# MD.R

*Lampe*

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```
source("CS_DE.R")

PAR.TEST <- DATA.INP[which(DATA.INP$ITEST == "SC1B"),] # SUBSET OF DATA FOR ANALYSIS
```

```
time.interp <- approxfun(x = PAR.TEST$TIME, y = PAR.TEST$TIME)
temp.interp <- approxfun(x = PAR.TEST$TIME, y = PAR.TEST$TEMP)
as.interp   <- approxfun(x = PAR.TEST$TIME, y = PAR.TEST$AS)
ls.interp   <- approxfun(x = PAR.TEST$TIME, y = PAR.TEST$LS)
d.interp    <- approxfun(x = PAR.TEST$TIME, y = PAR.TEST$D)

RHOI   <- as.numeric(PAR.TEST$RHOI[1])  # DENSITY AT THE START OF CREEP
DD      <- as.numeric(PAR.TEST$DD[1])   # AVERAGE GRAIN SIZE [MM]
W       <- as.numeric(PAR.TEST$W[1])    # WATER CONENT BY PERCENT WEIGHT

PARM <- c(RHOI = RHOI, DD = DD, W = W) # CONSTANT TEST SPECIFIC PARAMETERS
```

```
Z1  <- 0 # Predicted axial strain (initial values)
Z2  <- 0 # Predicted lateral strain (initial values)
Z3  <- 0 # internal variable "xi" for the transient function (FU)
                          # integral of Eqn 2-27, (initial values)

IC <- (c(Z1 = Z1, Z2 = Z2, Z3 = Z3)) # array of initial values

TIME <- PAR.TEST$TIME
```

```
# P.CER <- ode(func = strain_Rates.01, parms = PARM, y = IC,
#              times = TIME, method = "impAdams")
```