopach (solid red line). Moreover, this source area is subdivided into two regions: (i) a proximal emission area, delimited by the 3-cm isopach (solid blue line) and (ii) a distal emission area between the 3-cm and 0.2-cm isopachs. We considered measurements from 6 sampling sites in the proximal area (11 samples) and the sampling site in the distal area (4 samples) to obtain a weighted average GSD representative for each subarea, as shown in Fig. S2.

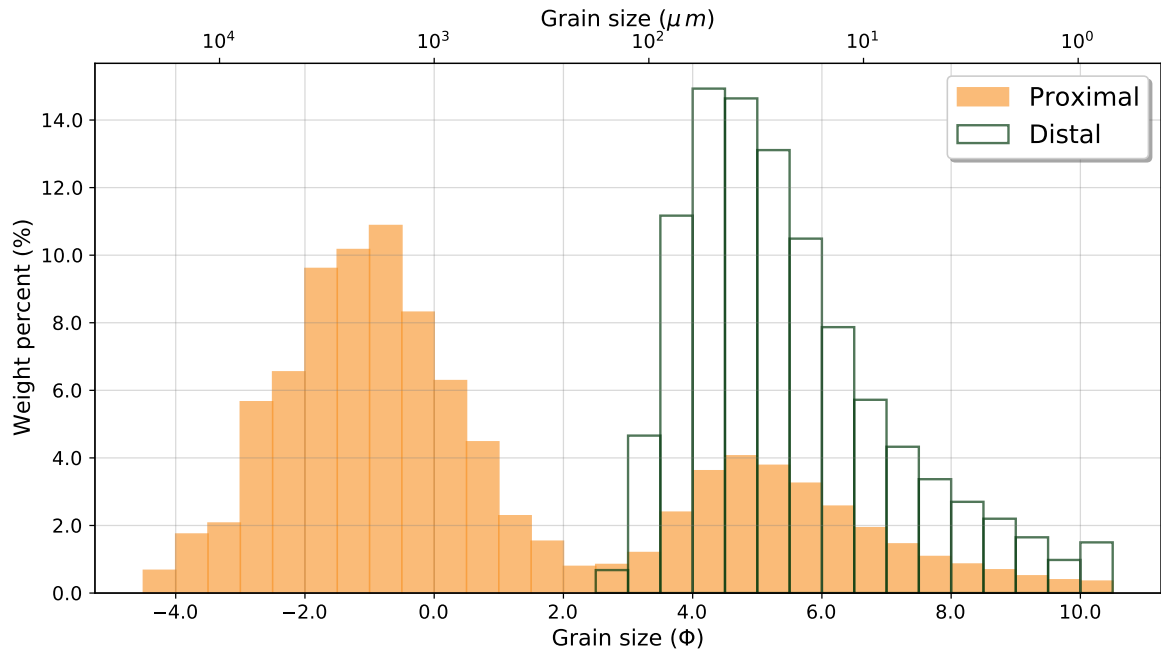


Figure S2: Weighted average Grain Size Distribution (GSD) for the proximal and distal emission areas defined in Fig. S1. The proximal GSD was computed using 11 samples collected from 6 sampling sites between Cordón Caulle and the Nahuel Huapi National Park. The distal GSD was computed using 4 samples collected in the distal sampling site around Ing. Jacobacci.

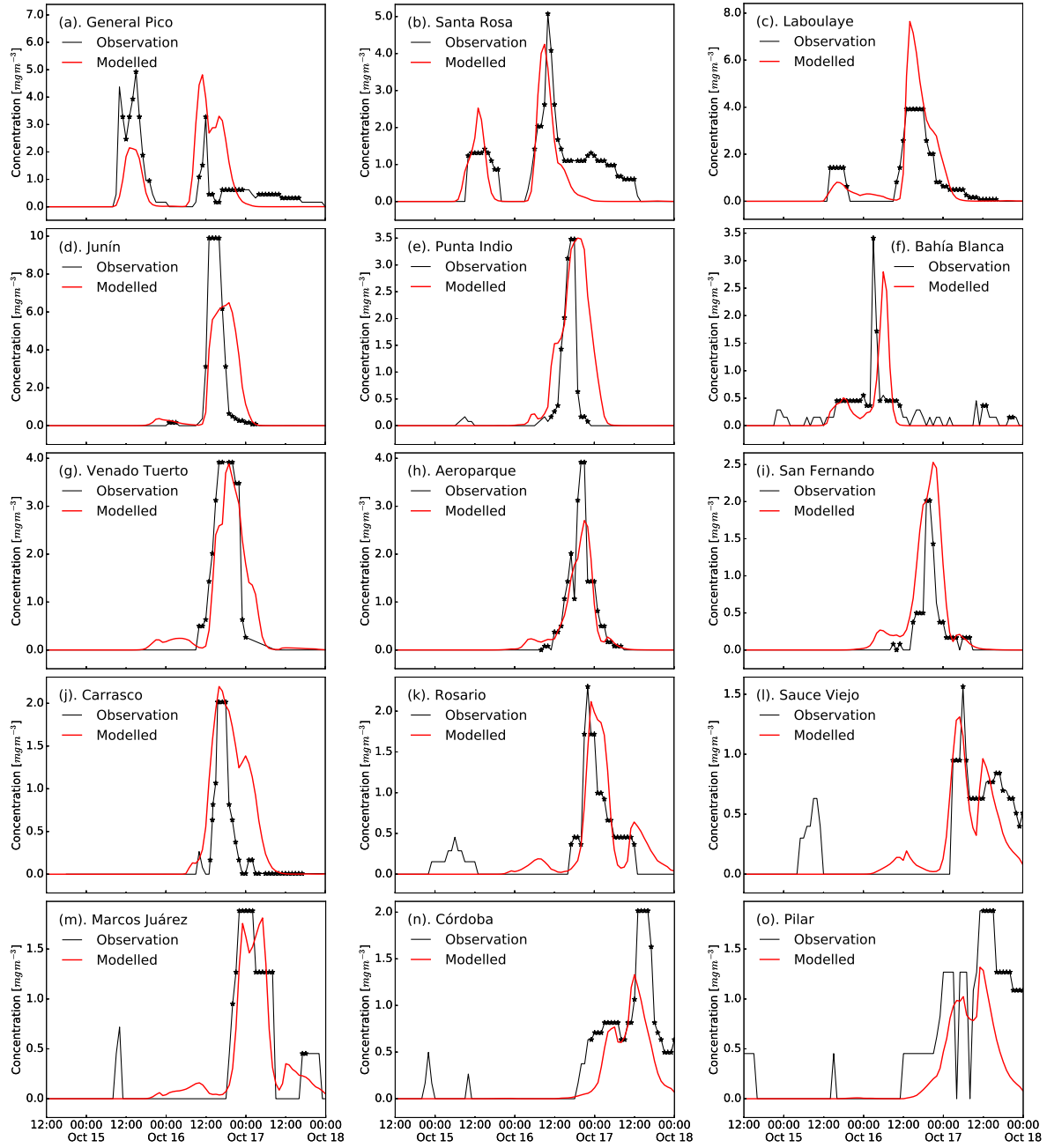


Figure S3: Resuspension events detected at multiple weather stations during the October 2011 outbreak. TSP concentration at surface according to model (solid red line) and measurement data derived from hourly visibility reports (solid black line) are in good agreement. Reports with ash in suspension are indicated by stars.

