what version of phreeqc should i download

iphreeqc-py.

A python 3+ ctypes wrapper for selected function prototypes defined by IPhreeqc version 3 in IPhreeqc.h and Var.h.

See "Change Log" below for recent changes.

This package is tailored to the author's preference but is made available in the event others find it useful.

The author is not affiliated with the USGS or the PHREEQC project.

Install.

Option 1.

Option 2.

Option 3.

This python package intentionally does not install or come with an IPhreeqc instance. An IPhreeqc shared library must be built and installed by the user. An example IPhreeqc install is below.

Additional Documentation.

See IPhreeqc.h and Var.h.

Example iphreeqc-3.6.2-15100 install.

Using Ubuntu 20.04.2 LTS with gcc (Ubuntu 9.3.0-17ubuntu1.

Example iphreeqc-py tests.

Assuming iphreeqc-py is installed and an IPhreeqc shared library has been configured, built, and installed as described above, try:

Clean up.

Notes.

For the above examples, IPhreeqc.h and Var.h are in.

Last tested with iphreeqc-3.6.2-15100 and python 3.9.4 in a virtual environment on Ubuntu 20.04.2 LTS, April 2021.

References & Attribution.

This work is derived from IPhreeqcPy.

License Notice.

License Usage Reference.

Change Log.

Notable changes from 0.1b0:

updated iphreeqc build example for Ubuntu 20.04 LTS release version 0.1.

See here for specifics.

Project details.

Project links.

Statistics.

Stars: Forks: Open issues/PRs:

View statistics for this project via Libraries.io, or by using our public dataset on Google BigQuery.

License: GNU Lesser General Public License v3 (LGPLv3)

Maintainers.

Classifiers.

License OSI Approved :: GNU Lesser General Public License v3 (LGPLv3) POSIX :: Linux Python :: 3.

Release history Release notifications | RSS feed.

Download files.

Download the file for your platform. If you're not sure which to choose, learn more about installing packages.

Introduction.

This page is the main resource of PHREEQC for Windows, a graphical user interface for PHREEQC-2, the popular aqueous geochemical modelling code by David Parkhurst and Tony Appelo. It was developped to add an easy-to-learn, intuitive graphical user interface (GUI) to PHREEQC. Since it was originally released in 1999 it has become widely-used for both teaching and research. In 2008 over 6000 people visited the download page!

PHREEQC for Windows is a 32 bit Windows version of the geochemical model PHREEQC-2, which is one of the most powerful tools in geochemical modelling available today. PHREEQC for Windows extends these capabilities and was developed to facilitate the creation of PHREEQC input files and the interpretation of the calculation results.

PHREEQC for Windows is completely free!

Description.

PHREEQC for Windows can do everything the normal version of PHREEQC version 2 can do. The input files for the program are backward compatible with the normal version of PHREEQC. This means that you can use any file created with the normal version in PHREEQC for Windows. However, some options that are available in PHREEQC for Windows are not available in the normal version. The extended capabilities include:

An input editor with some helpful features such as syntax highlight and a keyword index An output editor (read-only) A database editor (read-only) A simple debugger to check the input file for errors A grid to display the results in spreadsheet format A powerful charting option to display the results graphically.

PHREEQC for Windows has been tested on machine that run under Windows95, Windows98, Windows NT, Windows Me, Windows 2000 and Windows XP. It requires 5.1 MB of free hard disk space.

What version of phreeqc should i download.

PHREEQC version 3 is a computer program written in the C and C++ programming languages that is designed to perform a wide variety of aqueous geochemical calculations. PHREEQC implements several types of aqueous models: two ion-association aqueous models (the Lawrence Livermore National Laboratory model and WATEQ4F), a Pitzer specific-ion-interaction aqueous model, and the SIT (Specific ion Interaction Theory) aqueous model.

Parkhurst, D.L. and Appelo, C.A.J. (2013) Description of Input and Examples for PHREEQC Version 3 – A Computer Program for Speciation, Batch-Reaction, One-Dimensional Transport, and Inverse Geochemical Calculations. U.S. Geological Survey Techniques and Methods, Book 6, Chapter A43, 497 p, available only at PHREEQC Version 3.

*This PDF document is not Section 508 accessibility compliant. If you require accessibility assistance, please contact us to Request Assistance.

Email Address Created for Land Exchange Questions.

The Southwestern Region Office of Lands and Minerals Management is overseeing and administering the land exchange and appraisal process which includes the 2,422-acre Oak Flat Federal Parcel. All questions about the land exchange and appraisal process should be emailed to SM.FS.rcexinfo@usda.gov.

Programmatic Agreement Info.

To comply with Section 106 of the National Historic Preservation Act, the Tonto National Forest developed a Programmatic Agreement (PA) and included it in Volume 5, Appendix O of the final EIS. The PA was created in cooperation with the Advisory Council on Historic Preservation, the State Historic Preservation Office, tribes and other consulting parties. The PA contains an agreed upon process for identifying, evaluating and addressing adverse effects to historic properties associated with this undertaking.

What version of phreeqc should i download.

Compiled PhreeqcRM and IPhreeqc libraries (version 3.7.0)

I have compiled IPhreeqc and PhreeqcRM using Cmake and Visual Studio 2019 community edition on Windows 10, but should work on other Windows systems as well. The source of PhreeqcRM comes from USGS. On Linux, I have used the usual configure, make, make install sequence of commands on my Linux Mint laptop.

You will most probably need Visual C++ Redistributable for VC 2017 to use the Windows library. The Linux version of the library should work

out of the box. There are convenient Matlab and Julia wrappers for these libraries (Python is coming soon). Each wrapper downloads the right library from this repository, depending on your OS.

Please let me know if you can compile IPhreeqc and PhreeqcRM on mac and upload the libraries to this repository. I do not own a macbook (nor do I have any interest in acquiring one).

What version of phreeqc should i download.

Object-oriented python wrapper for the VIPhreeqc module.

Use Git or checkout with SVN using the web URL.

Work fast with our official CLI. Learn more.

Launching GitHub Desktop.

If nothing happens, download GitHub Desktop and try again.

Launching GitHub Desktop.

If nothing happens, download GitHub Desktop and try again.

Launching Xcode.

If nothing happens, download Xcode and try again.

Launching Visual Studio Code.

Your codespace will open once ready.

There was a problem preparing your codespace, please try again.

Latest commit.

Git stats.

Files.

Failed to load latest commit information.

README.md.

PhreeqPython is an object oriented wrapper around the (VIPhreeqc) extension of the Phreeqc chemical calculation engine (Parkhurst&Appello), written in Python.

PhreeqPython greatly simplifies adding solutions and querying their properties:

Allows for simple chemical and precipitation/dissolution reactions:

And even allows for addition, devision and multiplication of solutions to form new mixtures:

pip install -U phreeqpython.

64 bit Python3 Windows, OSX or Linux Using PhreeqPython on Windows requires installing Visual C++ Redistributable 2015.

Mac/Linux Windows Coverage.

This project makes use of the (Phreeqc) (David Parkhurst & Tony Apello) calcution engine and is (partly) derived from the (PhreeqPy) extension for IPhreeqc (Mike Müller)

Vitens is the largest drinking water company in The Netherlands. We deliver top quality drinking water to 5.6 million people and companies in the provinces Flevoland, Fryslân, Gelderland, Utrecht and Overijssel and some municipalities in Drenthe and Noord-Holland. Annually we deliver 350 million m³ water with 1,400 employees, 100 water treatment works and 49,000 kilometres of water mains.

One of our main focus points is using advanced water quality, quantity and hydraulics models to further improve and optimize our treatment and distribution processes.

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