



Tableau Public for Data Science

Summary

Short Description: This document explains how to utilize Tableau Public to visualize scientific data.

Language: English

Suitable for age: 14-18 years

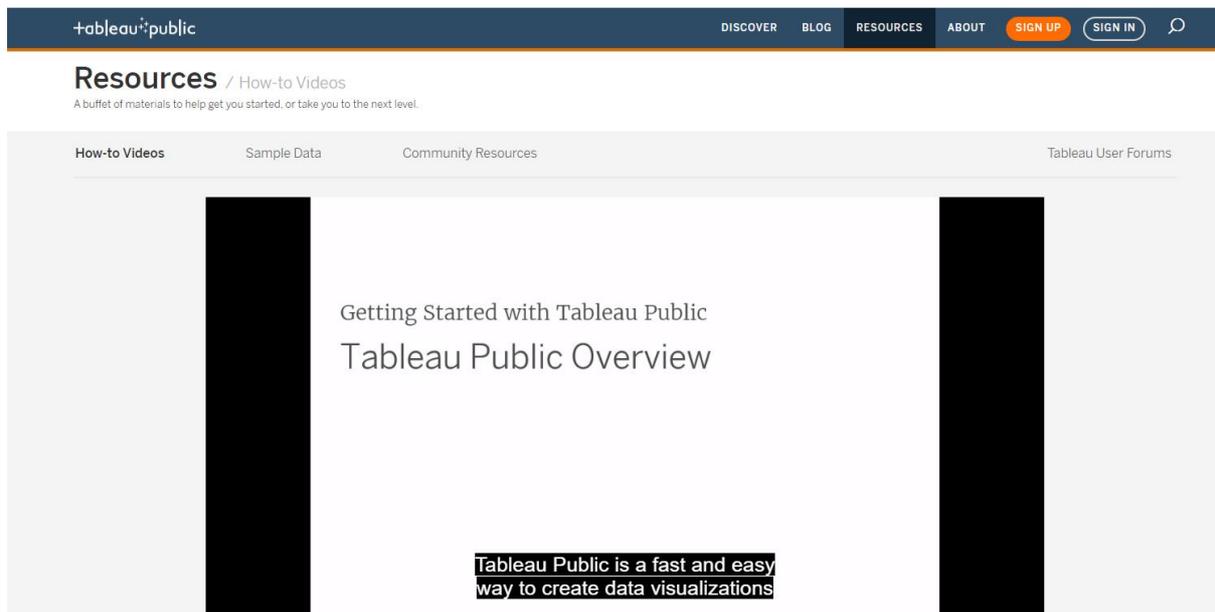
Key words: Data Visualization, Data Literacy, Summarizing and Communicating Numbers

