

Science Department – Environmental Science

NOVA: Magnetic Storm

1. Where is the Earth's magnetic field generated?
2. How does this magnetic field allow for life on our planet?
3. Why are scientists concerned with the current strength of the Earth's magnetic field?
4. What is space weather?
5. What are solar winds?
6. How is the Earth's magnetic field connected to the northern lights?
7. What evidence suggests that Mars once had a magnetic field?
8. How can the study of pottery help archeologists determine what the Earth's ancient magnetic field was oriented?
9. What is the current rate of decline of the Earth's magnetic field?
10. How do we know if this is a significant amount of change?
11. Explain how scientist can model the Earth's core.
12. What will cause the Earth's dynamo to stop?
13. How long can a planet sustain a magnetic field?
14. What evidence do scientists have that the earth's magnetic field has switched poles?
15. About how often does the earth's magnetic field switch poles?
16. What variables are involved in a model of the earth's magnetic field?
17. What is a key indication that the earth's magnetic field will soon reverse?
18. What is the difference between magnetic north and true north?
19. How did ancient mariners find true north?
20. How do these calculations by ancient mariners help scientists study anomalies in the Earth's magnetic field?
21. How will a weakened magnetic field affect our lives?