

Compare CASAL & Casal2

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23 October 2019

```
library(knitr)
hook_output = knitr_hooks$get('output')
knitr_hooks$set(output = function(x, options) {
  # this hook is used only when the linewidth option is not NULL
  if (!is.null(n <- options$linewidth)) {
    x = knitr:::split_lines(x)
    # any lines wider than n should be wrapped
    if (any(nchar(x) > n)) x = strwrap(x, width = n)
    x = paste(x, collapse = '\n')
  }
  hook_output(x, options)
})
```

Comparing CASAL mpd with Casal2 mpd

This document documents how the `compare_csl_to_csl2()` function is calculated. So that users can better understand how to translate a **CASAL** model to **Casal2** model.

```
## get Casal R-library
library(casal)
## read in Casal2 R functions replace this with the library later
R_files = list.files(".././../R-libraries/casal2/R")
files = file.path(".././../R-libraries/casal2/R", R_files)
for(i in 1:length(files))
  source(files[i])
## depending on your system run the scripts that do an mpd for casal and Casal2 files
#shell("cmd & cd .././LIN56\\ & run_models.bat")

# read in MPD's
csl_model = casal::extract.mpd(file = file.path(".././LIN56", "CASAL", "run_estimation.txt"))
csl2_model = extract.mpd(file = file.path(".././LIN56", "Casal2", "casal_flags_off", "run_estimation.txt"))
#csl2_model = extract.mpd(file = file.path(".././LIN56", "Casal2", "casal_flags_off", "multi_run.out"))

#compare_csl_to_csl2(csl_model, csl2_model, check_process_eq = TRUE, check_fits = TRUE) {
check_process_eq = TRUE
check_fits = TRUE
## check objects are the correct class
if ( class(csl_model) != "casalMPD" )
  stop("the csl_model needs to be of type casalMPD, make sure it is derived from the casal::extract.mpd")
if ( class(csl2_model) != "casal2MPD" )
  stop("the csl2_model needs to be of type casal2MPD, make sure it is derived from the casal2::extract.mpd")
if (!any(names(csl2_model[[1]]) %in% "type"))
  stop("I think this is Casal2 model is a multi run model (-i) this function will only work on model run")
## check the correct reports are present in the CASAL model
casal2_reports = names(csl2_model)
casal2_process_eq_reports = c("initialisation_partition", "partition", "derived_quantity", "process")
```

```

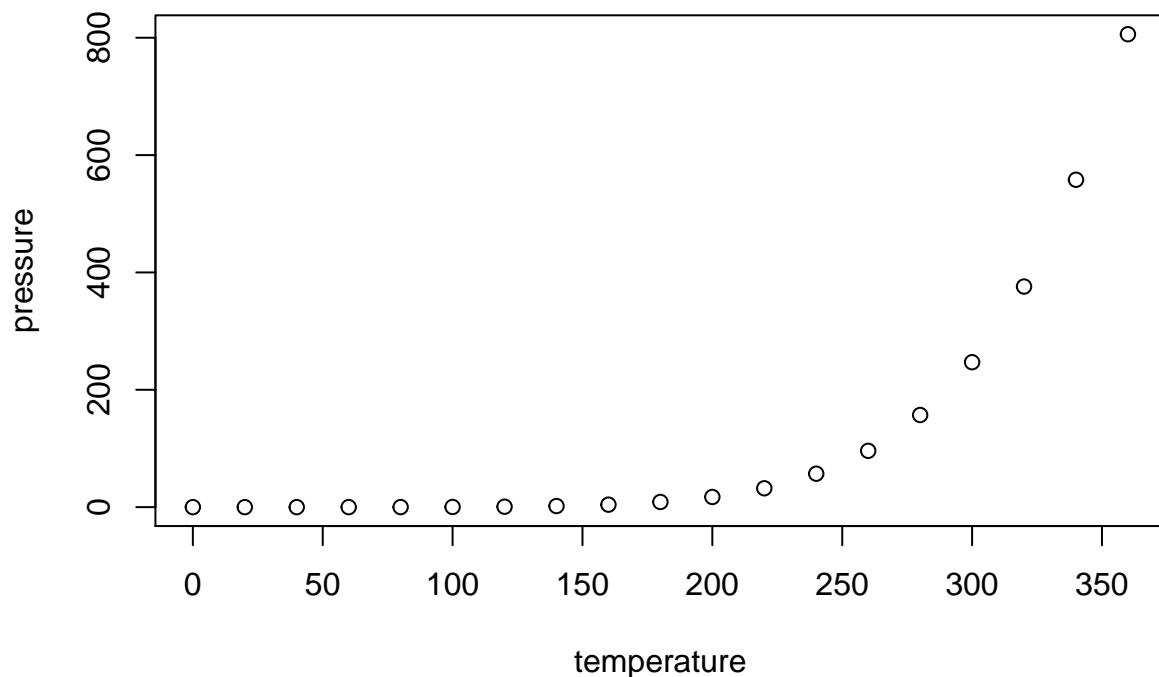
if (check_process_eq) {
  if (!any(names(csl_model) %in% c("quantities"))))
    stop("your CASAL model (csl_model) needs to have quantities turned on, go to the output.csl and check")
  found_report = FALSE;
  for (j in 1:length(casal2_process_eq_reports)) {
    found_report = FALSE;
    for(i in 1:length(casal2_reports)) {
      if (csl2_model[[i]]$type == casal2_process_eq_reports[j]) {
        found_report = TRUE
        break;
      }
    }
    if (!found_report)
      stop(paste0("To compare process dynamic equations the Casal2 needs to print a report of type '",
  }
}

if (check_fits) {
  if (!any(names(csl_model) %in% c("fits"))))
    stop("your CASAL model (csl_model) needs to have fits reported, go to the output.csl and check all")
}

```

Including Plots

You can also embed plots, for example:



Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.