Manual for raw data files:

The data are saved in two files:

1) Profile_Data.pdf: description of general parameters of the profile

2) Layer_Data.pdf: description of the layers and horizons, respectively (based on field and laboratory analysis)

General comments:

- A data set entry "-1" indicates that no analysis was conducted on the sample
- A data set entry "-9" indicates that the sample value was below detection limit

1) Structure of Profile_Data.pdf:

Fieldname	content	unit
PROFILE_NO	BIOTA profile number	-
DATE	date of sampling	-
REGION	BIOTA region	-
LOCATION	name of BIOTA observatory	-
OBSNO	number of BIOTA observatory	-
HABITATNO	habitat number of the plot	-
RANKING	ranking number of the plot in the observ.	-
PLOT	plot number in the observatory	-
LAT	latitude in dec-degree	-
LONG	longitude in dec-degree	-
PROFILE_TYPE	type of profile (miniprofile or deep profile)	-
UNIT	unit specification in the nested scales system	-
VEGETATION	vegetation of corresponding D3-unit	-
COMMENTS	general remarks on the profile	-
DEPTH	total depth of the profile	-
NO_LAYERS	total number of layers	-

2) Structure of Layer_Data.pdf:

Fieldname	content	unit
LAB_NO	internal sample number	-
PR_NO	BIOTA profile number	-
HOR_NO	number of horizon/ layer	-
UE	upper edge of layer	m
LE	lower edge of layer	m
MUNS_DRY	Munsell[1] colour of dry sample	-
MUNS_MOIST	Munsell[1] colour of moist sample	-
COMMENT	general remarks on layer/ horizon	-
SCEL_WP	fragment content (> 2 mm)	% weight
SCEL_VOLP	fragment content (> 2 mm)	% volume

Fieldname	content	unit
CLAY	clay (< 2 µm)	%
fSi	fine silt (2 to < 6.3 µm)	%
mSi	medium silt (6.3 to < 20 µm)	%
cSi	coarse silt (20 to < 63 µm)	%
SILT	total silt (2 to < 63 µm)	%
ffS	finest fine sand (63 to < 125 µm)	%
cfS	coarse fine sand (125 to < 200 µm)	%
fS	fine sand (63 to < 200 µm)	%
mS	medium sand (200 to < 630 µm)	%
cS	coarse sand (630 to < 2000 µm)	%
SAND	total sand (63 to < 2000µm)	%
TEX_KA5	texture class by analysis according to KA5[*2]	-
SAND_CLASS	sand class by analysis according to KA5[*2]	-
SCEL_A	fragment content by analysis (< 2000 µm)	%
PH_H2O	pH-value in water extract (1:2.5)	pH
PH_CACL2	pH-value in $CaCl_2$ extract (1:2.5)	pH
EC	el. conduct. in water extract (1:2.5)	(µS/cm)
EC_5	el. conduct. in water extract (1:5)	(µS/cm)
C_T	total carbon	%
C_A	inorganic carbon	%
C_O	organic carbon	%
N_T	total nitrogen	%
C_N_RATIO	organic C/ N-ratio	-
S_T	total S	g/kg
SI_T	total Si	%
AL_T	total Al	%
NA_T	total Na	g/kg
K_T	total K	g/kg
K_DL	double lactate soluble K	g/kg
CA_T	total Ca	g/kg
MG_T	total Mg	g/kg
P_T	total P	g/kg
P_DL	double lactate soluble P	g/kg
TI_T	total Ti	g/kg
FE_T	total Fe	g/kg
MN_T	total Mn	g/kg
CR_T	total Cr	mg/kg
CU_T	total Cu	mg/kg
NI_T	total Ni	mg/kg
ZN_T	total Zn	mg/kg
PB_T	total Pb	mg/kg
BA_T	total Ba	mg/kg
SR_T	total Sr	mg/kg
ZR_T	total Zr	mg/kg
CL_we	chloride in water extract (1:1)	mg/l
FL_we	fluoride in water extract (1:1)	mg/l
BR_we	bromide in water extract (1:1)	mg/l
NO3_we	nitrate in water extract (1:1)	mg/l
NO2_we	nitrite in water extract (1:1)	mg/l

SO4_we	sulphate in water extract (1:1)	mg/l
HCO3_we	hydrogen carbonate in water extract (1:1)	mg/l
CA_we	Ca in water extract (1:1)	mg/l
MG_we	Mg in water extract (1:1)	mg/l
K_we	K in water extract (1:1)	mg/l
NA_we	Na in water extract (1:1)	mg/l
FE_we	Fe in water extract (1:1)	mg/l
ANIO_we	anions in water extract (1:1)	mg/l
CATIO_we	cations in water extract (1:1)	mg/l

*[1]:   United States Department of Agriculture, ed. (2000): Munsell Soil Color Charts. New York, Gretag Macbeth

*[2]:   Ad-hoc-Arbeitsgruppe Boden, ed. (2005): Bodenkundliche Kartieranleitung. 5th edn. Hannover: Schweizerbart'sche Verlagsbuchhandlung