



# Assessment of the present knowledge on Meteoric Smoke Particles (MSP) in the Mesopause Region, 70-120 km

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# Meteoric Smoke Particles



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- Meteoric material enters Earth's atmosphere and ablates and vaporizes in the 70-120 km region
- The evaporated material interacts with the atmosphere
- Becomes nanometre sized Meteoric Smoke Particles
- Points of interest: Noctilucent clouds, polar mesospheric summer echoes, chemistry of the mesosphere, etc.

# Mesosphere Region



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- Lack of knowledge due to inaccessibility
- In-situ observations with sounding rockets
- Experiments
  - Constant variables and a controlled variable
- Not possible in the atmosphere!

# Summary



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- Comprehensive overview of MSP and relevant research in this field
- Pre-study for a master thesis
  - **Goal:**
    - Create a sensor capable of measuring the energy of the meteoric smoke particles
    - Try to determine their composition.