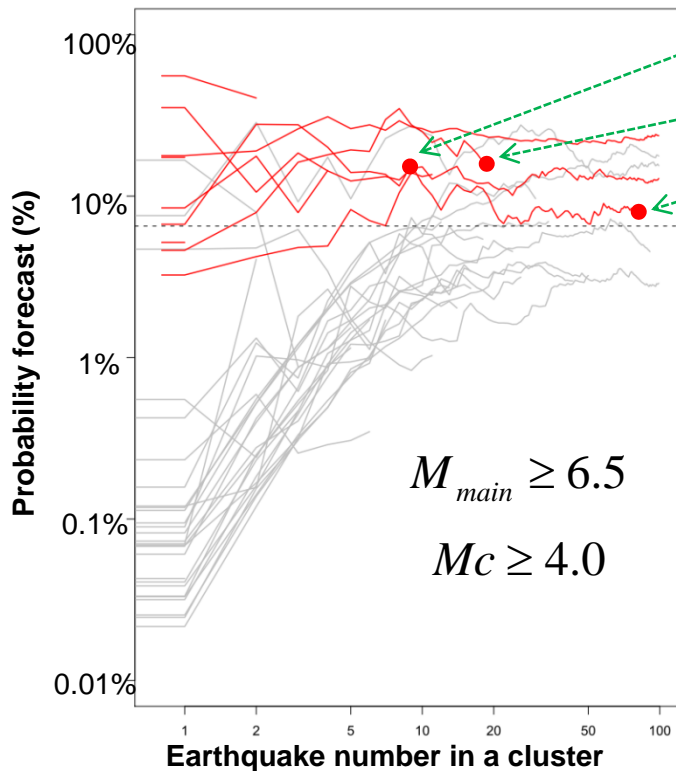
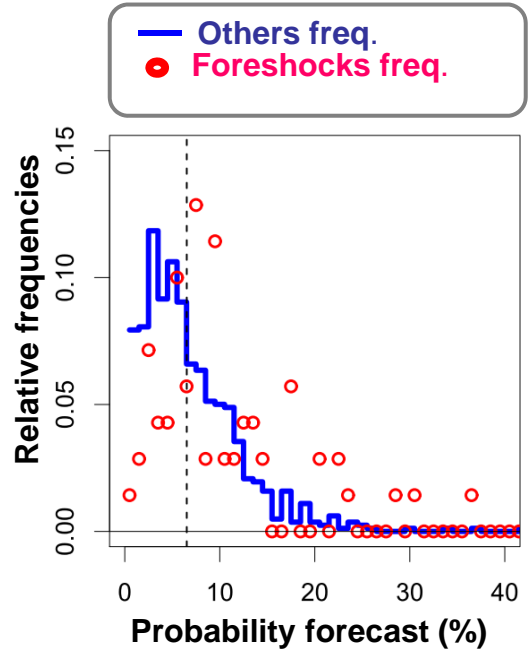
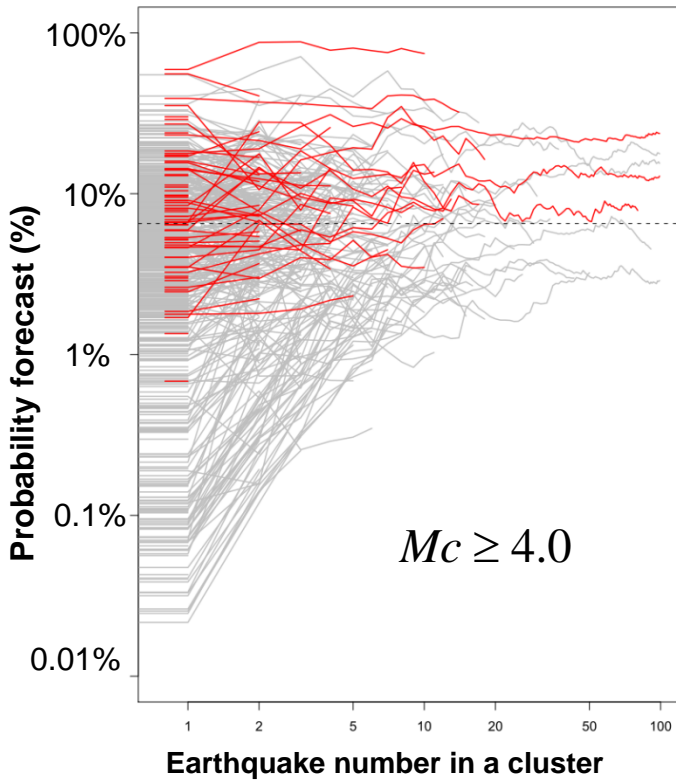


1994年 - 2011年3月



M7.3 Foreshock of 9 Mar 2011

M7.0 Ibaragi-Ken of May 2008

M9.0

$2 * Entropy_0 = 523.96 / 2 * Entropy = 460.29$
 $2 * \Delta Entropy = -63.68$

Forecast & performance

2.5	5%	10%	15%	
4	10	30	12	14 70
179	211	263	115	51 819
183	221	293	127	65 889
2.2	4.5	10.2	9.4	21.5 7.9

aic0 = 3178.62 aic1 = 3157.15
 $\Delta aic = -21.47$

左上図は地震群に新しい地震が加わった時、その順番（横軸）とその前震確率（縦軸）。結果的に前震の群れが赤線で、その他の群れが灰色線。右上図は予報確率とその結果の相対度数（正規化したもの）。赤丸が結果的に前震で、青がその他。横の点線は複数の場合の前震の全国平均（7.2%）。左下図は左上図のうち本震がM6.5以上のもの。右下の表は予報と実現頻度の集計表。

Fig. 3. Top left panel shows the foreshock probability forecasts of each cluster at each time when a member is updated, where red and gray color indicates that the clusters were actually foreshocks and other type, respectively. The forecast results during 1994-2011 Mar. are summarized in the top right panel and in contingency table in the left bottom, which show that the forecasts have been certainly better than the unconditional foreshock probability (7.2%) in case where we have plural events in a cluster. The left bottom panel is obtained when the clusters in the top left panel are restricted for the mainshock of $M \geq 6.5$.