

Encoding of data in R

Foreword

Titles are displayed as followed: `variablename.unit` (pc = %, nb = # and per = /)

DSDP 502

```
read.delim("DSDP502.txt",skip=36,header=FALSE,col.names=c("Depth.cm","Age.yrs","Benthicforamsd13C.PDB","Benthicforamsd18O.PDB","Notes1","Notes2"),sep=" ",na.strings="999")
```

The last column "Note" had to be divided into two new columns

DSDP 552

```
read.delim("DSDP552.tab",skip=16,header=FALSE,col.names=c("Depth.m","Age.ka","Cibicidoidessppd18O.permilPDB","Cibicidoidessppd13C.permilPDB"),sep=" ")
```

DSDP 607

```
read.delim("DSDP607.tab",skip=19,header=FALSE,col.names=c("Depth.m","Age.ka","Label","Cibicidoidessppd18O.permilPDB","Cibicidoidessppd13C.permilPDB","Uvigerinasppd18O.permilPDB","Uvigerinasppd13C.permilPDB"),sep=" ")
```

DSDP 610

```
read.delim("DSDP610.tab",skip=15,header=FALSE,col.names=c("Depth.m","Age.ka","Cibicidoidessppd18O.permilPDB","Cibicidoidessppd13C.permilPDB"),sep=" ")
```

GeoB1032

```
read.delim("GeoB1032.tab",skip=25,header=FALSE,col.names=c("Event","Depth.m","Depthc.mcd","Age.ka","CaCO3.pc","Sand.pc","TOC.pc","Cwuellerstorfid13C.permilPDB","Cwuellerstorfid18O.permilPDB","Sedrate.cmperka","Waterwm.pc","DBD.gperccm"),sep=" ")
```

GeoB1034

```
read.delim("GeoB1034.tab",skip=25,header=FALSE,col.names=c("Event","Depth.m","Depthc.mcd","Age.ka","CaCO3.pc","Sand.pc","TOC.pc","Cwuellerstorfid13C.permilPDB","Cwuellerstorfid18O.permilPDB","Sedrate.cmperka","waterwm.pc","DBD.gperccm"),sep=" ")
```

GeoB1035

```
read.delim("GeoB1035.tab",skip=25,header=FALSE,col.names=c("Event","Depth.m","Depthc.mcd","Age.ka","CaCO3.pc","Sand.pc","TOC.pc","Cwuellerstorfid13C.permilPDB","Cwuellerstorfid18O.permilPDB","Sedrate.cmperka","waterwm.pc","DBD.gperccm"),sep=" ")
```

GeoB1041

```
read.delim("GeoB1041.tab",skip=23,header=FALSE,col.names=c("Event","Depth.m","Depthc.mcd","Age.ka","Sand.pc","Cwuellerstorfid13C.permilPDB","Cwuellerstorfid18O.permilPDB","Sedrate.cmperka","waterwm.pc","DBD.gperccm"),sep=" ")
```

GeoB1101

```
read.delim("GeoB1101.tab",skip=24,header=FALSE,col.names=c("Depth.m","Depthc.mcd","Age.ka","CaCO3.pc","Sand.pc","TOC.pc","Cwuellerstorfid13C.permilPDB","Cwuellerstorfid18O.permilPDB","Sedrate.cmperka","waterwm.pc","DBD.gperccm"),sep="")
```

GeoB1105

```
read.delim("GeoB1105.tab",skip=23,header=FALSE,col.names=c("Event","Depth.m","Depthc.mcd","Age.ka","Sand.pc","Cwuellerstorfid13C.permilPDB","Cwuellerstorfid18O.permilPDB","Sedrate.cmperka","waterwm.pc"),sep="")
```

GeoB1117

```
read.delim("GeoB1117.txt",skip=1,header=FALSE,col.names=c("Corelabel","Depth","Compdepth","Age.ka","Cwuellerstorfid13C","Cwuellerstorfid18O"),sep="")
```

The data set was a personal communication by the author. Some titles don't have units because they weren't communicated in the file.

