```r
1  #demo for the 05 compaction testing
2  #by xingzhengwu@163.com
3
4  w1<-c(6.58,11.2,16.4)
5  rhod2<-c(1.852,1.895,1.834)
6  rho33<-c(1.974,2.108,2.135)
7  z1lab<-expression(paste(~~italic(w)," (%)",sep=""))
8  z2lab<-expression(paste(~~italic(rho)[d]," (g/cm^3)",sep=""))
9
10 plot(w1,rhod2,xlab=z1lab,ylab=z2lab,xlim=c(6,18),ylim=c(1.6,2.3),pch=1,lty=1,lwd=2,type='b'
   ,col = "darkviolet")
11 lines(w1,rho33,lty=2,lwd=1,col="darkred")
12 points(w1,rho33,pch=3,lwd=1,col="darkred")
13
14 legend("topright",pch=c(1,3),lty=c(1,2),lwd=c(2,1),  legend = c("Dry
   density","density"),col=c("darkviolet","darkred"),bg="white") #
15
16 strOut01=("D:/XWUBJ/TeachingHBU/SoilMechanicsLab/PPTWu/")  #you need to set up this
   directory 文件存储位置需要自行修改
17 savePlot(filename = paste(strOut01, "05 plotting of optimum water content.tif",sep=""),
   type = c("tif"),device = dev.cur(), restoreConsole = TRUE)
18 savePlot(filename = paste(strOut01, "05 plotting of optimum water content.emf",sep=""),
   type = c("emf"),device = dev.cur(), restoreConsole = TRUE)
19
```