
YI XIONG, Simon Fraser University
Exploring Forest Fire Duration Times

In attempt to understand how fire duration time is associated with environmental factors together with the fire's location and starting time, we analyze a collection of lightning-caused forest fire records. Two classes of semiparametric survival models are considered to avoid unrealistic model constraints and to capture the natural features of the underlying fire process. The analysis integrates the conventional survival analysis procedures with data smoothing techniques. In particular, we present how to deal with practical challenges arising from forest fire data, such as reporting delay, seasonal effect and spatio-temporal clustering. This is a joint work with John Braun (UBC-O) and Joan Hu (SFU).