

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