R Script For Accessing Air Temp Data and Plotting

##install WaterML and ggplot2 packages

install.packages(“WaterML”)

install.packages(“ggplot2”)

##load the WaterML package and ggplot2 package

require(WaterML)

require(ggplot2)

##Set Server location

USGS <- "http://hydroportal.cuahsi.org/nwisdv/cuahsi\_1\_1.asmx?WSDL"

##Set Variable for Data

AirTemp<- GetValues(USGS,"NWISDV:01104480","NWISDV:00020DataType=MEAN",startDate = "2014-09-01", endDate="2014-09-30")

##View Data

View(AirTemp)

##Simple plot

plot(AirTemp$time,AirTemp$DataValue)

##View summary statistics

summary(AirTemp$DataValue)

##Create scatter plot using ggplot

g <- ggplot(AirTemp, aes(x = AirTemp$time, y = AirTemp$DataValue)) + geom\_point()

##Create Complex, color-coated (by Temperature value) graph

g + geom\_point(aes(color = AirTemp$DataValue))