

Fragments of comets and asteroids travel through interplanetary space. A small part of this space matter reaches our Earth, and survives passage through the atmosphere. By analyzing it in a laboratory we can understand where it comes from, and how it travelled to reach us.

## THERMOSPHERE

### Meteoroid

A fragment of asteroid or comet, smaller than a metre in size. It enters the atmosphere with a speed of several tens of km/s.

100 - 500 km altitude

## MESOSPHERE

### Meteor or shooting star

A brief streak of light caused by the drag of the atmosphere heating a meteoroid and completely vaporizing it. Usually nothing reaches the ground.

50 - 100 km altitude

## STRATOSPHERE

### Fireball

A brilliant and long-lasting streak of light originating from a meteorite with a diameter of at least 10 cm. It can be visible also in daylight.

15 - 50 km altitude

## TROPOSPHERE

### Meteorite

A meteoroid fragment which survives the entry in atmosphere, and reaches the ground.

0 - 15 km altitude

ASTEROID

COMET

100

Tons of matter from space falling daily on Earth.

64.000

Meteorites recovered worldwide.

35

Meteorites worldwide for which the orbit and origin have been determined.

1

Meteorite recovered in Italy for which the orbit and origin have been determined through the efforts of INAF's PRISMA network.



Meteoroids that survive after entering the atmosphere, producing meteorites, are at least as large as a football. Their recovery provides a wealth of information on the history of the Solar System, and perhaps even on the origin of life.