



```
#' nse  
#'  
#' Compute NSE between observation and model  
#' @param m model estimates  
#' @param o observations  
#' @return nse  
  
nse = function(m,o) {  
  
err = m-o  
meanobs = mean(o)  
mse = sum(err*err)  
ovar = sum((o-meanobs)*(o-meanobs))  
nse = 1.0-mse/ovar  
  
return(nse)  
}
```



```
#' relerr  
#'  
#' Compute percent error between observation and model  
#' @param m    model estimates  
#' @param o    observations  
#' @return relerr  
  
relerr = function(m,o) {  
  
  err = m-o  
  meanobs = mean(o)  
  meanerr = mean(err)  
  
  res = meanerr/meanobs  
  return(res)  
}
```