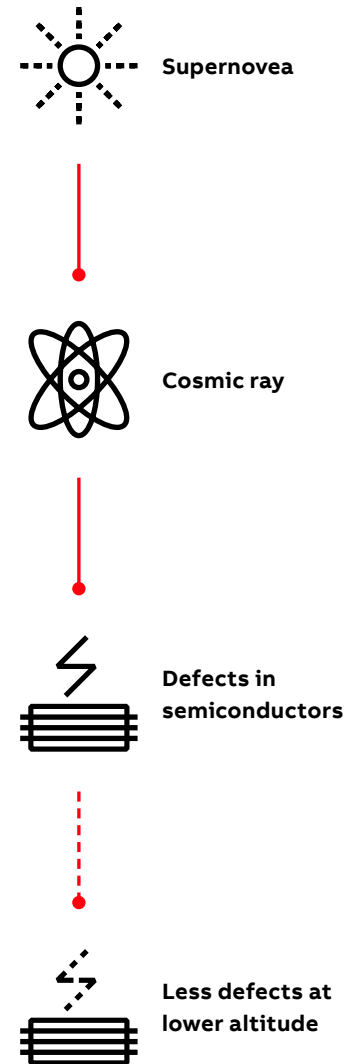


Cosmic rays

Influence on semiconductors

Cosmic rays are atom fragments that rain down on the Earth from outside of the solar system. They blaze at the speed of light and have to be taken into account for induced failures on every power electronic circuit.

Today ABB's power semiconductors are designed such that the failure rate due to cosmic rays is reduced to an "acceptable" level.



Cosmic rays harm semiconductors especially when operating at high altitudes (e.g. trains in alps).