

Table 1: Mean relative deviation achieved by different ablations (c.f. Table 1 in the paper).

Method	Wind Speed	Temperature	Precipitation
Ours	100.0 %	100.0 %	100.0 %
w/o steps	89.3 % (-10.7)	93.1 % (-6.9)	54.4 % (-45.6)
w/o approx	59.3 % (-40.7)	71.6 % (-28.4)	33.9 % (-66.1)
w/o both	56.0 % (-44.0)	62.9 % (-37.1)	18.4 % (-81.6)

Table 2: Detectability of different approaches used to fabricate extreme weather deviations (c.f. Table 2 in the paper).

Method	Wind Speed	Temperature	Precipitation
AdvDM	100.0 %	99.92 %	100.0 %
DP-Attacker	95.04 %	45.85 %	95.33 %
Ours	3.07 %	2.96 %	0.2 %

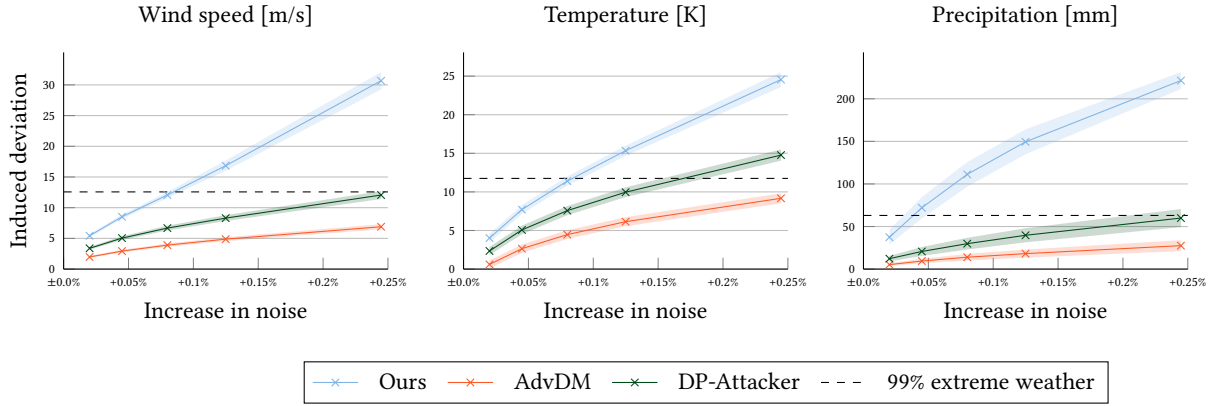


Figure 1: Resulting mean deviation induced by adversarial observations of different sizes (c.f. Figure 2 in the paper).

