

Figure S1. (a)–(i) Time sequences of two-dimensional $\Delta f^\circ F2$ maps recorded from 10:00 UT to 14:00 UT on 9 March 2011 with a 30-min step.

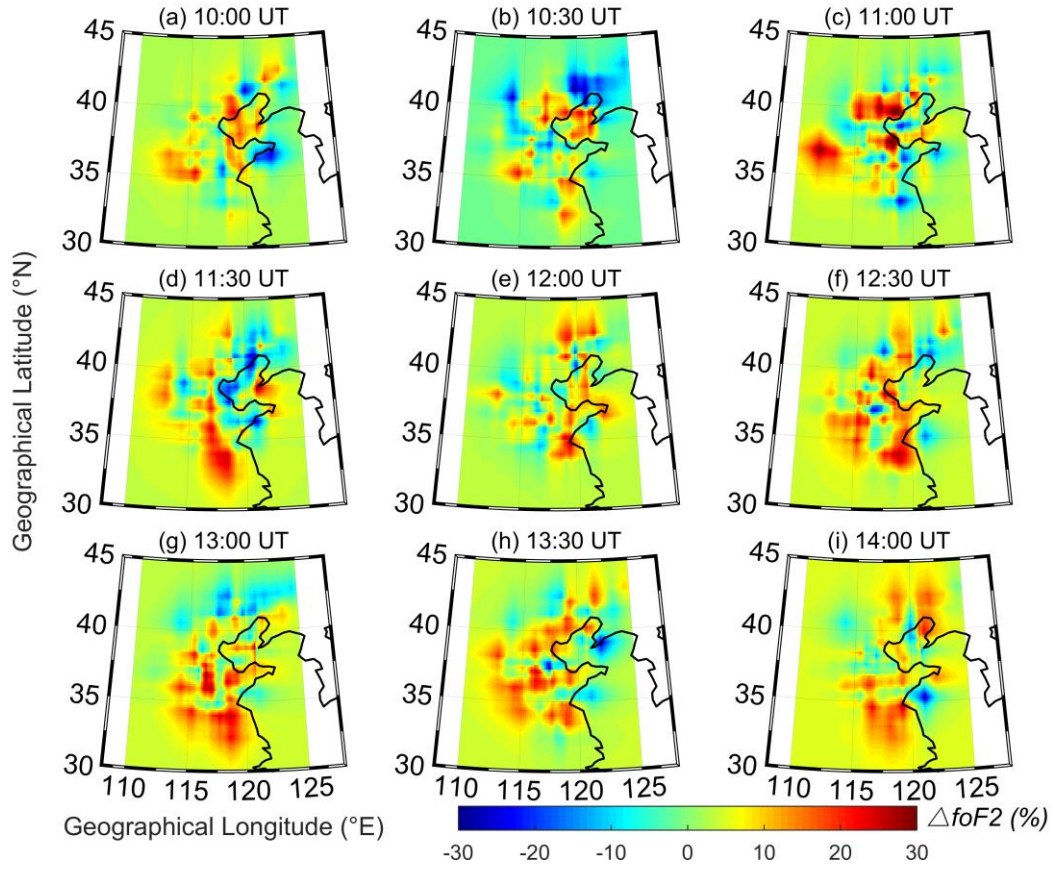


Figure S2. Same as Figure S1, (a)–(i) Time sequences of two-dimensional $\Delta f_o F_2$ maps recorded from 10:00 UT to 14:00 UT on 9 March 2011 with a 30-min step, but for the two-dimensional $\Delta f_o F_2$ variations on 10 March 2011.