ASReml 4.3 macOS installation guide

This implementation was produced using macOS version 15 Sequoia for the Apple arm64 architecture and for macOS version 11 Big Sur for Intel x86_64 architecture.

Files Included in the Installation

The program is provided as a package (pkg) file, comprising a script and binary executable images of the latest version of ASReml, along with documentation and examples.

The files are distributed between 3 folders and include among others:

`bin\asreml.sh`	shell script to invoke the program
`bin\myowngdg.f90`	example Fortran source for OWN variance structure
`doc\ASReml.htm`	HTML Help files (view in normal browser)
`doc\UserGuideFunctional.pdf`	Principal source of reference
`doc\WhatsNew43.pdf`	Description of changes for release 4.3
`doc\pedigree.pdf`	Description of pedigree options
`examples\*.*`	Data and input files for structural and functional examples contained within the User Guide

Downloading ASReml 4

Site Reference: On the ASReml download page you will need to enter your **Site Reference**. This is a unique string of letters and numbers that was sent in the Order Confirmation email. If someone other than yourself organized the software purchase you will need to obtain the **Site Reference** from them.

1. Go to the ASReml knowledge base https://asreml.kb.vsni.co.uk/asreml-4-downloads/ then enter your **Site Reference** and other details to access the downloads page.

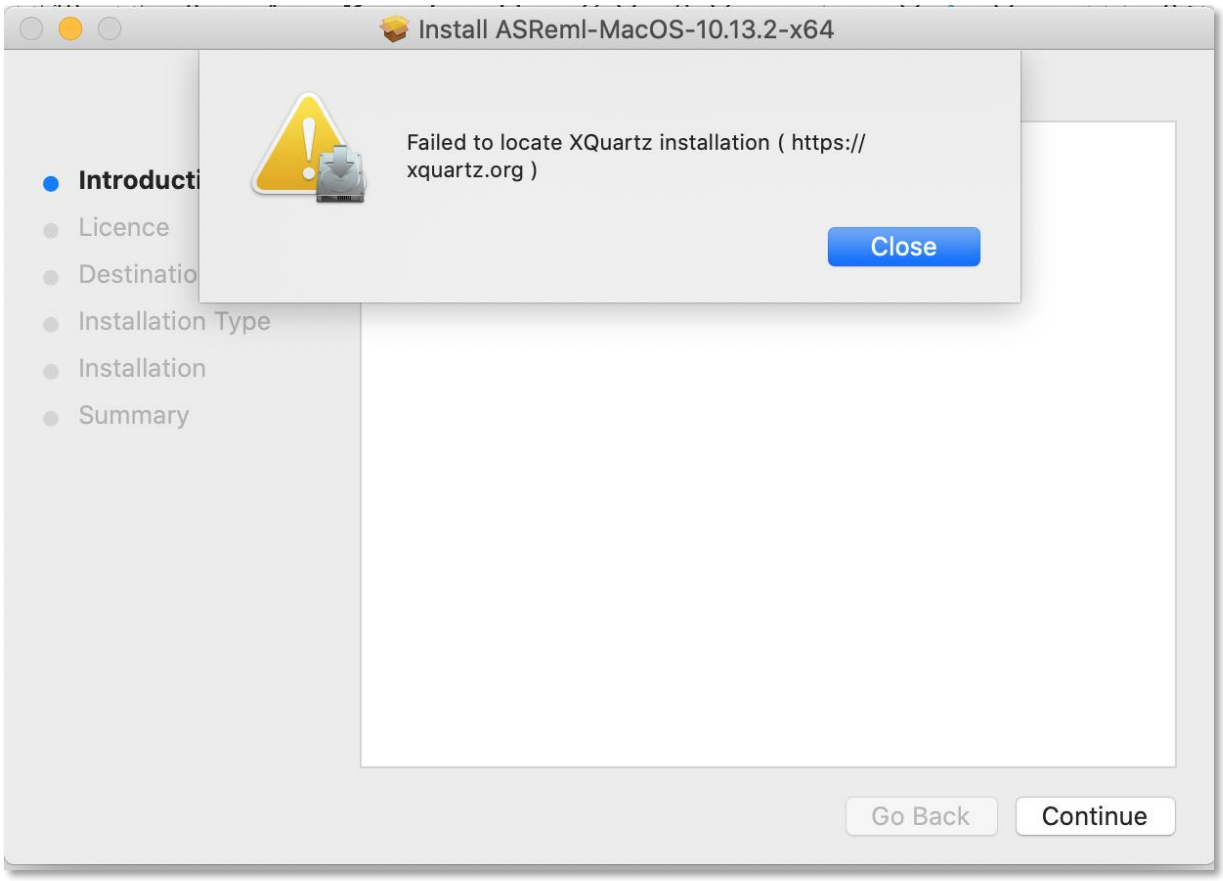
2. Scroll down to the macOS installation section and download the file.
   This have a filename similar to the following format
   `ASReml-{version}-{platform}_{cpu arch}-{os version}-{DateReference}.pkg`

   Choose the from the list the version for your platform architecture
   `ASReml-4.3.0.228-macOS15_Sequoia_arm64-15.0.1-9-Mar-2026-0824.pkg`
   `ASReml-4.3.0.228-macOS11_BigSur_x86_64-11.7.6-9-Mar-2026-0824.pkg`

Installing ASReml 4

Note: You will need to have administrative privileges to install this software as you will be prompted for an administrator password during the installation process.

