Winter is Coming: Weather and Conflict in France (1661-1789)  
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Introduction
My research contributes to the literature on the weather-conflict nexus. In recent research, one standard deviation change in the weather variable leads to a 11.3 per cent rise in the risk of intergroup conflict (Burke and al., 2014).

I link a dataset comprising 8,528 episodes of conflict (Nicolas, 2002) and high-resolution temperature data (Luterbacher and al., 2005). Using panel logit estimation with time and sub-regional fixed effects, I establish strong causal connections between weather variability and conflict in France between 1661 and 1789.

→ A novel dataset on conflict.  
→ A finer definition of conflict.  
→ First historical analysis in a pre-industrial European setting.  
→ Revisiting an old debate in the French historiography.

Methodology
I exploit year-to-year (harvest) fluctuations in seasonal temperature to identify the causal effect of weather variations on different types of conflict. The baseline specification, a panel logit model with time and Subdélegation fixed effects, can be summarized as follows:

\[ R_{it} = \alpha W_{it} + \beta S_{it} + \gamma X_{it} + \delta_{i} + \pi_{t} + \epsilon_{it} \]

Dependent variables:

→ dummy equals 1 if a conflict of type j appeared in Subdélegation i in year t.  
→ categorical variable equals to the number of conflict of type j in Subdélegation i in year t.  
→ categorical variable from 1 to 3 capturing the intensity of conflict (# of participants and duration).

Independent variables:

→ indicators of weather anomalies (see data section).  
→ shock: anomalies > 1 sd (Wu and al. 2005).

Control variables:

→ slope, area, population density, trade port, roman hub, bishop, years at war, rulers.

Questions

→ Did weather anomalies affect the incidence of social conflict in France between 1661 and 1789?  
→ Was the effect similar on different types of conflict?  
→ Did weather anomalies affect the intensity of conflict?

Data

Winter temperature anomalies, 1693  
Total Number of Conflict per Subdélegation, 1661-1789

Results

Annual Number of Conflict in France, 1661-1789  
Types of Conflict in France, 1661-1789

→ Negative temperature anomalies in winter increase the likelihood of fiscal conflict and conflict against the authorities.  
→ Negative temperature anomalies in winter decrease the likelihood of subsistence conflict, but the effect is non-linear and extreme anomalies increase the likelihood of subsistence conflict.  
→ Negative linear relationship between absolute temperature anomalies in the growing season and the onset of all kinds of conflict.  
→ Being engaged in defensive wars in year t decreases the probability of all kind of conflict, and decreases the intensity of conflict.  
→ Winter anomalies have positive and significant effect on the intensity of conflict.

References cited
Nicolas, J., La Rébellion Française, Mouvements Populaire et Conscience Sociale (1661-1789), Le Seuil, (2002).  

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