GeoB1211

```
read.delim("GeoB1211.tab",skip=25,header=FALSE,col.names=c("Depth.m","Depthc.mcd","Age.ka","CaCO3.pc","Sand.pc","TOC.pc","Cwuellerstorfid13C.permilPDB","Cwuellerstorfid18O.permilPDB","Sedrate.cmperka","waterwm.pc","DBD.gperccm"),sep="")
```

GeoB1312

```
read.delim("GeoB1312.txt",skip=1,header=FALSE,col.names=c("Corelabel","Depth","Compdepth","Age.ka","Cwuellerstorfid13C","Cwuellerstorfid18O"),sep="")
```

The data set was a personal communication by the author. Some titles don't have units because they weren't communicated in the file.

GeoB1505

```
read.delim("GeoB1505.tab",skip=24,header=FALSE,col.names=c("Depth.m","Age.ka","Cwuellerstorfid18O.permilPDB","TOC.pc","DBD.gperccm","CaCO3.pc","Al.pc","Ti.pc","Ba.mgperk","Mg.pc","K.pc","Fe.pc","Mn.pc"),sep="")
```

MD95_2042

```
read.table("MD95_2042.txt",skip=15,header=FALSE,col.names=c("AgeSFCP.ka","BenthicmeanO18","3ptrunningmeanbenthicdO18"),sep="")
```

ODP 659

ODP659 <-

```
read.delim("ODP659.tab",skip=14,header=FALSE,col.names=c("Depth.m","Cwuellerstorfid18O.permilPDB"),sep="")
```

```
ODP659chronos <-  
read.delim("ODP659chronos.tab",skip=15,header=FALSE,col.names=c("Depth.m","Depthc.  
mcd","Age.ka"),sep="")
```

```
age_model <- approxfun(ODP659chronos$Depth.m,ODP659chronos$Age.ka)
```

```
ODP659 <- data.frame(cbind(ODP659,Age.ka=age_model(ODP659$Depth.m)))
```

```
ODP659
```

ODP 662

```
ODP662 <-  
read.fwf("ODP662.txt",skip=16,header=FALSE,col.names=c("Godwinlabcode","Depth.m","Ty  
pe","d18O","d13C"),widths=c(17,9,6,13,9))
```

```
ODP662chronos <-  
read.delim("ODP662chronos.tab",skip=12,header=FALSE,col.names=c("Depth.m","Age.ka"),  
sep="")
```

Only 9 data for "Depth". As a consequence, there're a lot of NAs for the isotope data that weren't found at these depths.

```
age_model <- approxfun(ODP662chronos$Depth.m,ODP662chronos$Age.ka)
```

```
ODP662 <- data.frame(cbind(ODP662,Age.ka=age_model(ODP662$Depth.m)))
```

```
ODP662
```

ODP 664

```
read.delim("ODP664.txt",skip=1,header=FALSE,col.names=c("Depth","Age.ka","d18O","d13  
C"),sep="")
```

The data set was a personal communication by the author. Some titles don't have units because they weren't communicated in the file.

ODP 665

```
read.delim("ODP665.txt",header=TRUE,sep="")
```

ODP 704

```
read.delim("ODP704.txt",skip=1,header=FALSE,col.names=c("Depth","Age.yrs","Age.ka","Be  
nthid18O","Benthid13C","Leg138agemodel"),sep="")
```

ODP 758

```
ODP758 <-
```

```
read.delim("ODP758.tab",skip=15,header=FALSE,col.names=c("Depth.m","Label","Cwueller  
storfid13C.permilPDB","Cwuellerstorfid18O.permilPDB"),sep="")
```

```
ODP758chronos <-  
read.delim("ODP758chronos.tab",skip=13,header=FALSE,col.names=c("Depth.m","Age.ka"),  
sep="")
```

```
age_model <- approxfun(ODP758chronos$Depth.m,ODP758chronos$Age.ka)
```

```
ODP758 <- data.frame(cbind(ODP758,Age.ka=age_model(ODP758$Depth.m)))
```

```
ODP758
```

