**Functions to check for seasonality:**

findSeasonalFreq <- function(x)

{

n <- length(x)

spec <- spec.ar(c(x),plot=FALSE)

if(max(spec$spec)>10) # Arbitrary threshold chosen by trial and error.

{

period <- round(1/spec$freq[which.max(spec$spec)])

if(period==Inf) # Find next local maximum

{

j <- which(diff(spec$spec)>0)

if(length(j)>0)

{

nextmax <- j[1] + which.max(spec$spec[j[1]:500])

period <- round(1/spec$freq[nextmax])

}

else

period <- 1

}

}

else

period <- 1

return(period)

}

# find.freq(data.ts)

isSeasonal <- function(data.ts) {

fit <- tbats(data.ts)

seasonal <- !is.null(fit$seasonal)

seasonal

}