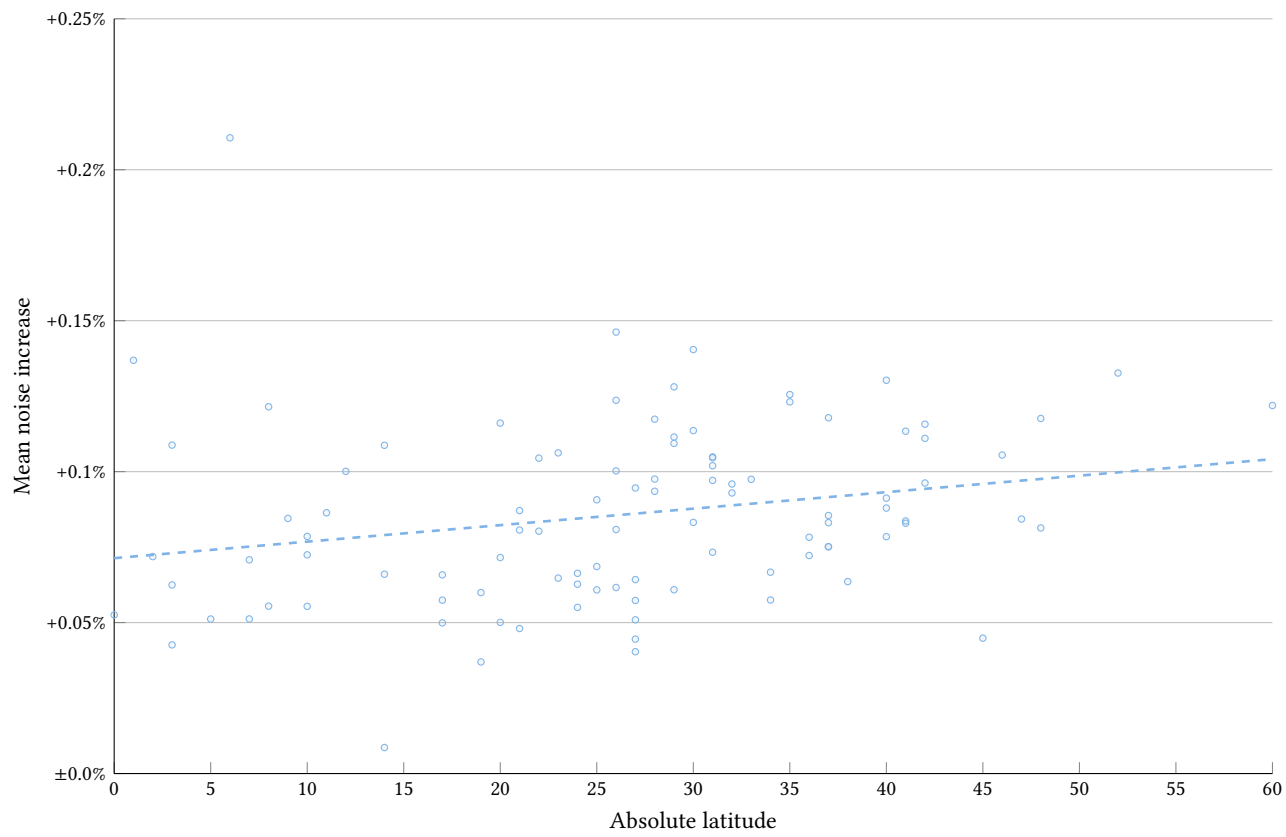


Figure 2: Mean required noise increase at different locations (c.f. Figure 3 in the paper).