ODP 806

```
ODP806 <-  
read.delim("ODP806.tab",skip=13,header=FALSE,col.names=c("Depth.m","Cwuellerstorfid18  
O.peruilPDB","Cwuellerstorfid13C.peruilPDB"),sep="")
```

```
ODP806chronos <-  
read.delim("ODP806chronos.tab",skip=12,header=FALSE,col.names=c("Depth.m","Age.ka"),  
sep="")
```

```
age_model <- approxfun(ODP806chronos$Depth.m,ODP806chronos$Age.ka)
```

```
ODP806 <- data.frame(cbind(ODP806,Age.ka=age_model(ODP806$Depth.m)))
```

```
ODP806
```

```
with(ODP806,plot(Age.ka,Cwuellerstorfid18O.peruilPDB,type='l'))
```

ODP 849

```
read.table("ODP849.txt",skip=41,header=FALSE,col.names=c("Depth.cm","Age.yrs","d13Cfo  
ramsb.PDB","d18Oforamsb.PDB"),sep="")
```

ODP 927

```
ODP927 <-  
read.delim("ODP927.txt",skip=2,header=FALSE,col.names=c("Mcd","d13C.peruilPDB","d18  
O.peruilPDB","Species1","Species2"),sep="")
```

```
ODP927chronos <-  
read.delim("ODP927chronos.txt",skip=1,header=FALSE,col.names=c("Mcd","Age.Ma"),sep="")
```

```
age_model <- approxfun(ODP927chronos$Mcd,ODP927chronos$Age.Ma)
```

```
ODP927 <- data.frame(cbind(ODP927,Age.Ma=age_model(ODP927$Mcd)))
```

```
ODP927
```

R says "suppression des ex aequos of x" but it works for a few data

ODP 929

```
ODP929 <-  
read.delim("ODP929.txt",skip=2,header=FALSE,col.names=c("Mcd","d13C.permilPDB","d18  
O.permilPDB","Species1","Species2"),sep="")  
  
ODP929chronos <-  
read.delim("ODP929chronos.txt",skip=1,header=FALSE,col.names=c("Mcd","Age.ka"),sep="")  
  
age_model <- approxfun(ODP929chronos$Mcd,ODP929chronos$Age.ka)  
  
ODP929 <- data.frame(cbind(ODP929,Age.ka=age_model(ODP929$Mcd)))  
  
ODP929
```

There was a problem with the file ODP929: there were more columns than columns names. The first columns "Label" were deleted from the text file and the column "Species" had to be divided by two because there was a space between the genus and the species name.

There're lots of NAs in the column "Age" while there shoudn't be.

ODP 980

```
read.table("ODP980.txt",skip=65,header=FALSE,col.names=c("Depth.cm","Age.yrs","Cwuellerstorfid13C.PDB","Cwuellerstorfid18O.PDB"),sep="")
```

ODP 981

```
read.delim("ODP981.txt",skip=37,header=FALSE,col.names=c("Depth.cm","Age.yrs","d18OCwueller.PDB","d13Ccibid.PDB","d13Cnpachyr.PDB","d18Ocibid.PDB","d18Onpachyr.PDB"),sep=" ",na.strings="-999")
```

ODP 982

```
read.delim("ODP982a.txt",skip=1,header=FALSE,col.names=c("Hole","Core","Sect","Interv","MCD","Age.ka","Cib18O","Cib13C","Bull18O","Bull13C","CaCO3.pc","IRD.pc"),sep="")
```

```
read.delim("ODP982b.txt",skip=35,header=FALSE,col.names=c("Depth.cm","Age.yrs","Cwuellerstorfid13C.PDB","Cwuellerstorfid18O.PDB","Notes1","Notes2"),sep="")
```

There're two files (a and b) because two different data set were found, each one covering a different timescale. The first data set was a personal communication by the author. Some titles don't have units because they weren't communicated in the file.