Format: .doc

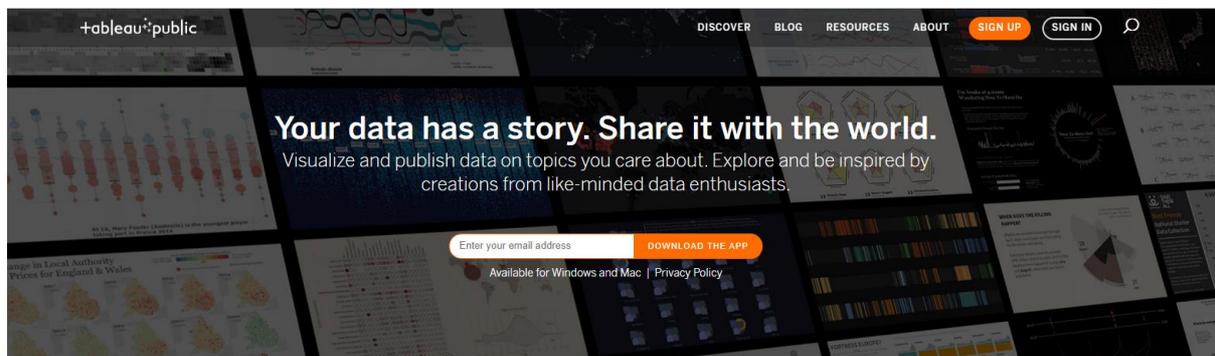
Link: <https://public.tableau.com>



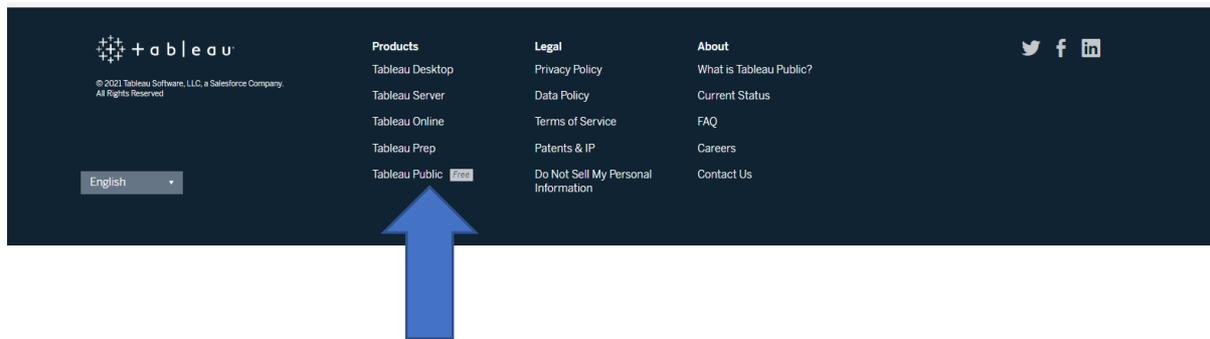
1. Go to <https://public.tableau.com/en-us/s/about> and get a first feeling what Tableau Public is all about. Watch the following **video** to help get you started: <https://public.tableau.com/en-us/s/resources>



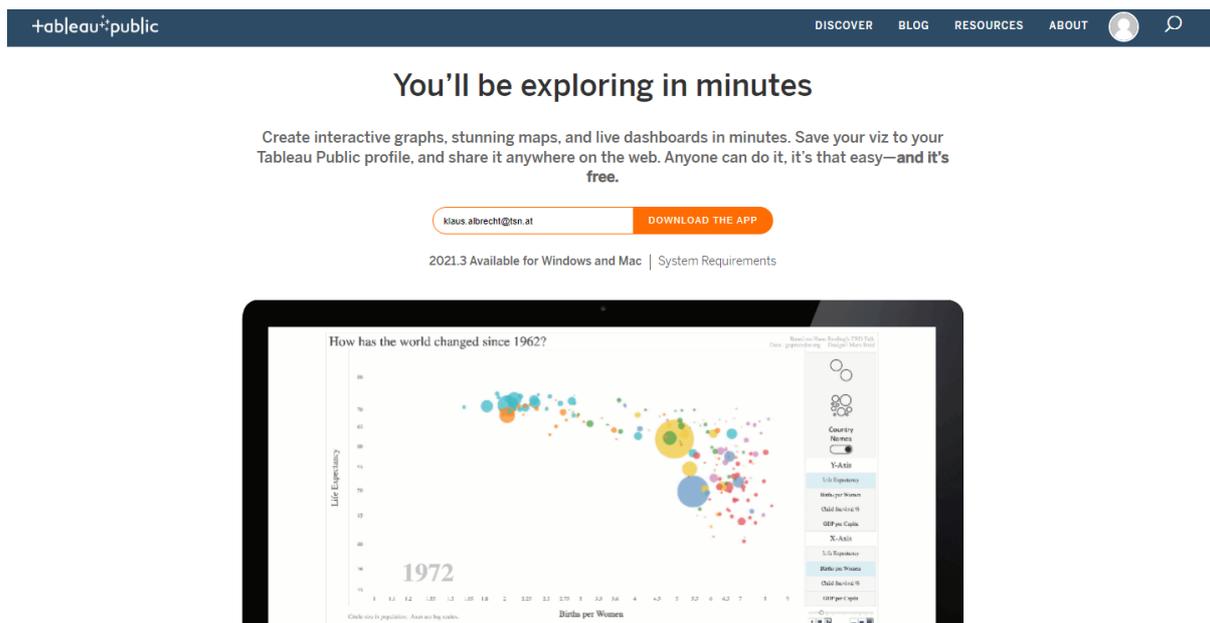
2. Sign up at the website and create an account for yourself: <https://public.tableau.com/s/>



