Temporal variation and regional characteristics of aftershock activity

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Although decrease of aftershock activity is well described by the improved Omori's law generally, we sometimes notice as well that an actual aftershock activity deviates conspicuously from the formula owing to the occurrence of clustered earthquakes or an induced activity that is often accompanied with enlargement of aftershock area. We investigate temporal variation of aftershock activity of recent earthquakes in detail. Our questions are as follows. Can we evaluate it quantitatively? Can we find any regional characteristics in those activities? We are specifically interested in the temporal variation of b and p values, regional difference in the p and K values, features of aftershock activity that has small p-value, and in what region clustering of aftershocks are likely to be observed.