Be careful with the second file, as it has more lines when downloaded into R. It might be annoying for further analysis.

ODP 983

```
read.delim("ODP983.tab",skip=17,header=FALSE,col.names=c("Depth.m","Age.ka","Sandparticlesabove63microm.pc","Cwuellerstorfid13C.permilPDB","Cwuellerstorfid18O.permilPDB"),sep="")
```

ODP 984

```
read.delim("ODP984a.txt",skip=1,header=FALSE,col.names=c("Depth.mcd","Age.ka","Benthicd18O"),sep="")
```

```
read.delim("ODP984b.tab",skip=18,header=FALSE,col.names=c("Depth.m","Age.ka","Benthicforamd18O.permilPDB"),sep="")
```

There're two files (a and b) because two different data set were found, each one covering a different timescale. The first data set was a personal communication by the author. Some titles don't have units because they weren't communicated in the file.

ODP 999

```
read.delim("ODP999.txt",skip=1,header=FALSE,col.names=c("F","P","O","N","M","L","K","Cor depth","Age.Ma","Cwd13C","Cwd18O","Sand.pc","PcSand/PcCaCO3.pc","CaCO3.pc"),sep=""),na.strings=".")
```

The symbol "." had to be typed in the txt file because otherwise, the table in R was a mess.

ODP 1012

```
read.delim("ODP1012.txt",skip=14,header=FALSE,col.names=c("Leg","Site","Hole","Core","Type","Section","Top.cm","Bottom.cm","Depth.mcd","Age.ka","d18O","d18Ocorr+cib+0.64","d13C","Species"),sep="")
```

ODP 1085

```
read.delim("ODP1085.txt",skip=36,header=FALSE,col.names=c("Depth.cm","Age.yrs","Benthicforamsd18O.PDB","Notes"),sep="",na.strings="-999")
```

ODP 1087

```
read.delim("ODP1087.tab",skip=24,header=FALSE,col.names=c("Depth.m","Age.ka","Label","Ginflatad18O.permilPDB","Ginflatad13C.permilPDB","Gbulloidesd18O.permilPDB","Gbulloidesd13C.permilPDB","Gruberd18O.permilPDB","Gruberd13C.permilPDB","Cwuellerstorfid18O.permilPDB","Cwuellerstorfid13C.permilPDB"),sep="")
```

ODP 1088

```
read.delim("ODP1088.txt",skip=7,header=FALSE,col.names=c("Site","Hole","Core","Section","Intervaltop.cm","Intervalbottom.cm","Depth.mcd","Age.ka","d18O.permil","d13C.permil","CaCO3.wtpc","Laboratory"),sep="",na.strings="")
```

ODP 1092

```
read.delim("ODP1092.txt",skip=1,header=FALSE,col.names=c("Depth.mcd","Species","d13C","d18O","d13CCW+0glob+0.5","d18/OCW+0.64glob-0.1","Age.ka"),sep="")
```

The columns "Sample" and "Site" were deleted in the text file because it was problematic while in R. In the text file, the age column was modified from the Excel file.

