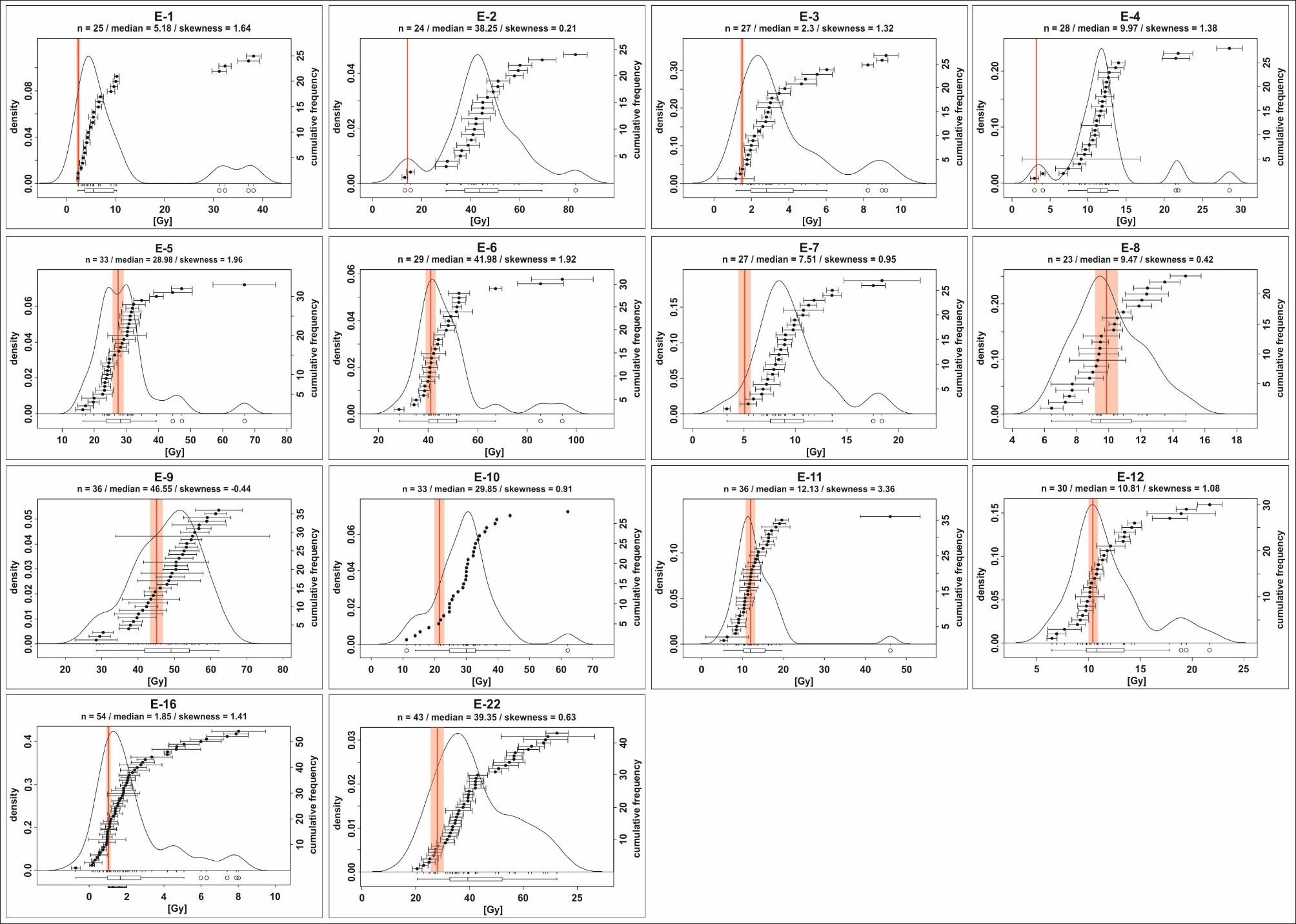
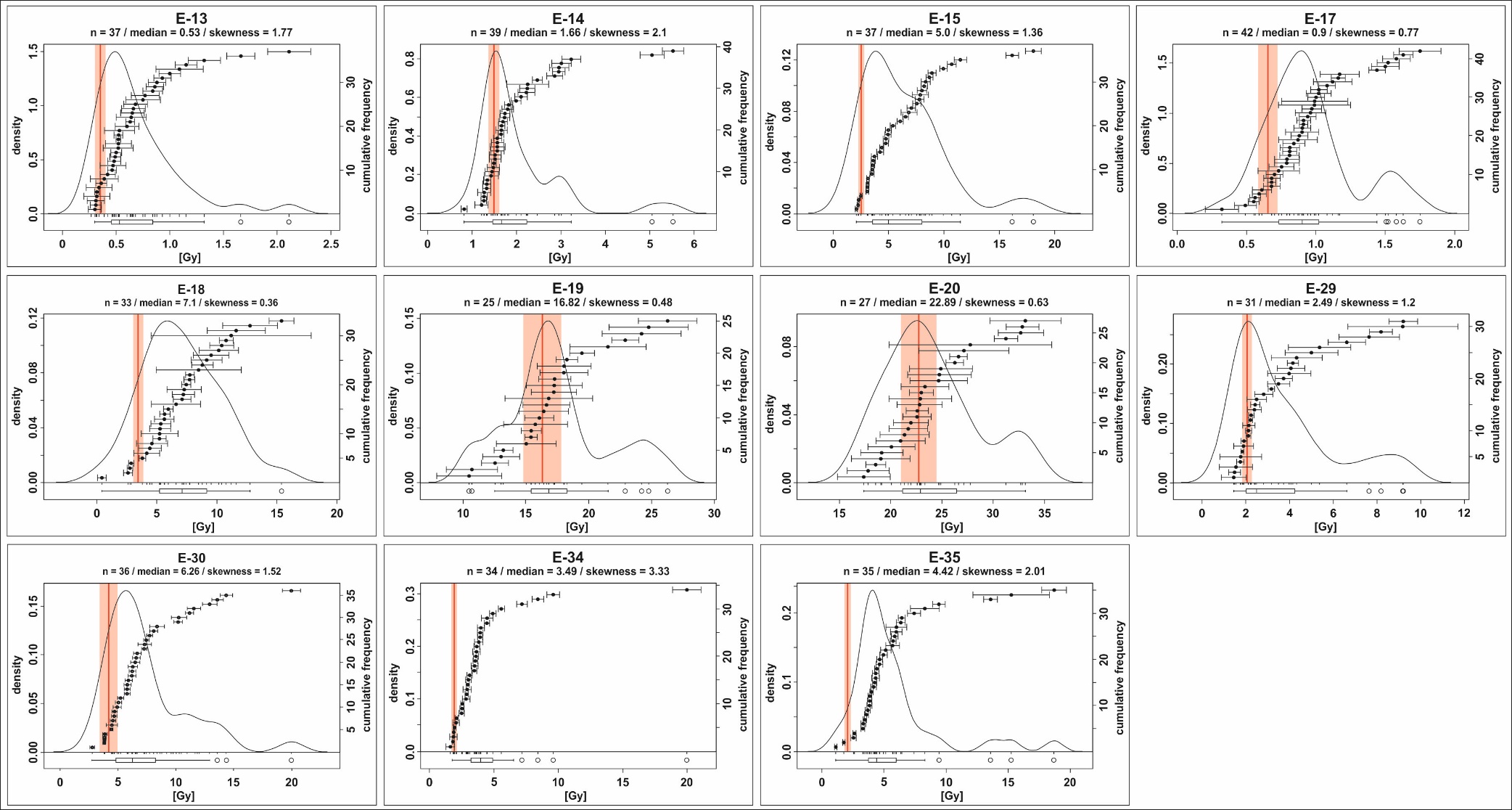
**Supporting Material Suchodoletz et al.:**