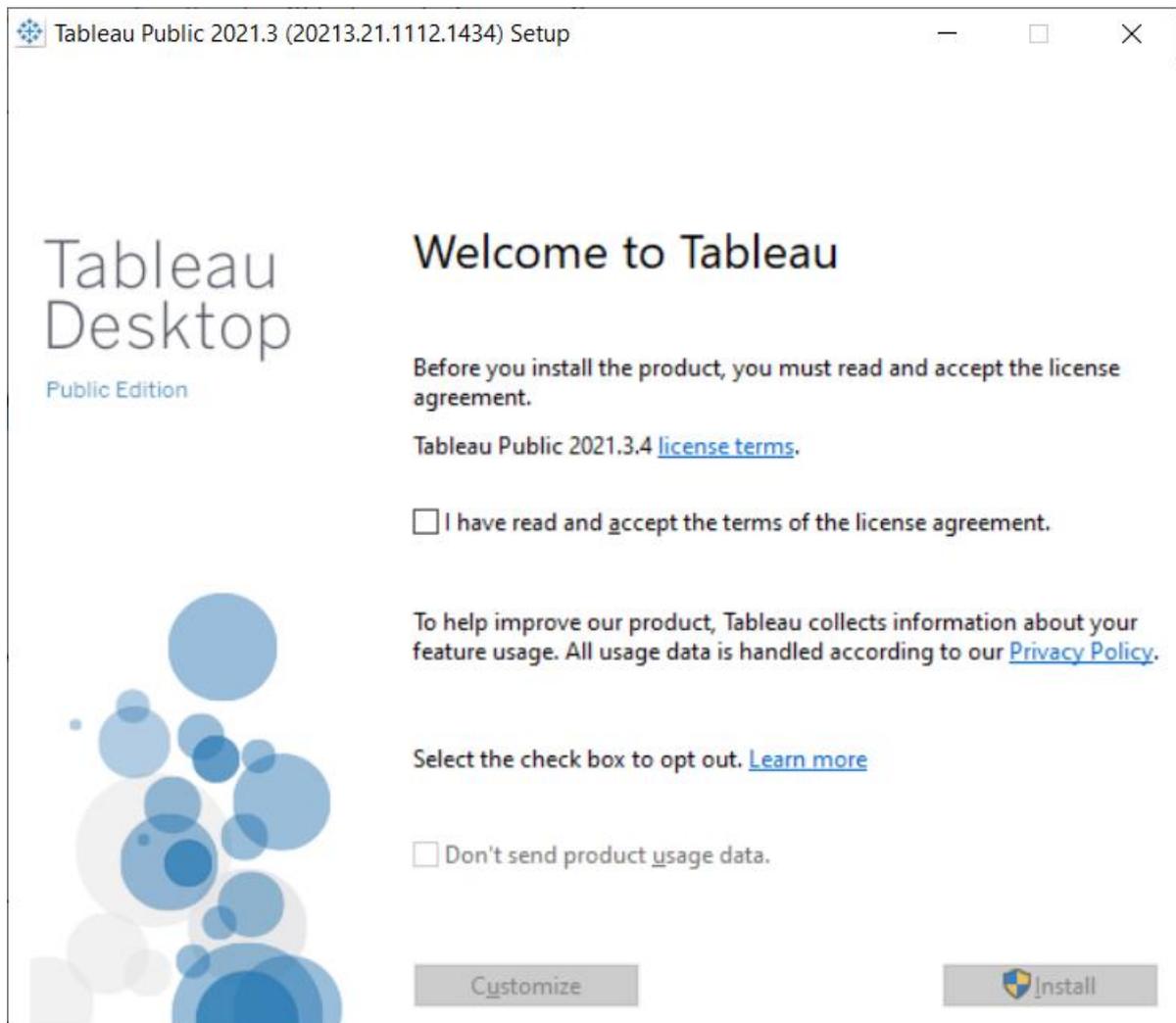
3. Get the free Tableau Public version from the website. You will find the link to the download file at the end of the webpage <https://public.tableau.com/en-us/s/resources>



