

Global Lightning Distribution driven by Aerosol-Microphysics Interactions



- Aerosols interact with clouds through their ability to nucleate cloud particles.
- Interaction between cloud particles cause lightning to occur in thunderstorm.
- How aerosols affect lightning through microphysics remain largely unexplored.
- **Research questions to be addressed are:**
 - How aerosols changes cloud properties.
 - Identify global lightning hotspots.
 - How lightning activity depends on different aerosols?
- **What you need?**
 - Interest in cloud microphysics and data analysis skills.
- **What you use?**
 - Decade-long data of lightning, aerosol and microphysics (ERA5)