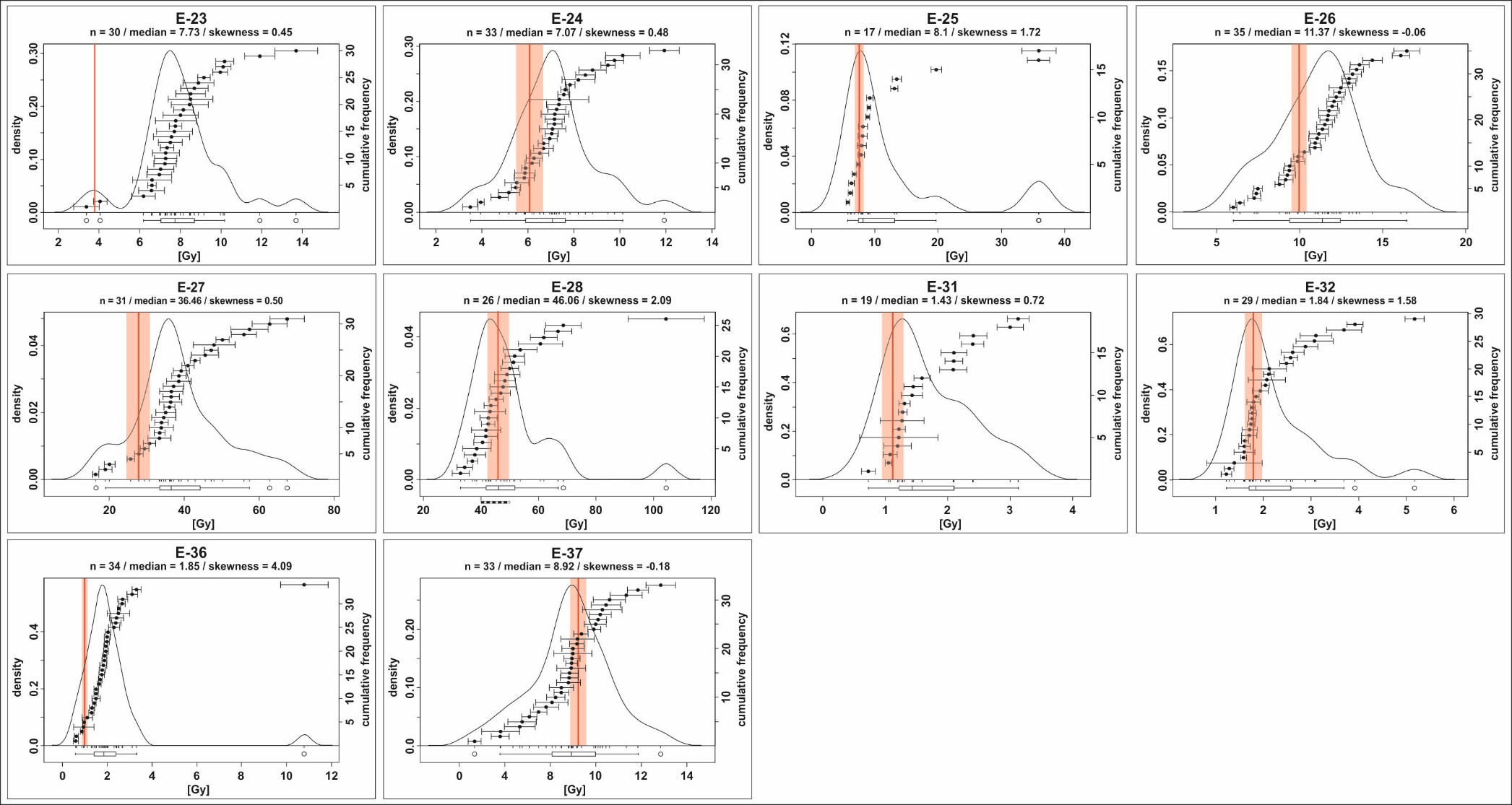
**Supporting Figure S-1:** Equivalent dose distributions of the quartz coarse grain luminescence measurements in Salsitz, and calculated De with error (shown in red).



