This study investigates the presence of high nitrite (NO_2^-) levels in coarse atmospheric particles at Mt. Qomolangma (Mount Everest) during a spring field campaign in 2022. The researchers found significant enrichment of NO_2^- in total suspended particulates (TSP) but not in fine particles ($PM_{2.5}$). The study suggests that wind-blown soil, which contains high levels of NO_2^-, is likely the primary source of this enrichment. Additionally, long-range transport of pollutants from South Asia may contribute to elevated NO_2^- levels, although the specific mechanisms remain unclear. The findings highlight the previously overlooked role of soil-derived NO_2^- in atmospheric chemistry and its potential impact on the atmospheric oxidation capacity in remote regions like the Tibetan Plateau. However, it will be an even stronger paper if the following points are carefully considered. This manuscript can be published after minor revision.

Major comments:

1. The study highlights the potential for soil-derived NO_2^- to influence atmospheric oxidation capacity through processes like photolysis or gas-particle partitioning. However, the broader implications for regional and global atmospheric chemistry are not fully explored. A more comprehensive discussion on how these findings fit into larger atmospheric models and their potential impact on climate and air quality would strengthen the study.
2. Although the manuscript provides a detailed description of the experimental procedures and results, the discussion on the research background and significance is not sufficiently in-depth. For example, while the importance of the Mt. Qomolangma region is mentioned, key questions such as why the study of NO_2^- in coarse particles is important and the implications of this finding for the global atmospheric chemistry cycle are not thoroughly discussed.

Minor comments:

1. Line 23. “Atmospheric reactive nitrogen cycling, with nitrous acid (HONO) and particulate nitrite (NO_2^-) as important intermediates, is crucial for maintaining the atmospheric oxidation capacity of the background atmosphere on the Tibetan Plateau.” Would be better.
2. Line 65, line 128. The terms "TSP" and "total suspended particulates" are used interchangeably. It would be beneficial to use one term consistently throughout the manuscript to avoid confusion.
3. Line 55. In Section “Introduction”, the phrase "Atmospheric oxidation capacity (AOC) regulates the formation of secondary aerosol and the removal of trace gases

including CH_4" could be shortened to "Atmospheric oxidation capacity (AOC) regulates secondary aerosol formation and trace gas removal, including CH_4."