



Imilac Meteorite Fragment

Age approx. 4.5 billion years

Found in the Atacama Desert in 1822

Estimated total mass >1000 kg

Imilac formed in the first few million years of our solar system's history
4.56 billion years ago.

This is a stony iron pallasite formed at the core-mantle boundary of a large asteroid. It shows a snapshot of the process of differentiation of olivine crystallising in a matrix of iron and nickel at a core-mantle boundary. In small samples the olivine is often weathered away. The front cover of the NHM Meteorites book has a spectacular picture of a pallasite. Like Henbury, a massive impact event would have blasted these fragments into space.