**Supporting Figure S-2:** Equivalent dose distributions of the quartz coarse grain luminescence measurements in Trebnitz, and calculated De with error (shown in red).



**Supporting Figure S-3:** Equivalent dose distributions of the quartz coarse grain luminescence measurements in Meilitz, and calculated De with error (shown in red).



**Supporting text TE-1**

Our model of weighting factors of different types of archaeological sites (settlements: 1, burial sites: 0.5, stray finds: 0.25) focuses on the potential anthropogenic impact on the environment and not solely on agricultural activities:

Regular human activities next to settlements are a matter of case. For burial sites, we cannot assume per se that there was no anthropogenic influence on the environment in their vicinity. Burial sites were often located close to settlements, i.e. the repeated presence of humans is obvious - also simply by virtue of the function of these sites. Given the proximity to settlements, we cannot rule out the existence of pastures or arable land next to burial sites. Especially in the case of prehistoric burial mounds, an impact on the environment is to be expected because open spaces had to be created. In addition, the necessary stones and earth had to be extracted and transported from somewhere. In contrast, it is difficult to deduce an anthropogenic influence on the environment from single stray finds. These are objects whose archaeological context is unknown. They may be the remains of burials or settlements that have not yet been identified as such. However, they may also be objects that arrived at their location in the course of a brief human presence. For this reason, we have decided to assume a lesser impact on the environment here compared to settlements and burial sites.

**Supporting text TE-2**

(a) Since it is known that first mention and foundation of a settlement did usually not occur at the same time, we tried to work out the settlement phases by a temporal stratification of the place names. Place names follow certain time-specific trends during their formation, and hence possess relative chronological information. Slavs lived in the study area during the Early and High Middle Ages, where they founded and named settlements. Since the 10th century CE, however, a successive assimilation of the Slavic population by East Frankish-German settlers took place, and in the study area this process was completed by the end of the 13th century CE (Eichler and Walther 1984). Also the East Frankish-German settlers founded settlements that usually received German place names. Occasionally - as in the case of Greiz - German foundations were given Slavic names (Hengst 2010), and so-called mixed names testify to the common coexistence of both population groups. Generally, it was possible to distinguish Slavic and German place names, and 265 of the 738 settlements show Slavic name forms.

(b) If the first written mention predates the archaeological date, the first written mention is taken as the first evidence. For example, the first written mention of the village Raba is documented in 1154 CE, and archaeological finds date it to the High Middle Ages ending in 1250 CE. Hence, 1154 CE is taken as the first evidence. In case of an additional concrete dating for the archaeological period, this is the taken as the first evidence: If, for example, archaeological finds range from the 8th to the 11th centuries CE, 800 CE is taken as the first evidence. Or if archaeological finds date to the 12th/13th centuries CE, 1300 CE is taken as the first evidence.

References:

- Eichler, E. & H. Walther (1984): Untersuchungen zur Ortsnamenkunde und Sprach- und Siedlungsgeschichte des Gebietes zwischen mittlerer Saale und Weißer Elster. Deutsch-slawische Forschungen zur Namenkunde und Siedlungsgeschichte 35, Berlin.

