## September 4, 2023

The results below are generated from an R script.

The R session information (including the OS info, R version and all packages used):

```
sessionInfo()
## R version 4.2.1 (2022-06-23)
## Platform: aarch64-apple-darwin20 (64-bit)
## Running under: macOS Ventura 13.2.1
##
## Matrix products: default
## LAPACK: /Library/Frameworks/R.framework/Versions/4.2-arm64/Resources/lib/libRlapack.dylib
## locale:
## [1] en US.UTF-8/en US.UTF-8/en US.UTF-8/C/en US.UTF-8/en US.UTF-8
## attached base packages:
              graphics grDevices utils
## [1] stats
                                               datasets methods
                                                                   base
## other attached packages:
## [1] rnoaa_1.4.0
                       weatherData_0.6.0 devtools_2.4.5
                                                              usethis 2.2.1
  [5] DescTools_0.99.49 crayon_1.5.2 minpack.lm_1.2-3 forecast_8.21
##
   [9] quantmod_0.4.23 TTR_0.24.3
                                            xts_0.13.1
                                                              zoo_1.8-11
##
## loaded via a namespace (and not attached):
     [1] nlme_3.1-157
                                    seasonalityTest_0.0.0.9000 fs_1.5.2
     [4] lubridate_1.9.2
                                   httr_1.4.4
##
                                                              rprojroot_2.0.3
##
     [7] tools_4.2.1
                                    profvis_0.3.8
                                                               utf8_1.2.2
## [10] R6_2.5.1
                                    colorspace_2.0-3
                                                             nnet_7.3-17
   [13] urlchecker_1.0.1
                                    withr_2.5.0
                                                              gridExtra_2.3
##
   [16] tidyselect_1.2.0
                                    Exact_3.2
                                                               prettyunits_1.1.1
##
   [19] processx_3.8.0
                                    curl_5.0.2
                                                              compiler_4.2.1
##
   [22] cli_3.6.0
                                    expm_0.999-7
                                                              xml2_1.3.3
                                    tseries 0.10-54
   [25] desc 1.4.2
                                                              scales 1.2.1
   [28] lmtest_0.9-40
                                    fracdiff 1.5-2
##
                                                              mvtnorm 1.1-3
##
   [31] quadprog_1.5-8
                                    callr 3.7.3
                                                               proxy_0.4-27
   [34] rappdirs_0.3.3
                                    stringr_1.5.0
                                                               digest_0.6.29
##
   [37] pkgconfig_2.0.3
                                    htmltools_0.5.4
                                                              sessioninfo_1.2.2
                                    fastmap_1.1.0
##
   [40] highr_0.9
                                                               htmlwidgets_1.6.0
##
   [43] rlang_1.1.0
                                    readxl_1.4.2
                                                              httpcode_0.3.0
##
   [46] rstudioapi_0.14
                                    shiny_1.7.2
                                                               generics_0.1.3
##
   [49] jsonlite_1.8.4
                                    dplyr_1.1.2
                                                               magrittr_2.0.3
## [52] Matrix_1.5-3
                                    Rcpp_1.0.11
                                                               munsell_0.5.0
## [55] fansi_1.0.3
                                    lifecycle_1.0.3
                                                               stringi_1.7.8
## [58] MASS_7.3-57
                                    rootSolve_1.8.2.3
                                                               pkgbuild_1.4.1
## [61] plyr_1.8.8
                                    grid_4.2.1
                                                               parallel_4.2.1
```

```
## [64] promises_1.2.0.1
                                   lmom_2.9
                                                              miniUI_0.1.1.1
## [67] lattice_0.20-45
                                   knitr_1.41
                                                              ps_1.7.2
## [70] pillar_1.9.0
                                   boot 1.3-28
                                                              gld_2.6.6
## [73] pkgload_1.3.2
                                   crul_1.4.0
                                                              urca_1.3-3
## [76] XML_3.99-0.14
                                   glue_1.6.2
                                                              evaluate 0.19
## [79] hoardr_0.5.3
                                   data.table_1.14.6
                                                              remotes_2.4.2
## [82] vctrs_0.6.1
                                   httpuv_1.6.6
                                                              cellranger_1.1.0
## [85] tidyr_1.3.0
                                   gtable_0.3.1
                                                              purrr_1.0.1
## [88] cachem_1.0.6
                                   ggplot2_3.4.3
                                                              xfun_0.38
                                                              e1071_1.7-12
## [91] mime_0.12
                                   xtable_1.8-4
## [94] later_1.3.0
                                   class_7.3-20
                                                              timeDate_4022.108
## [97] tibble_3.2.1
                                   tinytex_0.43
                                                              memoise_2.0.1
## [100] timechange_0.1.1
                                   ellipsis_0.3.2
Sys.time()
## [1] "2023-09-04 12:52:11 BST"
```