This study provided deep insights into the in-cloud processing nitrate formation. Nitrate is becoming a dominated fraction in fine particle in China. Investigating the nitrate formation is important to understand haze formation. It can be published in ACP after considering the following issues:

The discussion about the chemistry processes in the sampling site should be strengthened: Why the ozone concentrations were kept a relatively high level, even during nighttime? In 2018, the ozone concentrations were above 80 ppb during the entire field campaign, and, above 100 ppb for 2020. An explanation is needed for such high ozone concentration in the sampling site, especially cloudy condition. Additionally, "substantial attenuation of the incident solar radiation by clouds" may suppress the ozone formation, thereby, affect the N2O5 formation. The N2O5 uptake is a major contributor to in-cloud formed nitrate, more explanations of N2O5 sources are also needed.