- Hengst, K. (2010): Gera und nördliches Vogtland aus sprachhistorischer Sicht. In: Sachenbacher, P. & H.-J. Beier (Eds): Gera und das nördliche Vogtland im hohen Mittelalter. Beiträge zur Frühgeschichte und zum Mittelalter Ostthüringens 4, Beier & Beran, Langenweißbach, 17–34.

**Supporting table TA-1:** Analytical values of core Salsitz SC40

*(χ = mass-specific magnetic susceptibility, TOC = Total Organic Carbon; grey shading indicates soils/paleosols)*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Depth *[cm]*** | **χ**  ***[10-6 m3/kg]*** | **TOC *[%]*** | **CaCO3**  ***[%]*** | **Rb**  ***[mg/***  ***kg]*** | **Sr**  ***[mg/***  ***kg]*** | **P**  ***[mg/***  ***kg]*** | **Coarse sand**  ***[%]*** | **Middle sand *[%]*** | **Fine sand**  ***[%]*** | **Very fine sand *[%]*** | **Coarse silt *[%]*** | **Middle silt**  ***[%]*** | **Fine silt *[%]*** | **Coarse clay *[%]*** | **Middle clay**  ***[%]*** | **Fine clay**  ***[%]*** |
| 15-20 | 0.43 | 2.53 | 1.54 | 119 | 114 | 2522 | 0.7 | 5.1 | 6.3 | 10.1 | 18.4 | 16.1 | 11.9 | 9.5 | 8.9 | 11.8 |
| 20-25 | 0.56 | 2.39 | 1.12 | 117 | 112 | 2435 | 0.8 | 4.8 | 6.1 | 10.0 | 18.6 | 15.1 | 11.6 | 8.4 | 8.1 | 15.0 |
| 25-30 | 0.42 | 2.07 | 0.57 | 121 | 113 | 2015 | 0.6 | 5.0 | 6.1 | 10.3 | 16.6 | 16.5 | 12.3 | 9.4 | 9.2 | 11.7 |
| 30-35 | 0.34 | 1.95 | 0.40 | 117 | 108 | 1702 | 0.5 | 4.9 | 6.3 | 10.3 | 17.0 | 16.4 | 11.9 | 9.3 | 7.7 | 13.6 |
| 35-40 | 0.34 | 0.99 | 0.82 | 114 | 108 | 1385 | 0.4 | 4.9 | 6.3 | 10.3 | 16.4 | 16.5 | 12.3 | 8.8 | 7.6 | 14.0 |
| 40-45 | 0.31 | 0.91 | 0.76 | 114 | 109 | 1317 | 0.4 | 4.8 | 6.5 | 10.5 | 17.8 | 16.4 | 11.1 | 8.8 | 7.9 | 14.4 |
| 45-50 | 0.23 | 0.61 | 0.51 | 118 | 108 | 1136 | 0.5 | 4.8 | 7.0 | 11.4 | 17.4 | 16.0 | 11.4 | 8.3 | 7.4 | 13.9 |
| 50-55 | 0.17 | 0.50 | 0.17 | 118 | 106 | 1012 | 0.2 | 4.9 | 7.7 | 12.1 | 16.1 | 14.6 | 11.6 | 8.7 | 8.4 | 13.6 |
| 55-60 | 0.14 | 0.47 | 0.07 | 122 | 104 | 962 | 0.1 | 5.5 | 9.1 | 14.0 | 15.7 | 13.5 | 10.5 | 8.0 | 7.4 | 13.7 |
| 60-65 | 0.13 | 0.37 | 0.13 | 120 | 99 | 896 | 0.1 | 6.2 | 10.7 | 15.2 | 15.6 | 12.2 | 10.4 | 8.0 | 6.1 | 13.5 |
| 65-70 | 0.10 | 0.27 | 0.57 | 118 | 97 | 872 | 0.1 | 6.0 | 11.0 | 17.1 | 15.6 | 11.5 | 8.9 | 7.3 | 6.3 | 12.2 |
| 70-75 | 0.09 | 0.26 | 0.62 | 113 | 93 | 837 | 0.5 | 6.4 | 10.2 | 15.9 | 17.2 | 12.2 | 9.1 | 7.1 | 6.0 | 12.2 |
| 75-79 | 0.10 | 0.28 | 0.65 | 116 | 96 | 846 | 0.2 | 5.3 | 8.3 | 14.3 | 17.4 | 13.3 | 10.2 | 7.6 | 6.5 | 13.0 |
| 79-84 | 0.09 | 0.32 | 0.36 | 117 | 98 | 844 | 0.3 | 4.6 | 6.6 | 12.2 | 17.8 | 15.8 | 11.3 | 7.9 | 7.8 | 12.5 |
| 84-89 | 0.11 | 0.38 | 0.36 | 118 | 99 | 830 | 0.2 | 2.2 | 3.2 | 8.5 | 18.6 | 18.3 | 14.0 | 9.9 | 7.7 | 16.5 |
| 89-94 | 0.10 | 0.28 | 0.60 | 115 | 96 | 814 | 0.0 | 3.5 | 6.2 | 12.5 | 18.9 | 15.6 | 11.6 | 8.8 | 6.2 | 15.2 |
| 94-99 | 0.10 | 0.32 | 0.57 | 116 | 98 | 789 | 0.2 | 2.5 | 3.9 | 10.3 | 18.2 | 17.1 | 12.9 | 9.3 | 7.1 | 16.0 |
| 99-104 | 0.10 | 0.36 | 0.33 | 118 | 98 | 805 | 0.1 | 2.1 | 2.8 | 7.8 | 18.8 | 18.5 | 14.2 | 9.9 | 7.4 | 17.3 |
| 104-109 | 0.09 | 0.39 | 0.29 | 120 | 99 | 798 | 0.1 | 2.4 | 2.0 | 5.5 | 16.6 | 20.0 | 15.8 | 10.9 | 7.9 | 18.1 |
| 109-114 | 0.09 | 0.39 | 0.28 | 123 | 96 | 786 | 0.5 | 4.5 | 2.9 | 5.9 | 15.1 | 19.1 | 15.5 | 10.8 | 7.2 | 18.0 |
| 114-119 | 0.09 | 0.31 | 0.56 | 123 | 93 | 786 | 0.6 | 7.0 | 3.9 | 7.3 | 14.2 | 16.8 | 14.6 | 10.2 | 6.9 | 16.6 |
| 119-124 | 0.08 | 0.21 | 0.61 | 115 | 86 | 783 | 0.9 | 11.4 | 7.1 | 9.4 | 16.1 | 14.9 | 11.8 | 8.7 | 6.0 | 13.3 |
