

METEORITE ALERT

The daylight fireball of April 23rd 2012 and the Sutter's Mill meteorite

At 8.00 am on Sunday April 23rd, a major fireball was seen all over northern California and beyond. There were sonic booms and windows were shaken. Scientists used weather radar to track the movement of the object and predicted that it fell near Coloma, CA. A few days later several small fragments were found near Sutter's Mill. Scientifically the meteorite is called a CM chondrite, a rare class that contains water and carbon compounds that are similar to those responsible for producing life on Earth.

Here are pictures of the fragments:



The meteorite fragments are black, with tiny white flecks scattered through the interior. The surface is smooth and consists of a black coating that was produced by the heat of passage through the atmosphere. Frequently, a mass will be broken so you can see both the fused surface and the black interior with the white flecks. Scientists from the NASA Ames Research Center and SETI Institute, Mountain View, California, are anxious to learn as much as possible about the sizes and fall locations of the fragments of the Sutter's Mill meteorite, so they can understand the details of the meteorite's fall and origin. Since these meteorites carry important information about the early solar system, the formation of the planets, and possibly the origins of molecules necessary for life, it is also important that samples of these meteorites reach the scientific laboratories where they can be analyzed by the enormous array of scientific instruments used for these studies.

If you find a piece of this meteorite, please do the following:

- Handle it as little as possible and place it in aluminum foil to keep it clean. If it is wet from the rain, then dry it off by patting it with a tissue before placing it in the foil.
- Note as precisely as possible the find location and any special circumstances, such as the surface it was lying on, whether it appears to have moved, bounced off a wall, etc. Take photographs of the object while still in place, and the surrounding area.
- If you have GPS, then record find coordinates. If this is not possible, take photographs the horizon.
- Notify: Peter Jenniskens, 189 Bernardo Ave, Suite 100, Mountain View, CA 94043. Phone 650.8100216, Cell 650 2248276, Fax 650-961-7099. Email petrus.m.jenniskens@nasa.gov.

We expect larger objects may have buried themselves several feet, so please inspect any fresh holes in the ground.

Sutter's Mill is a rare meteorite that has considerable scientific value. Some of the fall area is on public land, but a large part of the fall area is expected to be private land. Before searching private land, be sure to coordinate with the land owner. It is important to record the find location. Even if you are not sure of the exact location, for scientific reasons we would still like to know about the object you have found and confirm its identity as a meteorite.