Fig S1. Exponential correlations between atmospheric NH_3 and ambient T at six Canadian sites

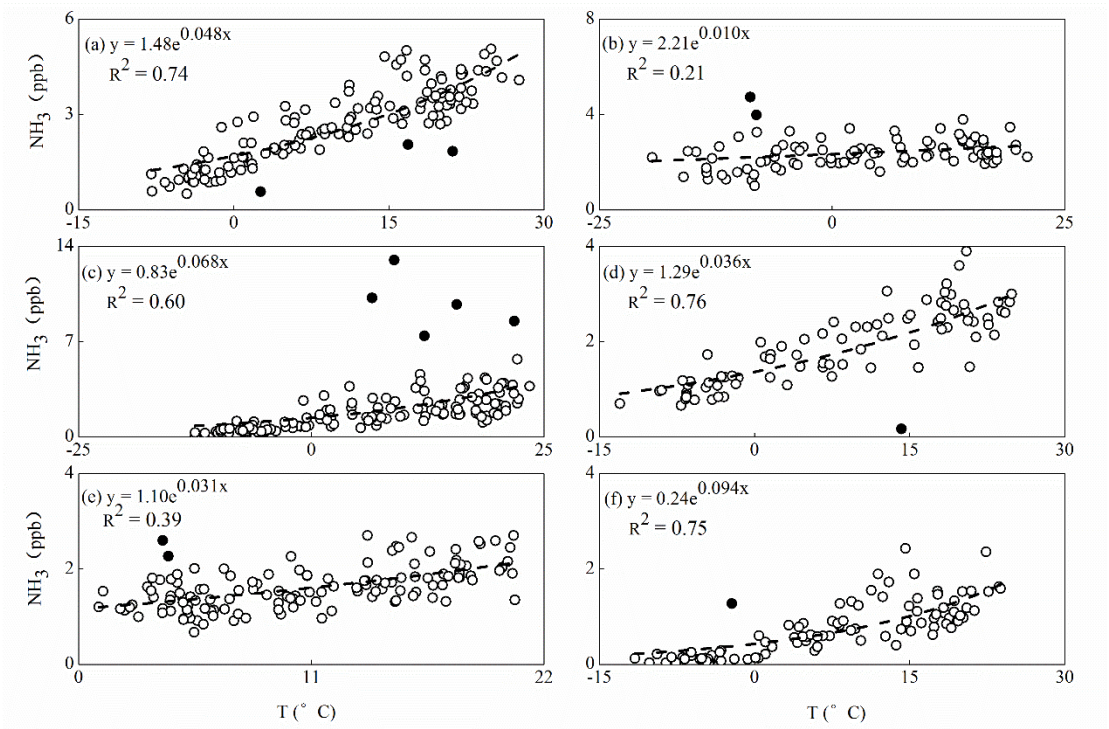


Fig S2. Exponential correlations between atmospheric NH_3 and ambient T at eight U.S. sites