| 124-129 | 0.08 | 0.18 | 0.52 | 114 | 86 | 790 | 1.3 | 9.3 | 8.8 | 12.5 | 16.6 | 14.6 | 9.8 | 7.3 | 6.4 | 11.4 |
| 129-134 | 0.08 | 0.19 | 0.58 | 113 | 88 | 800 | 0.2 | 5.8 | 6.6 | 10.3 | 20.1 | 17.5 | 11.4 | 8.6 | 6.8 | 12.0 |
| 134-139 | 0.08 | 0.23 | 0.49 | 116 | 91 | 834 | 0.8 | 4.8 | 4.8 | 8.5 | 18.6 | 19.1 | 12.5 | 8.8 | 7.0 | 13.4 |
| 139-144 | 0.09 | 0.25 | 0.42 | 122 | 95 | 855 | 0.3 | 4.8 | 4.3 | 7.0 | 18.0 | 19.8 | 13.3 | 9.7 | 7.9 | 14.2 |
| 144-149 | 0.09 | 0.26 | 0.59 | 122 | 92 | 905 | 1.3 | 6.0 | 4.8 | 6.4 | 15.9 | 18.8 | 14.6 | 9.9 | 7.5 | 14.3 |
| 149-154 | 0.09 | 0.28 | 0.65 | 127 | 95 | 893 | 2.0 | 6.0 | 4.3 | 5.6 | 14.4 | 18.7 | 15.5 | 10.4 | 7.1 | 15.2 |
| 154-159 | 0.10 | 0.34 | 0.47 | 131 | 96 | 892 | 2.4 | 6.0 | 2.7 | 3.7 | 13.6 | 20.7 | 17.3 | 10.7 | 8.0 | 14.8 |
| 159-164 | 0.09 | 0.34 | 0.22 | 139 | 100 | 809 | 1.1 | 4.2 | 1.7 | 2.6 | 12.3 | 20.0 | 18.4 | 12.4 | 8.7 | 18.5 |
| 164-169 | 0.09 | 0.31 | 0.00 | 146 | 100 | 752 | 1.7 | 9.4 | 3.0 | 3.6 | 9.9 | 17.6 | 18.2 | 11.7 | 8.5 | 16.0 |
| 169-174 | 0.09 | 0.23 | 0.50 | 147 | 95 | 1285 | 3.9 | 8.8 | 4.3 | 5.2 | 9.9 | 15.6 | 16.9 | 11.9 | 8.7 | 14.7 |
| 174-179 | 0.10 | 0.24 | 0.38 | 146 | 93 | 1193 | 0.8 | 8.1 | 4.8 | 5.6 | 9.5 | 14.9 | 17.2 | 13.0 | 9.7 | 15.7 |
| 179-184 | 0.11 | 0.22 | 0.00 | 142 | 90 | 999 | 0.7 | 9.1 | 5.6 | 6.5 | 9.6 | 14.6 | 16.0 | 12.3 | 8.6 | 16.4 |
| 184-189 | 0.10 | 0.15 | 0.15 | 143 | 91 | 884 | 0.9 | 9.9 | 6.0 | 6.8 | 10.1 | 14.6 | 15.9 | 11.9 | 8.4 | 14.7 |
| 189-194 | 0.10 | 0.12 | 0.32 | 141 | 89 | 731 | 0.3 | 9.2 | 6.1 | 7.0 | 9.6 | 13.6 | 15.7 | 12.3 | 8.4 | 17.2 |
| 194-199 | 0.11 | 0.12 | 0.11 | 140 | 88 | 737 | 0.2 | 9.7 | 6.6 | 7.2 | 10.3 | 13.5 | 15.1 | 11.5 | 8.0 | 17.6 |
| 199-204 | 0.11 | 0.09 | 0.31 | 140 | 88 | 637 | 0.4 | 10.2 | 7.1 | 7.9 | 10.4 | 13.2 | 13.8 | 10.9 | 8.8 | 17.0 |
| 204-209 | 0.11 | 0.08 | 0.37 | 137 | 86 | 689 | 0.3 | 11.0 | 7.4 | 8.1 | 10.8 | 13.7 | 13.1 | 10.0 | 8.4 | 16.4 |
| 209-214 | 0.12 | 0.09 | 0.35 | 137 | 86 | 731 | 0.2 | 10.3 | 7.0 | 7.8 | 10.5 | 13.4 | 13.6 | 10.2 | 8.5 | 17.8 |
| 215-220 | 0.10 | 0.09 | 0.32 | 135 | 85 | 711 | 0.4 | 11.1 | 7.4 | 8.5 | 11.5 | 12.8 | 12.8 | 9.8 | 7.7 | 17.4 |
| 220-225 | 0.11 | 0.08 | 0.34 | 133 | 85 | 733 | 0.3 | 10.7 | 7.5 | 9.3 | 11.3 | 13.3 | 11.6 | 9.5 | 7.4 | 17.9 |
| 225-230 | 0.10 | 0.05 | 0.80 | 135 | 86 | 803 | 0.3 | 10.5 | 7.3 | 9.6 | 11.5 | 13.2 | 11.3 | 9.0 | 8.0 | 17.1 |
| 230-235 | 0.12 | 0.06 | 0.71 | 134 | 86 | 802 | 0.5 | 9.8 | 6.3 | 8.3 | 11.0 | 12.9 | 12.6 | 10.0 | 7.7 | 19.8 |
| 235-240 | 0.12 | 0.07 | 0.64 | 133 | 86 | 793 | 0.5 | 10.4 | 6.8 | 9.1 | 12.3 | 13.0 | 10.9 | 9.5 | 6.4 | 20.7 |
| 240-245 | 0.10 | 0.06 | 0.55 | 131 | 85 | 922 | 0.6 | 10.7 | 6.5 | 8.5 | 11.9 | 12.6 | 11.7 | 9.5 | 7.3 | 19.8 |
| 245-250 | 0.09 | 0.04 | 0.64 | 131 | 84 | 767 | 2.1 | 12.2 | 6.3 | 8.5 | 11.2 | 13.1 | 11.6 | 8.7 | 6.8 | 18.5 |
| 250-255 | 0.09 | 0.02 | 0.64 | 117 | 71 | 714 | 8.4 | 32.2 | 4.5 | 5.6 | 7.4 | 8.2 | 7.5 | 5.8 | 5.2 | 14.3 |
| 255-260 | 0.09 | 0.05 | 0.57 | 116 | 70 | 1367 | 13.0 | 25.6 | 5.0 | 7.0 | 6.2 | 6.8 | 7.2 | 6.4 | 5.7 | 16.4 |
| 260-265 | 0.09 | 0.04 | 0.60 | 129 | 83 | 1144 | 2.2 | 10.6 | 8.0 | 12.5 | 11.1 | 10.9 | 10.2 | 8.3 | 6.9 | 17.8 |
| 265-270 | 0.09 | 0.04 | 0.53 | 126 | 83 | 965 | 1.6 | 7.3 | 5.9 | 12.9 | 14.8 | 12.8 | 10.4 | 8.3 | 6.1 | 17.9 |
| 270-275 | 0.09 | 0.032 | 0.53 | 124 | 84 | 1015 | 0.5 | 6.0 | 5.7 | 13.8 | 15.6 | 12.7 | 9.9 | 8.0 | 6.4 | 18.1 |