1. By default the downloaded installer file will be stored in your **Downloads** folder and will have the extension `.pkg`.
2. If you are using the macOS desktop you can double-click the downloaded installer file to launch the installation Wizard. Otherwise follow the alternative command line instructions below.
3. Follow the installer instructions to complete installation. ASReml will install by default into `/usr/local/vsni/asreml` location.
4. If you see this alert message, copy the URL shown on the dialog and paste into a browser, then click on the close button and exit the installer.



5. Follow the instructions at the URL to download and install XQuartz.
6. Restart the ASReml installation process from step 2.

Install Using the Command Line (Alternative Method)

The installer may also be executed from a **terminal session**.

Requirements

- The user account must have **sudo privileges**.

Steps

1. Open the **Terminal** application.
2. Navigate to the directory containing the installer eg: ~/Downloads.
3. Run the installer using:

```
sudo installer ./ASReml-{version}-{platform}-{DateReference}.pkg
```

4. Enter the your password when prompted.

The package installer will then complete the installation.

Confirming the Installation

We'll now carry out a number of steps to confirm that the installation is as expected. If any step fails to illicit the desired response it means something has gone awry: in this instance please visit: https://vsni.co.uk/support
Now test the installation

```
asreml --version
```

This should give you a response showing you the version for the ASReml application.

```
This is ASReml Version 4.3.0.230 for , Built on 2026-03-09 08:24
```

1. This is all correct so we can display a listing of ASReml commands by typing
   `asreml --help`

   Which should give you a list of commands that explain how to interact with ASReml.

2. You can now display your license status by typing
   `asreml --status`

   If your status shows that you already have a license (because you are upgrading, rather than installing for the first time), you can skip to section **Running ASReml 4** to test the installation.

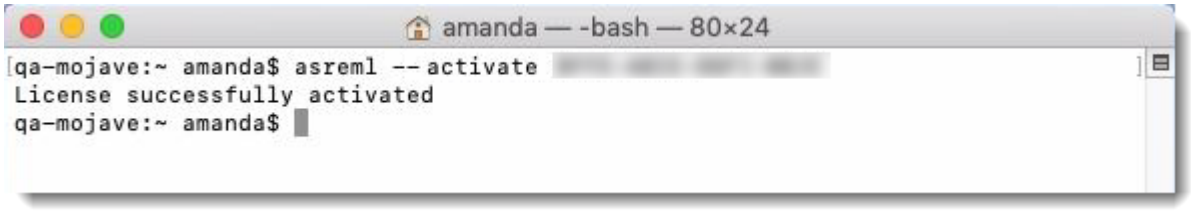
   If your status shows as '`No license for product`', continue with the next section.
   For any other failure indication refer to the **Troubleshooting** section.

Activating ASReml 4

When installation is complete you will need to activate your license using the 16 digit Activation Code emailed to you by customer support.
(If someone other than yourself organized the software purchase you will need to obtain the Activation Code from them.)

1. Open a terminal window and type `asreml --activate` followed by the 16 digit Activation Code.

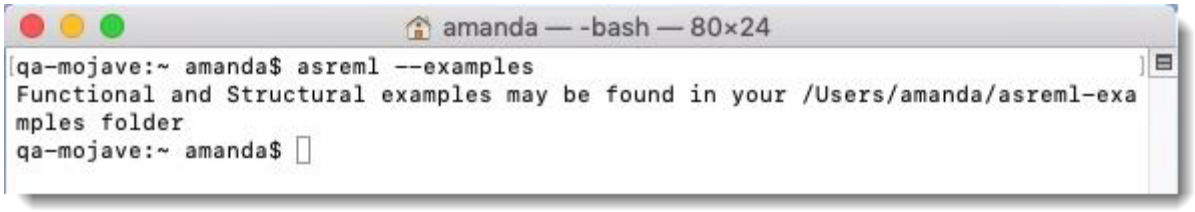
   For example: `asreml --activate 1234-1234-1234-1234`



   If activation failure is indicated refer to the **Troubleshooting** section.