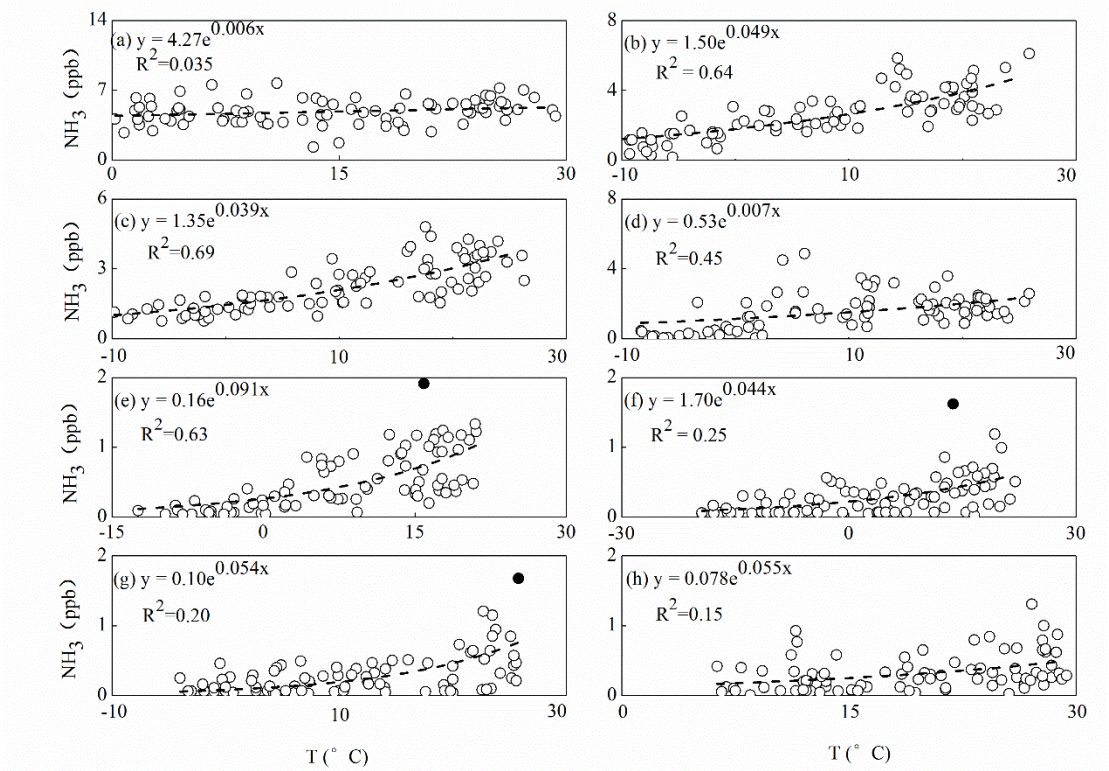
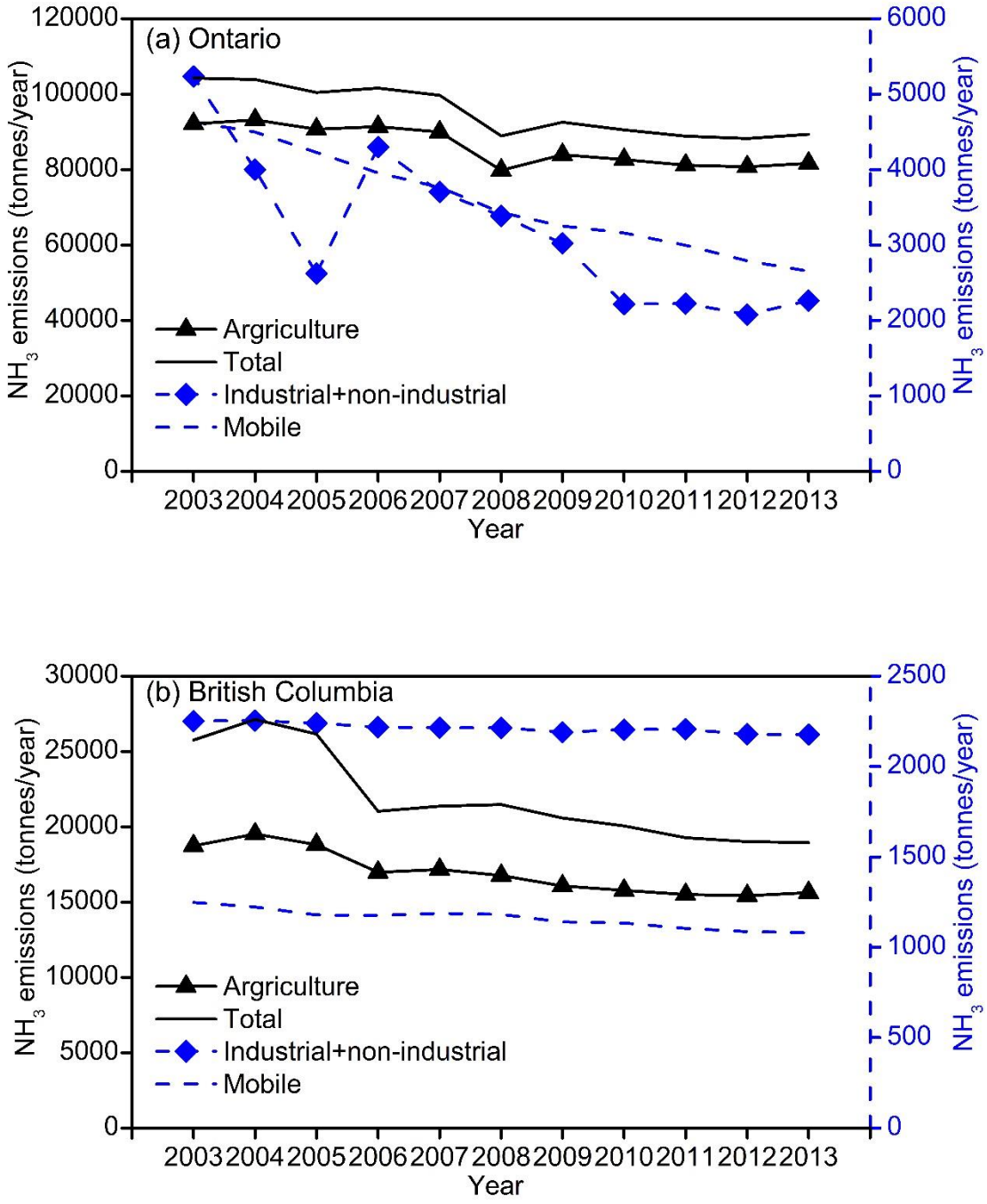


Fig. S3 Annual emissions of atmospheric NH_3 in three provinces of Canada (a: Ontario; B: Quebec; c: British Columba).