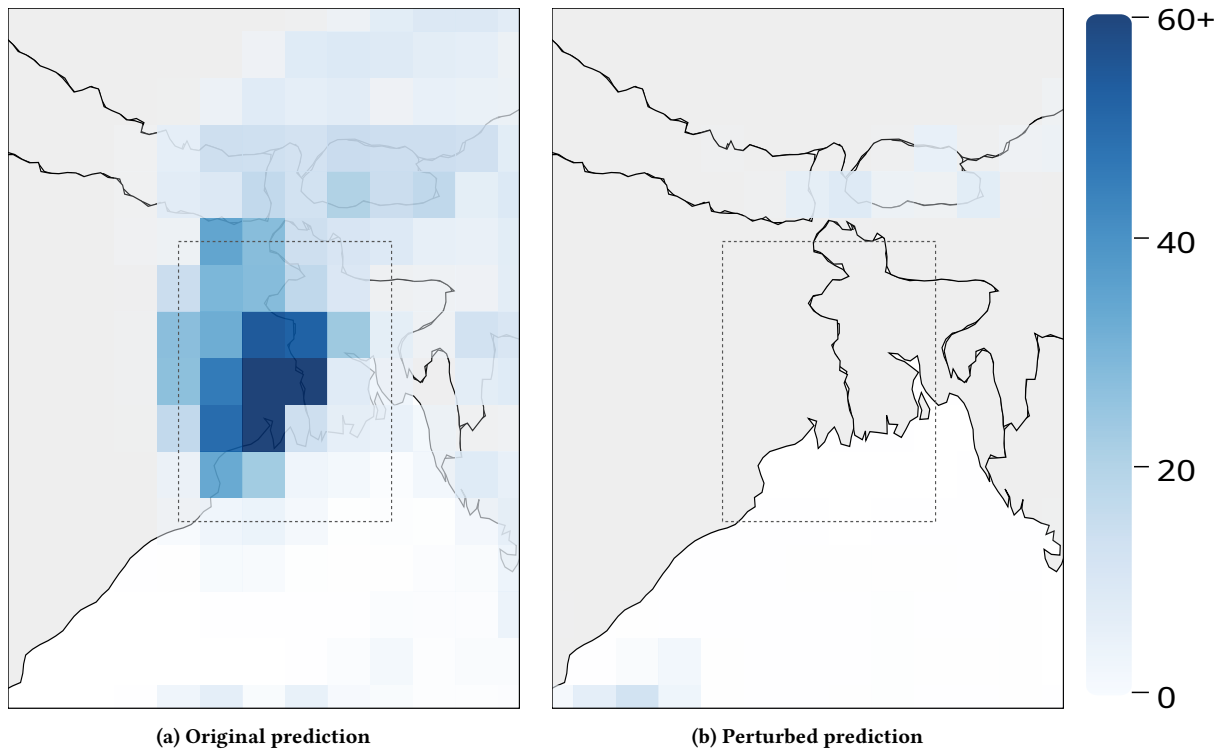
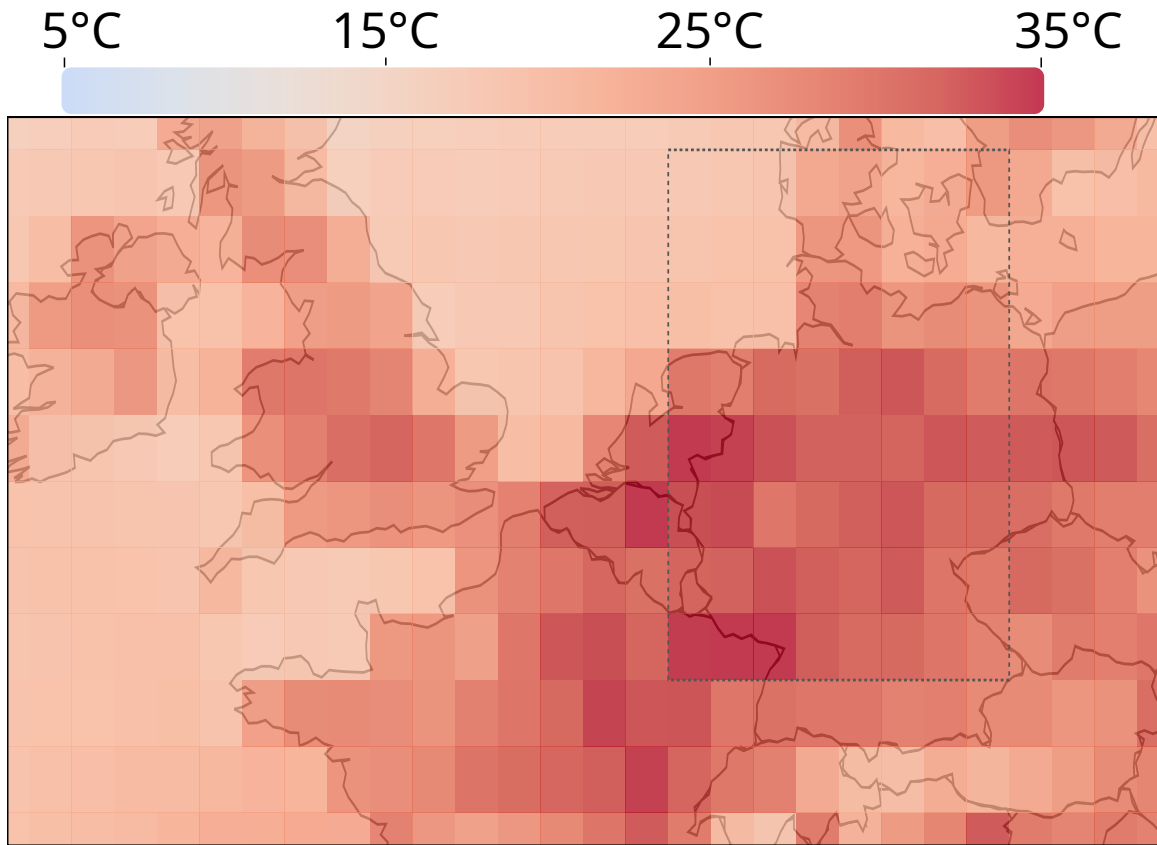
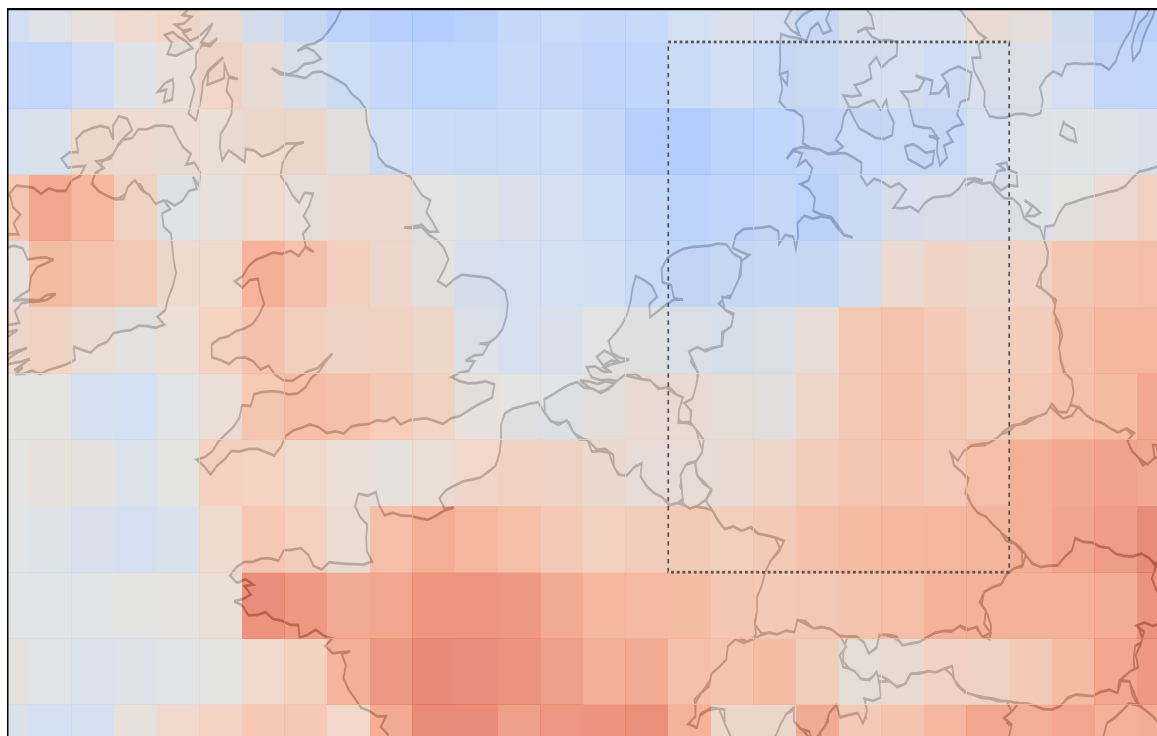


