



METEOHACK RESOURCE GUIDE

OBJECTIVE

METEOHACK is all about the mash-up of earth science data with other data sets to extract maximum value and insight addressing one of the themes below:

The Earth and Us: Combine Earth Science data and/or meteorological/climate data with sociological and/or economic information to generate new understandings and perspectives on human-environment interactions.

New Audiences: Find new applications for a diverse audience that generally does not care about the Earth science and meteorological data: young audiences, students, non-experts and diverse socio-cultural communities.

Warning! Danger Ahead!: Analyze Earth Science data and weather data to assist in monitoring natural disasters and phenomena associated with health risks, and to assess their impacts on life and property.

Artify the Earth: Interpret our Earth Science data and weather data artistically to create beautiful data visualisations, virtual reality experiences, music, or unique pieces of art.

METEOROLOGICAL SERVICE OF CANADA (MSC) AND CANADIAN CENTRE FOR CLIMATE SERVICES (CCCS) DATA

The Exceptional MSC Open Data Documentation

This is new documentation released exclusively for METEOHACK. Everything you need to know to get started!

<https://eccc-msc.github.io/open-data>

GeoMet Web Services

Access to an abundance of MSC, CCCS data with data clipping, reproduction, format conversion, etc.

<https://www.canada.ca/en/environment-climate-change/services/weather-general-tools-resources/weather-tools-specialized-data/geospatial-web-services.html>

<https://www.canada.ca/en/environment-climate-change/services/climate-change/canadian-centre-climate-services/display-download.html>

MSC Datamart

Access to an abundance of ECCC Open Data governed by ECCC, published in many open formats for your use.

<https://dd.meteo.gc.ca/>

Open Data Portal:

You can find the Open Data 101 page, the Apps Gallery to get acquainted with open data, and some application programming interfaces. As well as some resources

<https://open.canada.ca/en>

<https://open.canada.ca/en/maps/open-data-canada>

DATA TOOLS

Knime

With more than 1000 modules, hundreds of ready-to-run examples, a comprehensive range of integrated tools, and the widest choice of advanced algorithms available, KNIME Analytics Platform is the perfect toolbox for any data scientist.

<https://www.knime.com/>

OpenRefine

OpenRefine (formerly Google Refine) is a powerful tool for working with messy data: cleaning it, transforming it from one format into another, and extending it with web services and external data. OpenRefine can help you explore large data sets with ease.

<http://openrefine.org/>

Orange

Orange is open source data visualization and data analysis for novice and expert, and provides interactive workflows with a large toolbox to create interactive workflows to analyse and visualize data. Orange is packed with different visualizations, from scatter plots, bar charts, trees, to dendrograms, networks and heat maps.

<https://orange.biolab.si/>

Tad Viewer

Tad is a free (MIT Licensed) desktop application for viewing and analyzing tabular data.

<https://www.tadviewer.com>

CSVView

CSVView is a lightweight viewer that displays the start of a data file immediately so there's no waiting around for very large files to load. Using very little memory CSVView can comfortably open files larger than 4GB. With copy and paste functionality and selectable delimiter support CSVView provides a fast, clean and simple way to access very large CSV files.

<https://kothar.net/csvview>

Power BI

Power BI is a business analytics service provided by Microsoft. It provides interactive visualizations with self-service business intelligence capabilities, where end users can create reports and dashboards by themselves.

<https://powerbi.microsoft.com/en-us>

Datawrapper

Datawrapper is an online data-visualization tool for making interactive charts. Once you upload the data from CSV/PDF/Excel file or paste it directly into the field, Datawrapper will generate a bar, line, map or any other related visualization. Datawrapper graphs can be embedded into any website or CMS with ready-to-use embed codes. So many reporters and news organizations use Datawrapper to embed live charts into their articles. It is very easy to use and produces effective graphics.

<https://www.datawrapper.de/>

Qlik

Qlik lets you create visualizations, dashboards, and apps that answer your company's most important questions. Now you can see the whole story that lives within your data.

<https://www.qlik.com/us/>

Tableau Public

Tableau democratizes visualization in an elegantly simple and intuitive tool. It is exceptionally powerful in business because it communicates insights through data visualization. In the analytics process, Tableau's visuals allow you to quickly investigate a hypothesis, sanity check your gut, and just go explore the data before embarking on a treacherous statistical journey.

<https://www.tableau.com/>

Infogram

Infogram offers over 35 interactive charts and more than 500 maps to help you visualize your data beautifully. Create a variety of charts including column, bar, pie, or word cloud. You can even add a map to your infographic or report to really impress your audience.

<https://infogram.com/>

DESIGN TOOLS

Google Slides

Create a new presentation and edit with others at the same time

<https://www.google.com/slides/about>

Prezi

Prezi introduces a better way to present; everything you need to create, present and analyze your best presentations ever

<https://prezi.com>

Keynote

Keynote for Mac, iOS and iCloud lets you make dazzling presentations. Anyone can collaborate – even on a PC. And it works with Microsoft PowerPoint

<https://www.apple.com/keynote>

Sketch

The most advanced responsive front-end framework in the world. Sketch gives you the power, flexibility and speed you always wanted in a lightweight and easy-to-use package. Finally you can focus on what you do best:

Design.

<https://www.sketchapp.com>

Webflow

Webflow gives designers and developers the power to design, build, and launch responsive websites visually, while writing clean, semantic code for you

Adobe Photoshop

The world's best imaging and design app. Work across desktop and mobile devices to create and enhance your photographs, web and mobile app designs, 3D artwork, videos, and more

<http://www.adobe.com/ca/products/photoshop>

Adobe Illustrator

The industry-standard vector graphics app that lets you create logos, icons, drawings, typography, and complex illustrations for any medium

<http://www.adobe.com/ca/products/illustrator.html>

Gimp

A cross-platform image editor available for GNU/Linux, OS X, Windows and more operating systems. It is free software; you can change its source code and distribute your changes

<http://www.gimp.org>

Pixlr

Make every moment beautiful with our family of photo editing apps. Work in layers, replace colour, transform objects, and more- all from your browser

<https://pixlr.com>

FREE ASSETS

Pexels

Free stock photos to use anywhere, for any personal and commercial purpose

<https://www.pexels.com>

Pixabay

Discover over 1.3 million images and videos shared by our generous community

<https://pixabay.com>

Unsplash

Beautiful, free photos. Gifted by the world's most generous community of photographers

<https://unsplash.com>

freepik

Free vectors for personal and commercial use. Download in .AI and .EPS format

<https://www.freepik.com/>

VectorStock

Free stock photos to use anywhere, for any personal and commercial purpose.

<https://www.vectorstock.com/free-vectors>

Shutterstock

Great stories start here. Discover over 125 million royalty-free images, video clips and music tracks

<https://www.shutterstock.com>

Flaticon

The largest database of free icons available in PNG, SVG, EPS, PSD and BASE 64 formats.

<https://www.flaticon.com>

Google Fonts

Make the web more beautiful, fast and open through great typography. Browse and adopt different font styles of your choosing

<https://fonts.google.com>

Topal:Subtle Patterns

Free textures for your next web project, brought to you by Topal

<http://subtlepatterns.com>

The Noun Project

Icons for everything. Over a million curated icons, created by a global community

<http://thenounproject.com>

Font Squirrel

Font Squirrel scours the internet for high quality, legitimately free fonts. Download thousands of completely legal, high quality, free fonts

<http://www.fontsquirrel.com>

Lorem Ipsum Generator

A placeholder text commonly used in the graphic, print and publishing industries for previewing layouts and visual mockups

<https://loremipsumgenerator.com>