2. Now install the example folders by typing the following command.

   `asreml --examples`

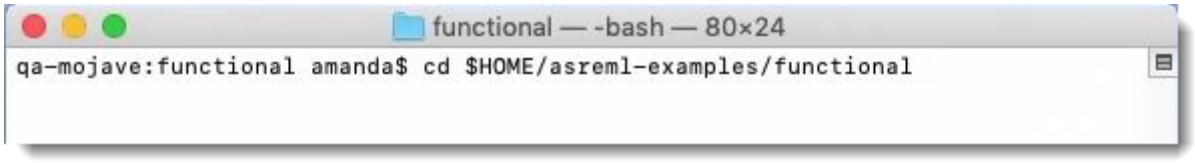


Running ASReml 4

You can now test the installation by running an example.

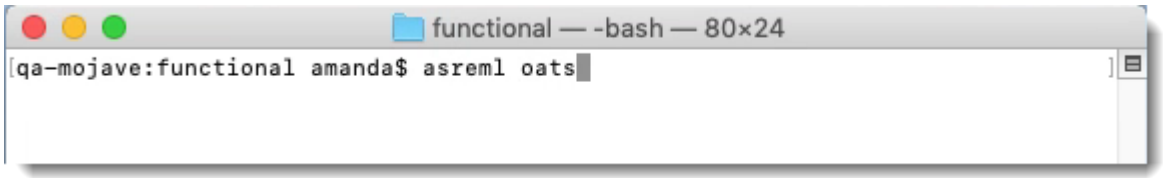
1. The example data files are stored in the `functional` directory. We'll navigate to this by typing the following command.

