Meteorite Landings on Earth Data

About Dataset

This dataset provides a comprehensive collection of meteorite landings worldwide, compiled by The Meteoritical Society and made available through NASA’s Open Data Portal. It includes 34,513 recorded meteorites with key details such as location, type, mass, fall status (whether the meteorite was observed falling or found later), and geographical coordinates. The data has been updated to reflect new meteorite discoveries and includes fields like:

Name & Type: Meteorite classification

Mass (grams): Weight of the meteorite

Fell or Found: Whether it was seen falling or later discovered

Year: The year of discovery or fall

Location Data: Latitude, longitude, and geo-coordinates

Source:

Original Data Provider: The Meteoritical Society

Hosted by: NASA Open Data Portal (data.nasa.gov)

Dataset Link: Meteorite Landings on Data.gov

Inspiration & Context:

Meteorites provide valuable insights into the early solar system, planetary formation, and extraterrestrial materials. This dataset can be used for:

✅ Scientific research on meteorite composition and distribution

✅ Data visualization of meteorite impact locations

✅ Machine learning applications for predicting impact zones

✅ Educational purposes in astronomy and planetary science

This dataset is publicly available and can be freely used for research, analysis, and visualization. 🚀✨

Meteorite\_Landings.csv (3.79 MB)

10 of 10 columns

About this file

Suggest Edits

This dataset contains detailed records of 34,513 known meteorite landings worldwide, compiled by The Meteoritical Society and hosted on NASA’s Open Data Portal. It includes essential information about meteorites, such as their classification, mass, location, and whether they were observed falling or found later.

Dataset Overview

The dataset consists of the following key columns:

name – The official name of the meteorite.

id – A unique identifier for each meteorite.

nametype – Indicates whether the meteorite is:

Valid: Most meteorites

Relict: Highly weathered meteorites

recclass – The classification of the meteorite based on its composition and structure.

mass (g) – The recorded mass of the meteorite in grams (if available).

fall – Specifies whether the meteorite:

Fell: Observed falling and later recovered

Found: Discovered without being observed falling

year – The year the meteorite was observed or discovered.

reclat & reclong – The latitude and longitude coordinates of the meteorite's location.

GeoLocation – A structured representation of the meteorite’s geographic location in (latitude, longitude) format.