This paper presents the design and construction of a unique system, RoLi, for the tower-based profile studies. Exemplary high-resolution profile data are provided, demonstrating the robust performance and successful application at the ATTO tower with a payload of ~80kg. I can see the future application of this system measuring an expanded number of compounds, maybe even VOCs. The onboard system and rails provide strong support for the scientific instruments in terms of safety control, data acquisition, and time synchronization. While several artefacts were noticed and appropriately addressed by the authors, recommendations are provided to further improve. The capability of this system for the vertical study of fog, clouds, and accumulated particles across the rain forest canopy is clearly demonstrated. Overall, I believe this manuscript suits well with the scope of AMT and is well-written, warranting publication after addressing two concerns and minor technical questions.

1. The aluminum rail in this RoLi system. I don't see a detailed description and evaluation of the strength of this commercial rail system. The Authors stated that "…is ideal for RoLi" but according to Figures 1 and 2, the thickness of the aluminum rail is notably smaller than the supporting frame. Considering the pulling forces from the ~80kg instrument payload, it would be more convincing if the authors could add some evaluation results about the strength. I am sure some words from the manufacturer's specifications would strengthen this claim.
2. Potential contamination of the RoLi system. In this paper, the authors demonstrated the application of RoLi system in the research area related to aerosol profiles. I am sure with such a payload, this system can support measurement of other targets, even VOCs. It would be great if the authors could clarify whether lubricants, solvents, or maintenance materials could introduce interference. Such words would enhance the credibility for multi-purpose future applications.

Below are some more specific comments:

1. Line 105: Insulation is crucial for the tower-based measurements. I am thinking the 100 kΩ resistance threshold for power supply reactivation described by the authors

might lead to frequent restarts when the unstable resistance fluctuates around 100 kΩ. Maybe a higher restart resistance threshold would be better to prevent unnecessary power cycling and reduce hardware stress.

2. Line 155: My experience with Raspberry Pi won't allow me to trust such a small processor. The connection between the RoLi system and the ground station is essential since the loss of connection would trigger the alarm. I don't know how frequently the connection check was scheduled (which should be mentioned), but I have double that this Raspberry Pi can handle such a burden of work.
3. Line 164: I understand that the selection of Cyberbajt YAGI 24-16-2.4 was well discussed by authors and technicians, but some descriptions would be great to show the capability of the effective range and signal strength, etc.
4. Line 221-226: When there is heavy wind with wind speed exceeding 15 m/s, the contingency plan is to send the RoLi system "go to home", as stated by the authors. My point of view is that staying where it is would be safer. During situations with heavy wind or lost connection, either moving upward or downward is not safe, especially when the connection alarm is triggered, which would send the system home, but if there is something wrong with the rail lower than the current system location, the system is out of control to stop, leading to a dangerous situation. Please correct me if there are unmentioned advantages of the current plan.
5. Line 242: Overheating inside the box is always painful. My recommendation is to use aluminum-coated foam wrapping around the box. It works great based on my experience.
6. Line 299: It would be more informative if the authors could provide the list of instruments or the compounds being measured permanently at the top of the ATTO tower.
7. Line 381-382: I am sure the authors had done that, but are there other parameters measured at the top of the ATTO tower that can help with the analysis?
8. Line 407-409: A small K-type thermocouple works great in the described situation. Lightweight and adaptable. So thin that it won't be bent by heavy wind. You can set it away from the box and the frame to avoid interference.