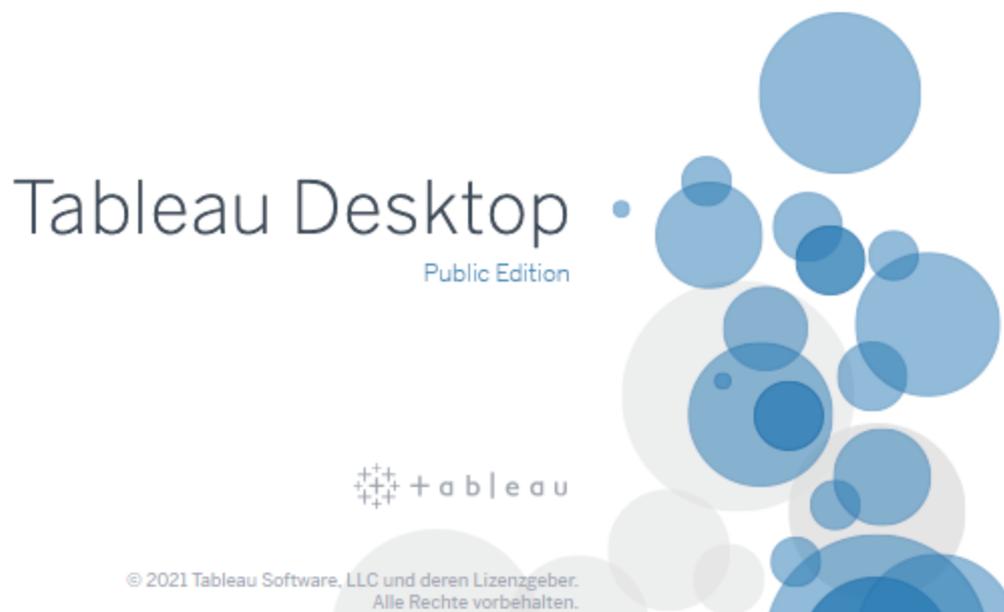
4. Download the free Tableau Public App: <https://public.tableau.com/en-us/s/download>



5. Start the setup routine for the latest Tableau Public version.



and start the application at the end of the setup process.



6. The best way to get familiar with Tableau Public is to reproduce the example given in the introduction video you have already watched during step 1 of this tutorial (Tableau Public Overview). Find the needed data (WorldBankCO2.xlsx) at the website <https://public.tableau.com/en-us/s/resources>

1. Tableau Public Overview (7:10)

Learn the basics of creating visualizations with Tableau Public

Covers:

- Connecting to data
- Creating Sheets and Dashboards
- Publishing to the web

Data: [World Bank CO2 \(.xlsx\)](#)
 Viz: [CO2 Emissions](#)

Open your first worksheet to start data analysis (following the steps given in the introduction video).

7. Try a first example yourself. For this you can use the data provided by the Center for Near Earth Object Studies from NASA. You find the data at the website: <https://cneos.jpl.nasa.gov/ca/>

NASA Jet Propulsion Laboratory
 California Institute of Technology

cneos Center for Near Earth Object Studies

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HOME → CLOSE APPROACHES → NEO

NEO Earth Close Approaches

Introduction Tutorial **Data Table** Comets (pre-1900) Uncertainties

Close Approach Data

The following table shows close approaches to the Earth by near-Earth objects (NEOs) limited as selected in the "Table Settings" below. Data are not available prior to 1900 A.D. nor after 2200 A.D. Data are further limited to encounters with [reasonably low uncertainty](#).