Figure 3: Predicted precipitation at the peak of Cyclone Amphan (c.f. Figure 4 in the paper).



(a) Original prediction



(b) Perturbed prediction

Figure 4: Predicted temperature at the peak of the European Heat Wave 2006 (c.f. Figure 5 in the paper).

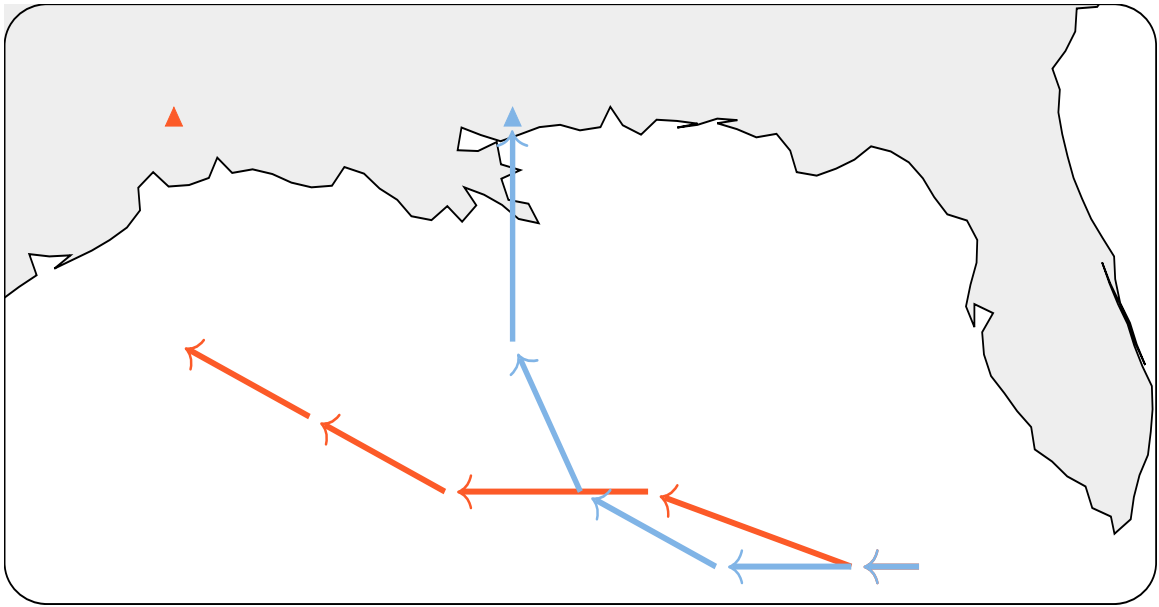


Figure 5: Predicted storm path of Hurricane Katrina (c.f. Figure 6 in the paper).