   `cd $HOME/asreml-examples/functional`

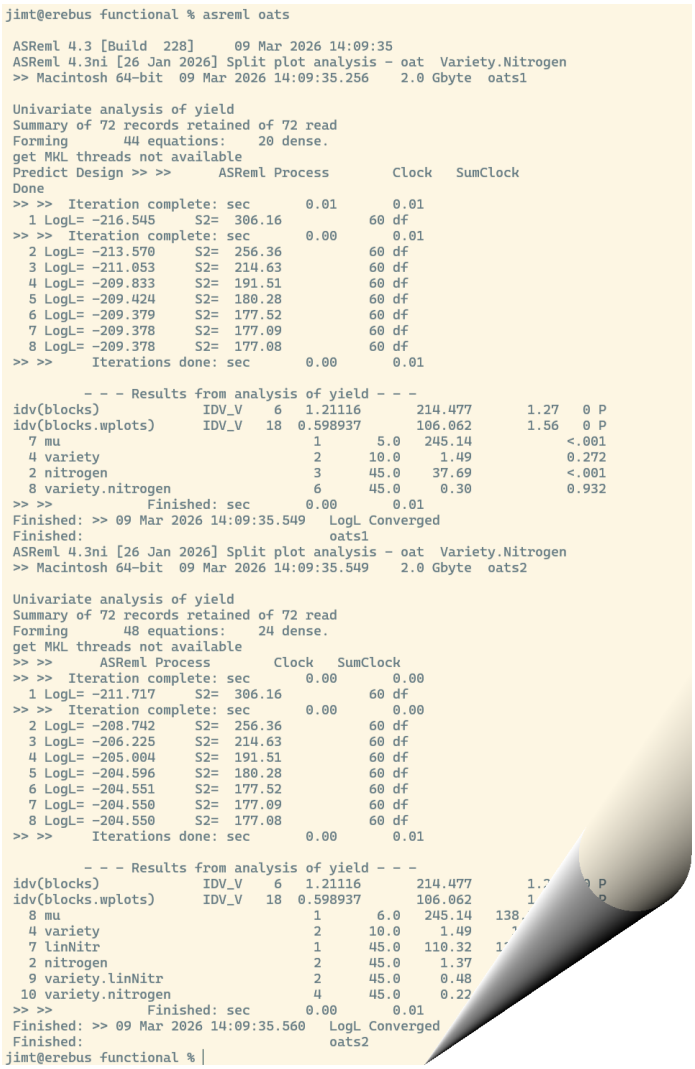


2. Now run the `oats` example by typing the following command:

   `asreml oats`



This will produce the following output.



```
jimt@erebus functional % asreml oats

 ASReml 4.3 [Build  228]     09 Mar 2026 14:09:35
 ASReml 4.3ni [26 Jan 2026] Split plot analysis - oat  Variety.Nitrogen
 >> Macintosh 64-bit  09 Mar 2026 14:09:35.256    2.0 Gbyte  oats1

 Univariate analysis of yield
 Summary of 72 records retained of 72 read
 Forming       44 equations:    20 dense.
 get MKL threads not available
 Predict Design >> >>      ASReml Process        Clock   SumClock
 Done
 >> >>  Iteration complete: sec       0.01       0.01
   1 LogL= -216.545     S2=  306.16          60 df
 >> >>  Iteration complete: sec       0.00       0.01
   2 LogL= -213.570     S2=  256.36          60 df
   3 LogL= -211.053     S2=  214.63          60 df
   4 LogL= -209.833     S2=  191.51          60 df
   5 LogL= -209.424     S2=  180.28          60 df
   6 LogL= -209.379     S2=  177.52          60 df
   7 LogL= -209.378     S2=  177.09          60 df
   8 LogL= -209.378     S2=  177.08          60 df
 >> >>     Iterations done: sec       0.00       0.01

          - - - Results from analysis of yield - - -
 idv(blocks)             IDV_V    6   1.21116       214.477       1.27   0 P
 idv(blocks.wplots)      IDV_V   18  0.598937       106.062       1.56   0 P
   7 mu                             1       5.0   245.14            <.001
   4 variety                        2      10.0     1.49            0.272
   2 nitrogen                       3      45.0    37.69            <.001
   8 variety.nitrogen               6      45.0     0.30            0.932
 >> >>            Finished: sec       0.00       0.01
 Finished: >> 09 Mar 2026 14:09:35.549   LogL Converged
 Finished:                          oats1
 ASReml 4.3ni [26 Jan 2026] Split plot analysis - oat  Variety.Nitrogen
 >> Macintosh 64-bit  09 Mar 2026 14:09:35.549    2.0 Gbyte  oats2

 Univariate analysis of yield
 Summary of 72 records retained of 72 read
 Forming       48 equations:    24 dense.
 get MKL threads not available
 >> >>      ASReml Process        Clock   SumClock
 >> >>  Iteration complete: sec       0.00       0.00
   1 LogL= -211.717     S2=  306.16          60 df
 >> >>  Iteration complete: sec       0.00       0.00
   2 LogL= -208.742     S2=  256.36          60 df
   3 LogL= -206.225     S2=  214.63          60 df
   4 LogL= -205.004     S2=  191.51          60 df
   5 LogL= -204.596     S2=  180.28          60 df
   6 LogL= -204.551     S2=  177.52          60 df
   7 LogL= -204.550     S2=  177.09          60 df
   8 LogL= -204.550     S2=  177.08          60 df
 >> >>     Iterations done: sec       0.00       0.01

          - - - Results from analysis of yield - - -
 idv(blocks)             IDV_V    6   1.21116       214.477       1.2
 idv(blocks.wplots)      IDV_V   18  0.598937       106.062       1
   8 mu                             1       6.0   245.14   138.
   4 variety                        2      10.0     1.49
   7 linNitr                        1      45.0   110.32   1
   2 nitrogen                       2      45.0     1.37
   9 variety.linNitr                2      45.0     0.48
  10 variety.nitrogen               4      45.0     0.22
 >> >>            Finished: sec       0.00       0.01
 Finished: >> 09 Mar 2026 14:09:35.560   LogL Converged
 Finished:                          oats2
jimt@erebus functional %
```

Using your license offline

Note: this feature is only available for enterprise licenses. Offline mode is not available for other license types.

You can use ASReml without an Internet connection for up to 30 days by taking your ASReml license offline.

1. Ensure you have an Internet connection so that you can connect to the RLM license server.
2. Start ASReml then type the following: `asreml --go-offline <period in days>`

   e.g. `asreml --go-offline 2` (This will take you offline for 2 days)

Your license will automatically return to online mode once the offline days have expired. You can also go back online before the offline expiry date by following the instructions below.

Going back online

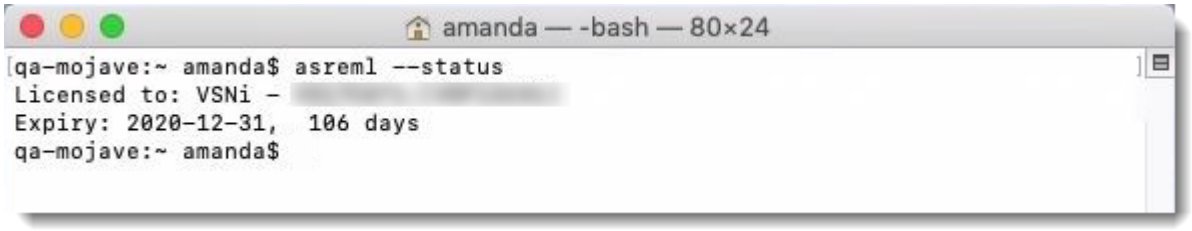
To return to online mode at any time, do the following:

1. Ensure you have an Internet connection so that you can connect to the RLM license server.
2. Start ASReml then type `asreml --go-online`

Viewing license status

You can see how many days remain before expiration of your license by checking the license status.

Start ASReml then type `asreml --status`



Using Help

You can view the ASReml help commands by typing `asreml -help`

Troubleshooting

This section covers what action should be taken upon the event of installation or license failure.