Check out our [brief video tutorial](#).

Table Settings: Near future (within 60 days) Nominal dist. <= 0.05au no H limit

Show 10 entries
 Showing 1 to 10 of 43 entries

Search: Search object

8. You can download the required data (Excel file) from the webpage

<https://cneos.jpl.nasa.gov/ca/>

Home About Orbits Close Approaches Impact Risk Planetary Defense Discovery Statistics Tools Extras

HOME → CLOSE APPROACHES → NEOS

Show 10 entries

Showing 1 to 10 of 42 entries

Search: Search object

Object	Close-Approach (CA) Date	CA Distance Nominal (LD au)	CA Distance Minimum (LD au)	V relative (km/s)	V infinity (km/s)	H (mag)	Diameter
(2021 VX7)	2021-Dec-06 02:24 ± < 00:01	14.74 0.03788	14.71 0.03781	6.13	6.12	24.7	31 m - 70 m
(2021 WE1)	2021-Dec-06 05:45 ± < 00:01	5.55 0.01427	5.54 0.01424	8.99	8.97	26.3	15 m - 33 m
(2021 WM2)	2021-Dec-06 11:54 ± < 00:01	8.20 0.02106	8.14 0.02093	12.33	12.32	25.9	18 m - 39 m
(2021 XT1)	2021-Dec-06 12:05 ± 00:03	8.00 0.02056	7.98 0.02050	5.34	5.31	28.6	5.2 m - 12 m
(2021 WL2)	2021-Dec-06 12:18 ± < 00:01	6.98 0.01793	6.96 0.01787	7.47	7.45	26.8	11 m - 25 m
(2021 XE1)	2021-Dec-06 18:10 ± < 00:01	4.00 0.01029	4.00 0.01027	3.13	3.05	28.8	4.7 m - 11 m
(2021 XA3)	2021-Dec-07 00:54 ± 00:40	14.54 0.03736	14.37 0.03694	8.22	8.21	26.3	15 m - 33 m
(2021 XN2)	2021-Dec-07 14:54 ± < 00:01	2.33 0.00599	2.33 0.00598	7.42	7.36	27.2	9.5 m - 21 m
(2021 XC1)	2021-Dec-08 21:12 ± < 00:01	6.48 0.01664	6.45 0.01656	6.86	6.83	26.3	15 m - 33 m
(2021 WT4)	2021-Dec-08 21:59 ± < 00:01	10.79 0.02773	10.70 0.02750	6.42	6.40	26.7	12 m - 27 m

