Interactive comment on "Air quality in the middle and lower reaches of the Yangtze River channel: A cruise campaign" by Zhong Li et al.

Anonymous Referee #2

The authors focused on air quality along the Yangtze River based on a shipboard observation performed in winter of 2015. Over the past few decades, China's rapid development leads to huge cargo transports in the Yangtze River channel. However, there is lack of data for ship emission along the Yangtze River channel, especially in the inland area. From this viewpoint, this manuscript supplied value data and made some contributions to portray a picture of air pollution along the Yangtze River. However, the manuscript suffered from poor English written. There are a lot of wrong spelling, tedious sentence, vague expression. Generally, the manuscript is difficult to read and should be improved greatly before publication.

Line 3 "River"is changed to be "river" Line 4 what mean ¿'onboard and coastal areas" Line 7 After the sentence of "Based on the filter samples,. . .", the PM2.5 concentration

during the cruise campaign should be shown. Line 11 "the secondary inorganic formation"should be changed to "the secondary inorganic aerosol formation" Line 19 "This result. . ."should be changed to "The results" Line 35 "their effects"should be changed to "their negative effects" Line 40 ". . .and possible sources in this region have been generally characterized"should be changed to ". . .and source identification in this region have been generally studied" Line 44-55 Authors cited a few of literatures focused on air quality on the region of Yangtze River Delta. In my opinion, authors should expand these literatures to the MLYR region, of which is overlapped well with the present region. Furthermore, the author should show specific regions shown in cited literatures. Line 63 "The MLYR"should be changed to "The MLYR region", and "effecting its air quality"should be deleted. Line 68 "particle matter" should be abbreviated to be"PM" Line 77 "noted" should be changed to "pointed out" Line 79 "Shanghai port" should be changed to "The Shanghai port" Line 83 "the air quality" should be changed to "air quality" Line 93 "to the best of our knowledge, it is the first systematic observation to characterize the air pollution along the China's largest and longest river"should be changed to "to the best of our knowledge, it is the first systematic observation on air pollution along the Yangtze River". Line 97 "A mobile haze monitoring platform" should be changed to "A mobile monitoring platform" Line 206 "supplements"should be changed to "supporting information" Line 204-205 A sentence should be added here to explain the T/B value for weather identification, although it has been explained in the Experimental section. Line How about the T/B values for EP3 and EP5? Line 214 there are two "with". This sentence should be written. Line 217 "in the sixth episode"should be changed to "For the sixth episode" Line 233 "Their detail information"should be changed to "The detailed information" Line 245 ". . ., mainly owing to local emissions, photochemical processes and meteorology conditions (Xu et al., 2011)" should be deleted. Line 247 "cities"was changed to "the cities" Line 252 "was substantially enhanced"should be changed to "increased" Line 261 "the mean levels"should be changed to "the mean level" Line 263 "revealed"should be changed to "was characterized by" Line 264 "edge"should be changed to "banks" Line 266 "by"should be changed to "identified by" Line 268 "region-

ally"should be changed to "apparently" Line 292-293 ". . .accounting for 37.43% and 40.15% in PM2.5 and PM1.0?", gained in the present study? Line 430 "the similar source region distributions"should be changed to "the similar region distributions" Line 462 ". . .and the YDR, Jiangsu, east of Anhui, and the Mongolian plateau were identified as the major source regions, and pathways."This sentence should be rewritten. Line 487 "the present cruise"should be changed to "the cruise" Line 542 "It is noted that"should be changed to "It was noted that" Line 564 "the YRD regions"should be changed to "the YRD region" Line 567 "Ship engine emission"should be changed to "Ship emission"