

# Introduction

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The *NASAaccess* package is a simple and needed tool for accessing and processing remote sensing data. The *NASAaccess* package has multiple functions that help the user to access and reformat hydrological data for easy ingest into various hydrological models. Since the package functions touch NASA data repositories to retrieve data, the user must set up a registration account with Earthdata as well as authorizing NASA GES DISC data access. The package user should make sure that his(her) local machines has curl installed properly. Further instructions on creating the “.netrc” and “.urs\_cookies” files can be accessed at *How To Access Data NASA data With cURL And Wget wiki page*. Creating the “.netrc” file at the user machine ‘Home’ directory and storing the NASA GES DISC user logging information in it is needed to execute the package commands.

Note: for Windows users the NASA GES DISC logging information should be saved in a file named “\_netrc” beside the “.netrc” one.

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- GPM
- GLDAS
- CMIP5 Climate
- CMIP6 Climate

## Built with

```
sessionInfo()
#> R version 4.1.2 (2021-11-01)
#> Platform: x86_64-apple-darwin17.0 (64-bit)
#> Running under: macOS Big Sur 10.16
#>
#> Matrix products: default
#> BLAS: /Library/Frameworks/R.framework/Versions/4.1/Resources/lib/libRblas.0.dylib
#> LAPACK: /Library/Frameworks/R.framework/Versions/4.1/Resources/lib/libRlapack.dylib
#>
#> locale:
#> [1] C/en_US.UTF-8/en_US.UTF-8/C/en_US.UTF-8/en_US.UTF-8
#>
#> attached base packages:
#> [1] stats graphics grDevices utils datasets methods base
#>
#> other attached packages:
#> [1] NASAaccess_3.0.3
#>
#> loaded via a namespace (and not attached):
#> [1] Rcpp_1.0.8 lattice_0.20-45 tidyr_1.2.0
#> [4] png_0.1-7 class_7.3-19 digest_0.6.29
#> [7] rprojroot_2.0.2 utf8_1.2.2 R6_2.5.1
```

```

#> [10] plyr_1.8.6          evaluate_0.15        e1071_1.7-9
#> [13] httr_1.4.2          ggplot2_3.3.5       pillar_1.7.0
#> [16] RgoogleMaps_1.4.5.3 rlang_1.0.1         rstudioapi_0.13
#> [19] raster_3.5-15       rmarkdown_2.11      desc_1.4.0
#> [22] rgdal_1.5-28        stringr_1.4.0       foreign_0.8-81
#> [25] munsell_0.5.0       proxy_0.4-26        compiler_4.1.2
#> [28] xfun_0.29           shapefiles_0.7      pkgconfig_2.0.3
#> [31] htmltools_0.5.2     rgeos_0.5-9         tidyselect_1.1.2
#> [34] tibble_3.1.6        roxygen2_7.1.2      codetools_0.2-18
#> [37] XML_3.99-0.9        fansi_1.0.2         crayon_1.5.0
#> [40] dplyr_1.0.8         withr_2.4.3         sf_1.0-6
#> [43] bitops_1.0-7        brio_1.1.3          grid_4.1.2
#> [46] gtable_0.3.0        lifecycle_1.0.1     DBI_1.1.2
#> [49] magrittr_2.0.2      units_0.8-0         scales_1.1.1
#> [52] ncdcf_1.19          KernSmooth_2.23-20  cli_3.2.0
#> [55] stringi_1.7.6       sp_1.4-6            testthat_3.1.2
#> [58] xml2_1.3.3          ellipsis_0.3.2      generics_0.1.2
#> [61] vctrs_0.3.8         rjson_0.2.21        tools_4.1.2
#> [64] ggmap_3.0.0         glue_1.6.2          purrr_0.3.4
#> [67] jpeg_0.1-9          yaml_2.3.5          fastmap_1.1.0
#> [70] pkgload_1.2.4       colorspace_2.0-3    terra_1.5-21
#> [73] maptools_1.1-2      classInt_0.4-3      knitr_1.37

```