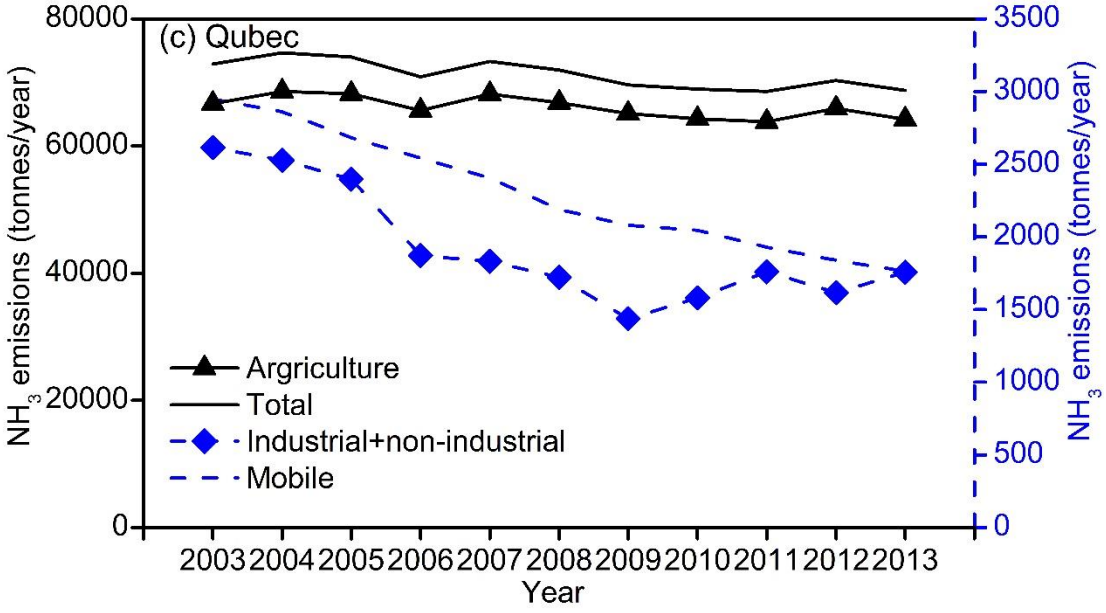

(c) Qubec
80000
60000
40000
20000
0
3500
3000
2500
2000
1500
1000
500
0
NH3 emissions (tonnes/year)
NH3 emissions (tonnes/year)
Argriculture
Total
Industrial+non-industrial
Mobile
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Year

Fig. S4 The spectra of input data, IMFs and residual calculated by EEMD for atmospheric NH_3 at Site 1 from July 2003 to June 2014.

