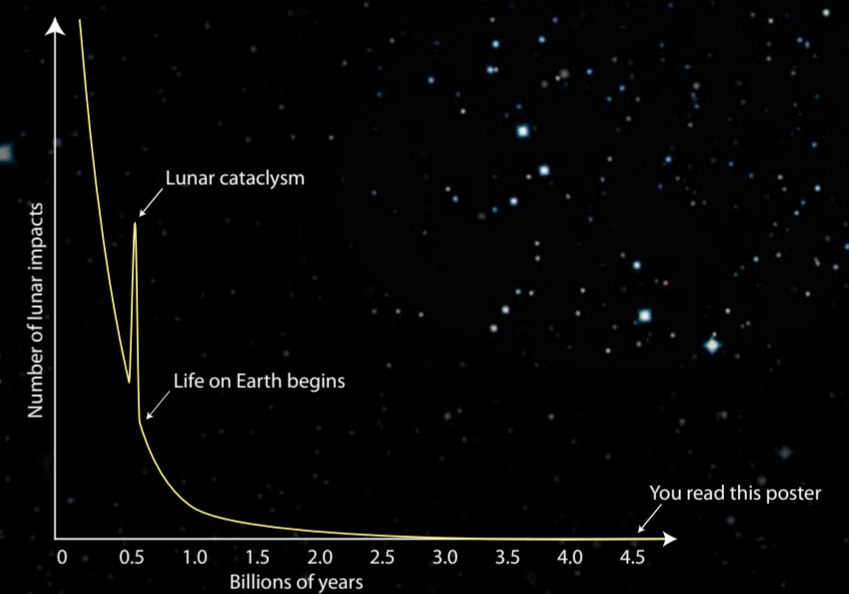


The Lunar Cataclysm

Half a billion years after the major impacts in the inner solar system ceased, a sudden massive shower of comets and asteroids may have battered the Earth and moon



Radioactive element analysis of lunar soil samples returned by the Apollo astronauts suggests that 4 billion years ago a shower of asteroids and comets may have smashed into the Earth and moon. This could have been due to gravitational perturbations of the Oort cloud (a halo of comets surrounding the solar system). Some of the inbound comets smashed directly into the Earth and moon. Others collided with asteroids disturbing their orbits and causing some of them to hit the Earth and moon too. The first indications of life on Earth date from very soon after this event though scientists aren't 100% sure if microbial life existed before this and was wiped out by the cataclysm.



Because the moon has no atmosphere or liquid water it has no weather to erode impact features as has happened on the Earth. As a result the lunar landscape remains today, much as it was 4 billion years ago at the end of this bombardment. A battered reflection of what the Earth would once have looked like and a graphic illustration of the destructive power of large comet and asteroid impacts.



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