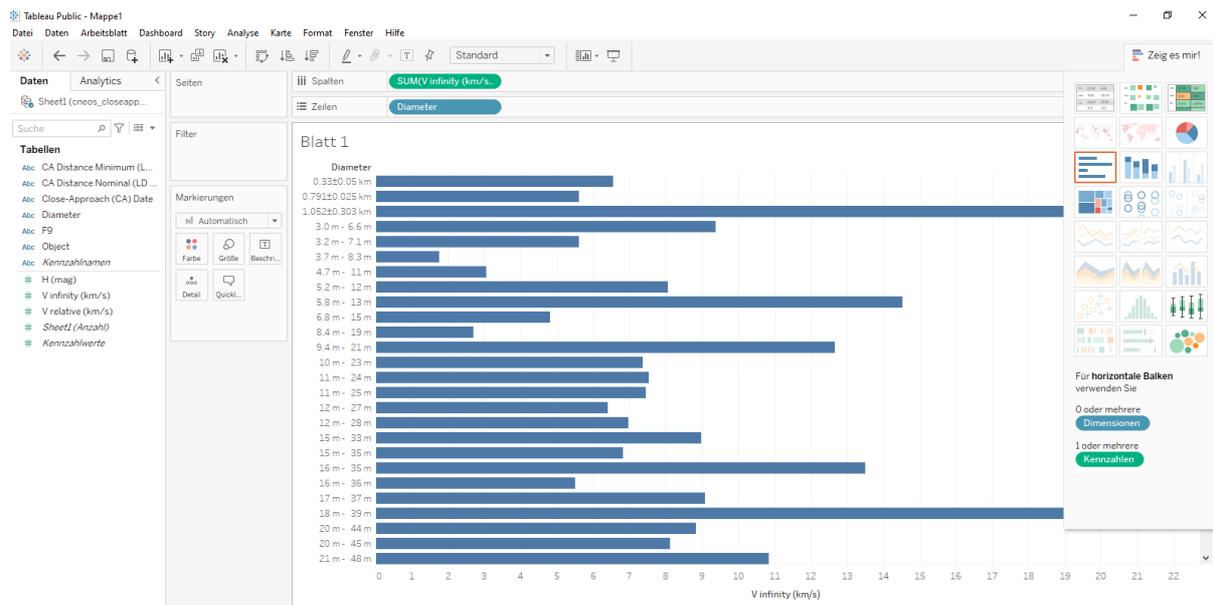
Print CSV Excel

Previous 1 2 3 4 5 Next

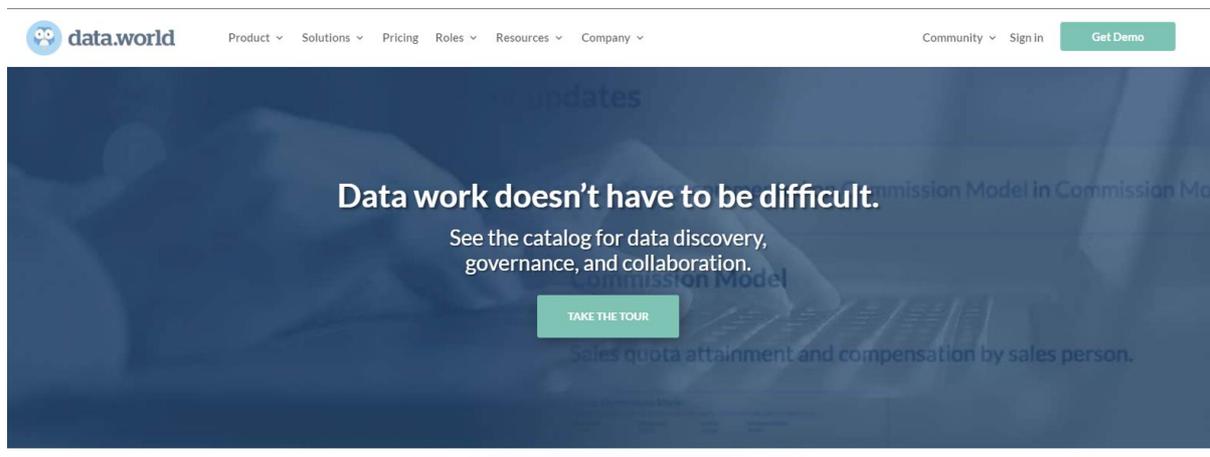
Use the "Print" button above to print data contained in this table. Use the "CSV" or "Excel" buttons to download the data for use in your spreadsheet program. Allow a few seconds for downloads of large datasets.

Machine-readable data are available. See the [API document](#) for details.