**Supporting table TA-2:** Analytical values of core Salsitz SC57

*(χ = mass-specific magnetic susceptibility, TOC = Total Organic Carbon; grey shading indicates soils/paleosols)*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Depth *[cm]*** | **χ**  ***[10-6 m3/kg]*** | **TOC**  ***[%]*** | **CaCO3**  ***[%]*** | **Rb**  ***[mg/***  ***kg]*** | **Sr**  ***[mg/***  ***kg]*** | **P**  ***[mg/***  ***kg]*** | **Coarse sand**  ***[%]*** | **Middle sand**  ***[%]*** | **Fine sand**  ***[%]*** | **Very fine sand**  ***[%]*** | **Coarse silt**  ***[%]*** | **Middle silt**  ***[%]*** | **Fine silt *[%]*** | **Coarse clay**  ***[%]*** | **Middle clay**  ***[%]*** | **Fine clay**  ***[%]*** |
| 15-20 | 0.79 | 2.19 | 0.40 | 111 | 112 | 2764 | 2.4 | 4.7 | 4 | 7.5 | 18.5 | 17.8 | 12.3 | 9.6 | 8.3 | 14.7 |
| 20-25 | 1.00 | 2.20 | 0.46 | 115 | 120 | 2861 | 1.5 | 5 | 4 | 6.8 | 18.7 | 17.9 | 12 | 10 | 9.3 | 13.8 |
| 25-30 | 1.52 | 1.71 | 0.38 | 115 | 117 | 2505 | 1.1 | 4.6 | 4 | 7 | 20.1 | 17.9 | 11.9 | 9.5 | 8.5 | 14.3 |
| 30-35 | 0.66 | 1.20 | 0.28 | 120 | 116 | 1765 | 1.1 | 5.2 | 4.2 | 7.5 | 19.1 | 18.4 | 12 | 9.5 | 7.9 | 14.3 |
| 35-40 | 0.74 | 0.91 | 0.28 | 117 | 109 | 1217 | 1.1 | 4.1 | 3.8 | 7.3 | 19.3 | 17.9 | 12.2 | 9.4 | 8.2 | 15.8 |
| 40-45 | 0.23 | 0.69 | 0.13 | 126 | 111 | 1080 | 0.4 | 2.4 | 3.1 | 6.8 | 17.8 | 18.2 | 14.2 | 10.9 | 9.1 | 16.9 |
| 45-50 | 0.15 | 0.53 | 0.05 | 131 | 115 | 1016 | 0.1 | 1.5 | 2.6 | 6.5 | 16.4 | 18.2 | 14.9 | 11.3 | 8.8 | 18.6 |
| 50-55 | 0.13 | 0.47 | 0.06 | 129 | 114 | 976 | 0.4 | 1.6 | 2.7 | 6.9 | 18.6 | 18.3 | 13.7 | 11.3 | 8.6 | 17 |
| 55-60 | 0.12 | 0.49 | 0.05 | 118 | 104 | 887 | 0.1 | 1 | 1.9 | 5.9 | 18.3 | 19.2 | 14.9 | 11.5 | 8 | 18.4 |
| 60-65 | 0.12 | 0.50 | 0.07 | 126 | 111 | 859 | 0.2 | 1.2 | 1.4 | 2.7 | 17.6 | 21.4 | 16.5 | 12 | 9 | 17.9 |
| 65-70 | 0.11 | 0.48 | 0.11 | 126 | 108 | 881 | 0.6 | 0.9 | 1 | 3.6 | 17.7 | 21.3 | 16.2 | 12 | 8.2 | 18.1 |
| 70-75 | 0.11 | 0.43 | 0.06 | 123 | 102 | 813 | 0.4 | 0.8 | 0.8 | 2.9 | 16.8 | 22.2 | 17.1 | 12.4 | 8.2 | 18.3 |
| 75-80 | 0.12 | 0.38 | 0.04 | 126 | 102 | 814 | 0.1 | 0.6 | 0.8 | 2.9 | 16.2 | 22.9 | 17.3 | 12.4 | 9 | 17.2 |
| 80-85 | 0.13 | 0.34 | 0.05 | 130 | 103 | 809 | 0 | 0.4 | 0.6 | 2.2 | 16 | 23.5 | 17.2 | 12.2 | 9.9 | 17.7 |