ODP 1123

ODP1123 <-

```
read.delim("ODP1123.tab",skip=38,header=FALSE,col.names=c("Depth.m","Depthc.mcd","Depthcr.rmcd","Label","Cwuellerstorfid13C.permilPDB","Cwuellerstorfid18O.permilPDB","Cibicidesspd13C.permilPDB","Cibicidesspd18O.permilPDB","Ccicatricosusd13C.permilPDB","Ccicatricosusd18O.permilPDB","Ccorpulentusd13C.permilPDB","Ccorpulentusd18O.permilPDB","Ckullenbergid13C.permilPDB","Ckullenbergid18O.permilPDB","Cpachydermad13C.permilPDB","Cpachydermad18O.permilPDB","Crobertsonianusd18O.permilPDB","Numboniferd13C.permilPDB","Numboniferd18O.permilPDB","Uhispidad13C.permilPDB","Uhispidad18O.permilPDB","Uperegrinad13C.permilPDB","Uperegrinad18O.permilPDB","Uvigerinaspd13C.permilPDB","Uvigerinaspd18O.permilPDB","Comment"),sep=" ",na.strings="")
```

ODP1123chronos <-

```
read.delim("ODP1123chronos.tab",skip=48,header=FALSE,col.names=c("Depth.m","Age.ka","Label","Ginflata.nb","Tcrassaformis.nb","Tcrassula.nb","Ttruncatulinooidess.nb","Hhirsuta.nb","Hscitula.nb","Gbulloides.nb","Gfalconensis.nb","Tquinqueloba.nb","Thumilis.nb","Gaequilateralis.nb","Gcalida.nb","Gglutinata.nb","Nincompta.nb","Npachyderma.nb","Gruber.nb","Gsacculifer.nb","Ouniversa.nb","Sdehiscens.nb","Bdigitata.nb","Pobliquiloculata.nb","Foramplankt.nb","Forambent.nb","Ostracoda.nb","Radiolarians.nb","Spongespic.nb","Echinoidspine.nb","Fishteeth.nb","Pyrite.nb","Volcglass.nb","Foramplanktfrag.nb","Foramplankforam.pc"),sep=" ")
```

```
age_model <- approxfun(ODP1123chronos$Depth.m,ODP1123chronos$Age.ka)
```

Wrong command "suppression des ex-aequos de 'x'"

```
ODP1123 <- data.frame(cbind(ODP1123,Age.ka=age_model(ODP1123chronos$Depth.m)))
```

ODP1123

ODP 1143

```
read.delim("ODP1143.tab",skip=18,header=FALSE,col.names=c("Age.ka","Depth.mcd","Cwuellerstorfid18O.permilPDB","Sedrate.cmperka"),sep=" ")
```

ODP 1146

```
read.fwf("ODP1146.txt",skip=5684,nrows=2516,header=FALSE,col.names=c("Coresection","Sectiondepth.cm","Sitedepth.MBSF","Sitedepth.MCD","Sitedepth.RMCD","Age.ka","Species","d13C.VPDB","d18O.VPDB"),widths=c(8,10,11,11,11,11,23,12,11))
```

ODP 1148

```
read.delim("ODP1148.txt",skip=1,header=FALSE,col.names=c("Age.ma","Pelagicforamsd13C","Pelagicforamsd18O","Age.Ma","Benthicforamsd13C","Benthicforamsd18O"),sep=" ")
```

PC_72

```
read.table("PC_72.txt",skip=34,header=FALSE,col.names=c("Depth.cm","Age.yrs","d18O.PDB"),sep=" ")
```

RC13_110

```
read.table("V19_30.txt",skip=40,header=FALSE,col.names=c("Depth.cm","Age.yrs","d13Cforamsb.PDB","d18Oforamsb.PDB"),sep="")
```

RC13_229

```
read.table("RC13_229.txt",skip=39,header=FALSE,col.names=c("Depth.cm","Age.yrs","d13Cforamsb.PDB","d18Oforamsb.PDB"),sep="")
```

The 5th column ("Notes") had to be deleted because a lot of data was missing and these data were irrelevant

V19_30

```
read.table("V19_30.txt",skip=51,header=FALSE,col.names=c("Depth.cm","Age.yrs","d13C.PDB","d18O.PDB"),sep="")
```

Total (57 of the article)

```
read.delim("total.tab",skip=58,header=FALSE,col.names=c("Age.ka","Forambenthd18O.per milPDB","d18Ostdev"),sep="")
```