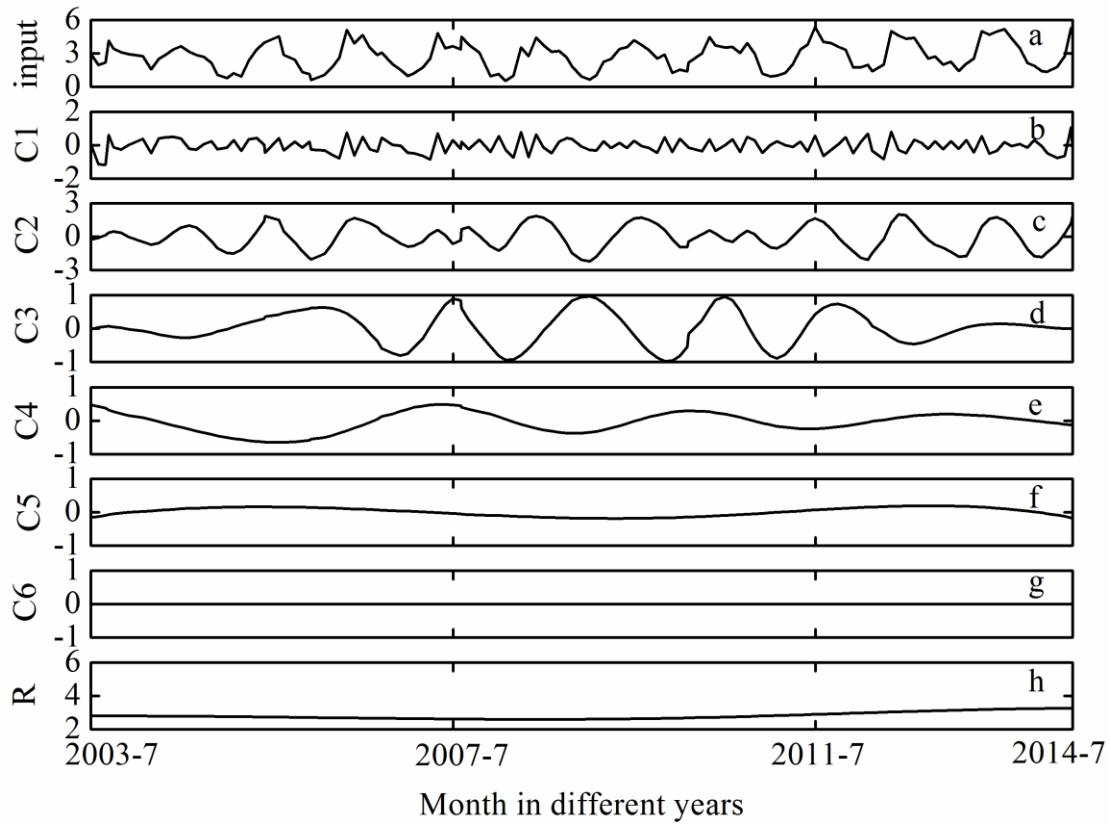
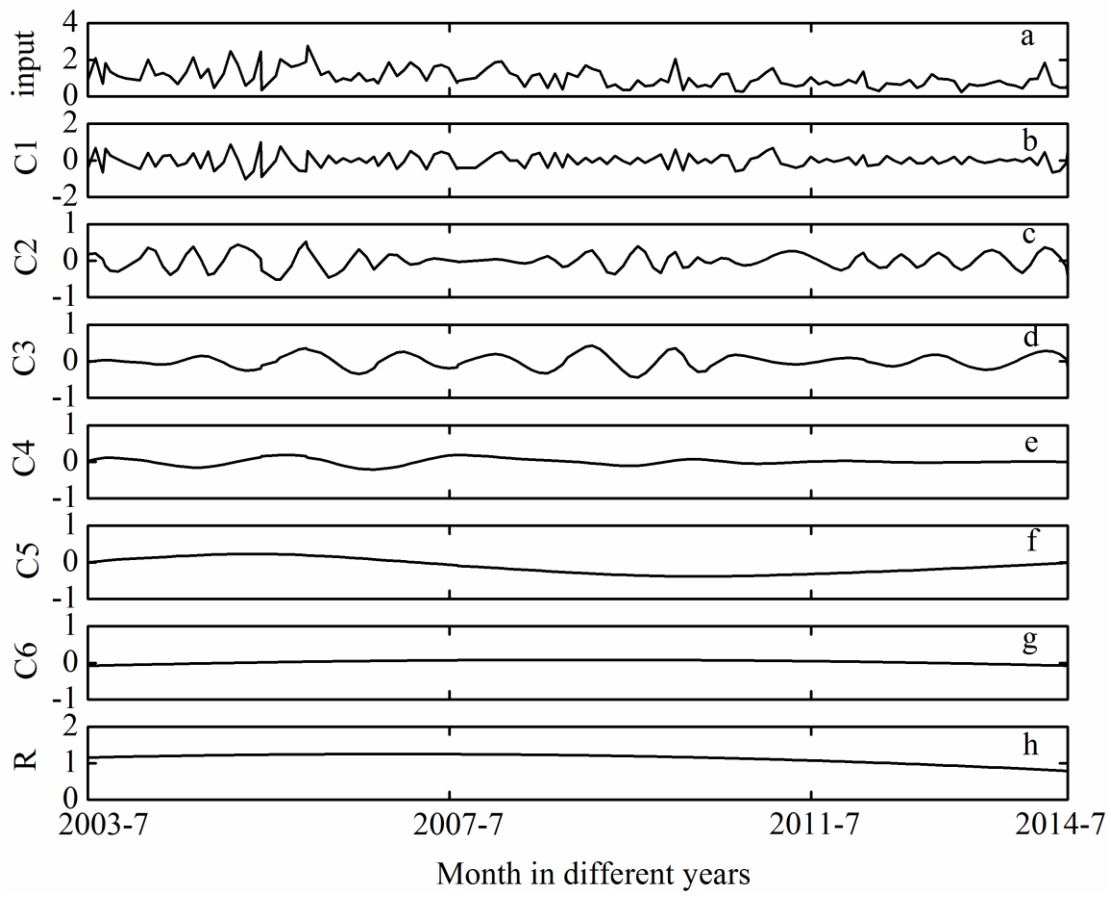



Fig. S5 The spectra of input data, IMFs and residual calculated by EEMD for pNH_4^+ in $PM_{2.5}$ at Site 1from July 2003 to June 2014.