| 85-90 | 0.13 | 0.29 | 0.03 | 133 | 102 | 764 | 0 | 0.3 | 0.5 | 2.2 | 15.2 | 22.4 | 17 | 12.1 | 9.1 | 21 |
| 90-95 | 0.14 | 0.27 | 0.03 | 132 | 100 | 764 | 0 | 0.5 | 0.7 | 3.1 | 15.2 | 21.4 | 16.2 | 12.1 | 8 | 22.6 |
| 95-100 | 0.14 | 0.27 | 0.03 | 131 | 97 | 804 | 0.1 | 0.9 | 2.2 | 3.3 | 15.1 | 21.1 | 15.4 | 11.9 | 8.9 | 20.4 |
| 100-105 | 0.14 | 0.32 | 0.02 | 134 | 97 | 876 | 0.1 | 0.7 | 1.3 | 4.5 | 15 | 20.5 | 15.9 | 11.6 | 9.3 | 19.9 |
| 105-110 | 0.14 | 0.32 | 0.04 | 136 | 98 | 834 | 0 | 1 | 1.8 | 6.1 | 14.1 | 19.6 | 15.9 | 12.6 | 8.2 | 19.6 |
| 110-115 | 0.14 | 0.31 | 0.01 | 136 | 96 | 710 | 0.2 | 1.5 | 2.4 | 6.6 | 14.4 | 18.9 | 15.3 | 12.3 | 10.3 | 17 |
| 115-120 | 0.17 | 0.28 | 0.03 | 142 | 97 | 666 | 0.4 | 1.5 | 1.8 | 5.1 | 13.7 | 19.9 | 16.7 | 12.4 | 9.6 | 18.7 |
| 120-125 | 0.17 | 0.24 | 0.06 | 143 | 95 | 659 | 0.4 | 2 | 1.6 | 4.3 | 12.6 | 18.5 | 17.6 | 13.3 | 11.6 | 17.6 |
| 125-130 | 0.18 | 0.24 | 0.07 | 149 | 96 | 679 | 0.3 | 2.3 | 1.7 | 4.4 | 11.5 | 18.1 | 17.5 | 13.6 | 11.5 | 18.9 |
| 130-135 | 0.21 | 0.23 | 0.03 | 154 | 94 | 641 | 0.2 | 2.5 | 1.7 | 4.2 | 10.3 | 17.7 | 17.3 | 13.5 | 9.1 | 23.1 |
| 135-140 | 0.21 | 0.23 | 0.03 | 152 | 94 | 614 | 0.4 | 2.4 | 1.5 | 3.7 | 10.5 | 17.3 | 17.8 | 13.9 | 9.4 | 22.8 |
| 140-145 | 0.23 | 0.22 | 0.03 | 152 | 93 | 615 | 0.2 | 2.3 | 1.5 | 4.1 | 11 | 16.8 | 17.1 | 13.4 | 10.8 | 22.5 |
| 145-150 | 0.23 | 0.26 | 0.03 | 153 | 93 | 635 | 0.2 | 2.6 | 1.5 | 3.7 | 12 | 18.2 | 16.8 | 12.7 | 10 | 21.8 |
| 150-155 | 0.23 | 0.28 | 0.02 | 150 | 91 | 535 | 0.3 | 2.8 | 1.8 | 4.6 | 11 | 16.7 | 16.2 | 12.4 | 10.3 | 23.8 |
| 155-160 | 0.24 | 0.28 | 0.02 | 152 | 91 | 519 | 0.5 | 3.8 | 1.8 | 4.4 | 10.3 | 16.5 | 15.7 | 12.9 | 10.4 | 23.2 |
| 160-165 | 0.23 | 0.28 | 0.03 | 141 | 87 | 489 | 0.9 | 4.5 | 2.1 | 4.5 | 10.3 | 16.3 | 15.6 | 12.1 | 10.5 | 23.1 |
| 165-170 | 0.20 | 0.26 | 0.05 | 144 | 89 | 493 | 0.7 | 5.6 | 2.7 | 5.6 | 11.9 | 16.4 | 14.8 | 11.1 | 10.4 | 20.4 |
| 170-175 | 0.17 | 0.24 | 0.02 | 139 | 88 | 527 | 1.5 | 6.7 | 2.9 | 5.8 | 12.6 | 16.8 | 13.5 | 10 | 10.1 | 19.5 |
| 175-180 | 0.15 | 0.22 | 0.01 | 134 | 88 | 562 | 1.4 | 8.5 | 3.7 | 7.7 | 13.4 | 14.7 | 12.5 | 9.7 | 9.4 | 18.4 |
| 180-185 | 0.15 | 0.18 | 0.02 | 129 | 87 | 534 | 1.9 | 9.8 | 4.2 | 8.4 | 13.6 | 14.3 | 11.6 | 9.3 | 7.6 | 18.6 |