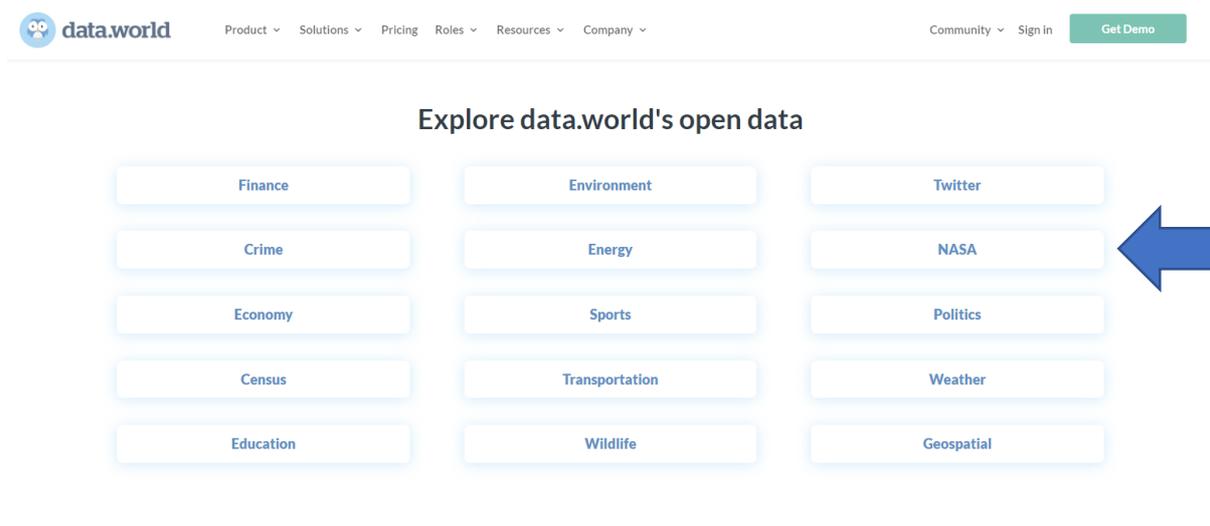
As a first example you could visualize the velocity (km/s) in relation to the diameter of the object.



9. For more interesting data visit the website <https://data.world/> and sign up for your own account.



Here you can find lots of useful data. Be sure to check out the data from NASA as well: <https://data.world/datasets/nasa>





Exoplanets

Kelly Garrett for NASA · Updated 2 years ago

Daily updated list of confirmed planets

Used in 69 projects 1 file 1 table

Tagged nasa, space, outerspace, planets, exoplanets, +1

358 Comment



Five Millennium Catalog of Solar Eclipses

NASA · Updated 4 years ago

Summarizes all eclipses over this five millennium period by century.

Used in 5 projects 1 file 1 table

Tagged nasa, solar eclipses, astronomy

52 Comment



Five Millennium Catalog of Solar Eclipses - Detailed

NASA · Updated 4 years ago

Concise details and local circumstances at greatest eclipse for every solar eclipse

Meteorite Landings > Untitled project

Project directory + Add Meteorite-Landing... x

Jump to a file or query (Ctrl + K) Meteorite-Landings.csv Query Download Open in app

	name	#	id	nametype	reclass	#	mass_g	fall	year
1			1	Valid	L5		21	Fell	1880-01-01T00:00:00.000000000
2			2	Valid	H6		720	Fell	1951-01-01T00:00:00.000000000
3			6	Valid	EH4		107000	Fell	1952-01-01T00:00:00.000000000
4	co		10	Valid	Acapulcoite		1914	Fell	1976-01-01T00:00:00.000000000
5	s		370	Valid	L6		780	Fell	1902-01-01T00:00:00.000000000
6	st		379	Valid	EH4		4239	Fell	1919-01-01T00:00:00.000000000
7	3ogdo (stone)		390	Valid	LL3-6		910	Fell	1949-01-01T00:00:00.000000000
8			392	Valid	H5		30000	Fell	1814-01-01T00:00:00.000000000
9			398	Valid	L6		1620	Fell	1930-01-01T00:00:00.000000000
10	Blanca		417	Valid	L		1440	Fell	1920-01-01T00:00:00.000000000
11	si Atrouss		423	Valid	Diogenite-pm		1000	Fell	1974-01-01T00:00:00.000000000
12			424	Valid	L6		24000	Fell	1925-01-01T00:00:00.000000000
13	jr-la-Lys		425	Valid	Unknown		No data.	Fell	1769-01-01T00:00:00.000000000
14			426	Valid	L6		779	Fell	1949-01-01T00:00:00.000000000

ABOUT THIS FILE

Last Updated 4 years ago
Owner NASA
Created 4 years ago
Size 4.75 MB

Displaying 10 columns, 45,716 rows in table
meteorite_landings

TABLE COLUMNS

name
id
nametype
reclass

