2 hours before we observed them”.

5) Page 15165: why there is not NPF if air mass is coming from ocean?
Response: At coastal sites, no NPF events were observed to take place when the air mass was coming from the ocean side with clean air to the measurement station (e.g., WLC, BGC). This is because the cleaner air mass was not carrying enough NPF precursors such as H2SO4 or low-volatile VOCs to favor the nucleation events. We have now modified the text in lines 404-411 to make the above point clearer and the amended text reads as: “At coastal sites, however, no NPF events were noted when the air mass was coming from the ocean side with clean air, as this cleaner air mass was not carrying enough NPF precursors such as H2SO4 or low-volatile VOCs to favor the nucleation events. This is substantiated by the fact that SO2 concentrations in the air coming from ocean side were much lower than those coming from the continent (e.g., at BGC site, average SO2 concentration in the air mass from ocean and continent were 1.4 ppbv and 2.8 ppbv, respectively) and supported by other studies at coastal site (Yu et al., 2014)”.

6) Page 15166 line 9. GR one time higher? I do not understand this.
Response: We have now made this statement clearer which now reads as: “Average GRs at urban and regional sites were about twice those at coastal sites and cruise measurement, indicating that the higher concentrations of gaseous precursors in the polluted areas not only favor the formation of particles, but also accelerate the growth rate as long as the nucleation particles are formed”.

7) Page 15168: How many days or hours it takes from NPF to CCN? It is crucial to look whether CCN concentrations are increasing in the second or even in the third day.
Response:
The time it takes from NPF to CCN depends on the growth rate (GR) of nucleation particles. In this study, we find that the GRs of nucleation particles at urban and regional sites were 3.2 nm/h to 21 nm/h, which means that it takes roughly about 2.5 to 16 hours for the nucleation particles to perform as CCN (assuming the critical diameter is 50 nm). One the other hand, the GRs of nucleation particles at coastal sites and cruise measurement were 1.6 nm/h to 7.5 nm/h, suggesting that it will take much longer time (roughly one day) for the nucleation particles to reach CCN size range (at least 50 nm). The referee have rightly pointed out that it is crucial to evaluate the contribution of NPF events to CCN production in the second or the third day. In our study, we use the mode fit method to estimate the contribution of NPF to CCN. This approach requires very clear NPF peaks in the size distributions in order to achieve accurate fitness results. As a result, we cannot calculate the contribution of NPF events to CCN production in the second or the third day. Nevertheless, to make this much clearer, we have modified the corresponding discussion. The text now reads as “Third, as discussed above, the approach requires very clear NPF peaks in the size distributions in order to achieve accurate fitness results. So the focusing time period is constrained between 14:00 and 17:00 h, when the NPF mode is clear and evening rush hour has not come. The contribution in the following hours or the following days cannot be precisely calculated though this approach. As it is crucial to evaluate the contribution of NPF events to CCN production in the following days, more studies on this field are needed in the future.”

8) It would be good to speculate what are formation rates at 3 nm. It is possible to calculate formation rates at 15 nm, although they probable have nothing to do with atmospheric nucleation.
Response: The referee have rightly pointed out that the formation rate is an important parameter to describe the characteristic of nucleation events, which is even more important to study the mechanism of new particle formation (Kulmala et al., 2013). However, as our measurement of particles starts from 15 nm, the calculated formation rates cannot precisely represent the real nucleation rate at 3 nm or 1.5 nm. This is the reason why we have not discussed them in our study.
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