

H08 Installation Manual for Windows 11

1 Create a Linux environment on Windows

1.1 WSL2(Windows Subsystem for Linux version2) Installation

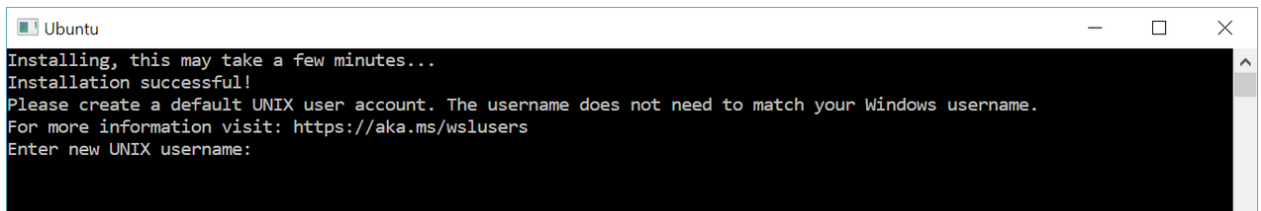
Launch Windows PowerShell as an administrator from the Start menu and run the following command.

```
> wsl --install
```

Executing this command initializes the WSL runtime environment and installs the latest Ubuntu distribution on WSL2 at the same time. WSL2 also provides native support for running Linux GUI applications on Windows, eliminating the need to install an X environment on the Windows side.

1.2 Create a Login Account in the Ubuntu Virtual Environment

After installation, restart your PC and log back into Windows. The Ubuntu terminal will launch and prompt you to enter the name and password for the new user account you are creating. Enter the account name and password you wish to use.



1.3 Update the Ubuntu Virtual Environment to the Latest Version

After logging into Ubuntu, run the following command to keep your environment up to date.

```
% sudo apt update
```

```
% sudo apt -y upgrade
```

2 Pre-installation of Related Software

2.1 Installation of gcc, gfortran, cmake

```
% sudo apt update
```

```
% sudo apt upgrade
```

```
% sudo -E apt install gcc gfortran cmake
```

2.2 Installation of zlib, szip

```
% sudo -E apt install zlib1g zlib1g-dev libsz2
```

2.3 Installation of curl and libcurl

```
% sudo -E apt install curl libcurl4-openssl-dev
```

2.4 Installation of HDF5

```
% sudo -E apt install hdf5-tools hdf5-helpers libhdf5-dev libhdf5-doc libhdf5-serial-dev
```

2.5 Installation of NetCDF-C, NetCDF-Fortran

```
% sudo -E apt install netcdf-bin libnetcdf-dev libnetcdf-dev
```

2.6 Installation of GMT

① Installation of Recommended Related Packages

```
% sudo -E apt install -y ghostscript ffmpeg imagemagick
```

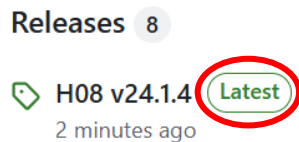
② Installation of GMT

```
% sudo -E apt install -y gmt gmt-gshhg gmt-dcw
```

3 Installation of H08 Source Code

3.1 Obtaining the H08 Source Code from GitHub

① Access <https://github.com/h08model/H08>, click the “Latest” button in the “Releases” section on the right side of the page, and open the download page for the source code.



② In the **Assets** section, click one of the file links (either the **.zip** or **.tar.gz** archive) to download the compressed source code file to your download folder.

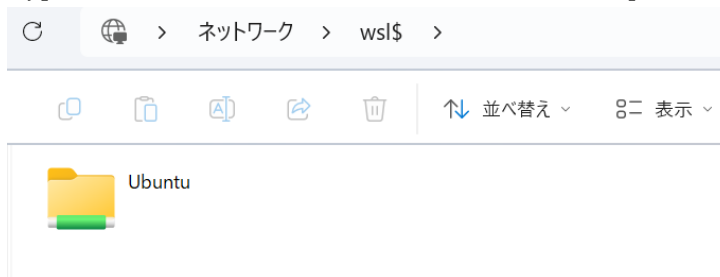
▼ Assets 2

Source code (zip)	6 minutes ago
Source code (tar.gz)	6 minutes ago

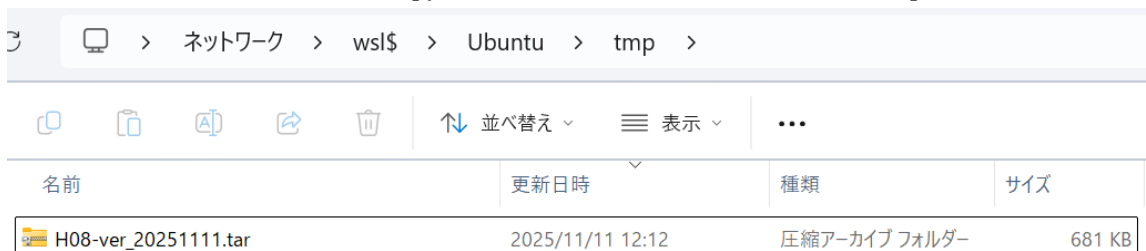
※The version may have been updated. Please use the latest release version.

3.2 Copying the Source Code Downloaded to the Local PC into the Ubuntu Virtual Environment

① Type “wsl\$” into the address bar of Windows Explorer to display the Ubuntu virtual disk.



② Extract the Ubuntu folder and copy the file downloaded in 3.1 into the tmp folder.



③ Under the home directory of the Ubuntu virtual environment, extract the compressed file and create the H08 root directory (H08-ver_YYYYMMDD). In this example, it would be like this:

```

% cd ~
% tar xvfz /tmp/H08-ver_20251111.tar.gz
% ls -a | grep H08
H08-ver_20251111
% tree -C -L 1 -a H08-ver_20251111/
H08-ver_20251111/
├── .gitignore
├── LICENSE
├── README.md
├── README_ja.md
├── Versions.md
├── adm
├── bin
├── cpl
├── cpt
├── crp
├── dam
├── install.sh
├── lib
├── lnd
├── map
├── met
└── riv

11 directories, 6 files
%

```

3.3 Compiling & Installing H08 Source Code (For This Example)

- ① Rename adm/Mkinclude.Bak to adm/Mkinclude for Ubuntu environment

```

% cd ~/H08-ver_20251111
% mv adm/Mkinclude.Bak adm/Mkinclude

```
- ② Run the H08 installation script

```

% sh ./install.sh

```
- ③ Set environment variables for H08 execution

```

% cd adm

```

Create a script to modify the sample.bashrc file in this directory to match your PC environment.

Any text editor can be used for script creation, but for users unfamiliar with Linux operations, the nano editor is recommended as it is easy to use in the terminal. To learn how to use it, search for “nano editor” on a search engine.

※The H08 root directory name used below is “H08-ver_20251111”; change it as appropriate.

【ch_sample.sh】

#!/bin/bash

ch_sample.sh

cat sample.bashrc | ¥

sed -e "s%export DIRH08=~/Users~/Naota~/H08%export ¥

DIRH08=\${HOME}~/H08-ver_20251111%" ¥

> add.bashrc

echo "¥n" >> add.bashrc

Run this script.

% sh ./ch_sample.sh

Add the created add.bashrc file to ~/.bashrc.

% cat add.bashrc >> ~/.bashrc

Apply the changes.

% source ~/.bashrc