

The MIMOSA Digital Model for Understanding the Arctic Stratospheric Vortex in Winter

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1- What is the most important atmospheric parameter in the study of the Earth's atmosphere

- a) The temperature
- b) Ozone
- c) Clouds
- d) The rain

2- At what altitude is the stratosphere

- a) On the ground
- b) At 400 km altitude
- c) At an altitude of 100 km
- d) Between 10 and 60 km

3- In which regions of the world the stratospheric vortices develop

- a) At the equator
- b) Above the Pacific Ocean
- c) Above the Arctic
- d) Above Africa

4- In which season does the stratospheric vortex develop

- a) Summer
- b) Fall
- c) Winter
- d) Spring

5- What is the average lifetime of the stratospheric vortex

- a) 10 years
- b) 4 months
- c) 2 days
- d) 5 hours

6- At what speed around the Earth turns the air in a stratospheric vortex

- a) Around the world in 2h
- b) Around the world in 24h
- c) Around the world in 4 days
- d) Around the world in one month

7- What is the reason for calling the atmosphere of the Earth between 10 and 60 km the stratosphere

- a) In honor of the Greek god Stratos
- b) Because in this part of the atmosphere the layers of air do not mix
- c) In honor of its discovery by Frenchman Philippe Stratot
- d) Because it is at this altitude that the insects the stratéolles can live

8- Which of these temperatures is stratospheric?

- a) -40°C
- b) $+200^{\circ}\text{C}$
- c) $+2000^{\circ}\text{C}$
- d) -200°C