**Supporting table TA-3:** Analytical values of core Trebnitz TC11

*(χ = mass-specific magnetic susceptibility, TOC = Total Organic Carbon; grey shading indicates soils/paleosols)*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Depth *[cm]*** | **χ**  ***[10-6 m3/kg]*** | **TOC *[%]*** | **CaCO3**  ***[%]*** | **Rb**  ***[mg/***  ***kg]*** | **Sr**  ***[mg/***  ***kg]*** | **P**  ***[mg/***  ***kg]*** | **Coarse sand**  ***[%]*** | **Middle sand *[%]*** | **Fine sand**  ***[%]*** | **Very fine sand**  ***[%]*** | **Coarse silt**  ***[%]*** | **Middle silt**  ***[%]*** | **Fine silt**  ***[%]*** | **Coarse clay**  ***[%]*** | **Middle clay**  ***[%]*** | **Fine clay**  ***[%]*** |
| 10-15 | 0.31 | 2.41 | 0.0 | 115 | 135 | 1878 | 0.42 | 3.53 | 1.80 | 2.36 | 15.50 | 24.60 | 11.80 | 7.00 | 7.30 | 25.30 |
| 15-20 | 0.33 | 2.75 | 0.1 | 111 | 134 | 1771 | 0.63 | 5.71 | 3.20 | 3.52 | 18.40 | 24.40 | 12.10 | 8.40 | 6.50 | 16.40 |
| 20-25 | 0.29 | 2.22 | 0.1 | 112 | 130 | 1664 | 0.36 | 5.89 | 3.20 | 3.39 | 18.50 | 23.60 | 11.60 | 8.10 | 7.80 | 17.20 |
| 27-32 | 0.27 | 1.64 | 0.1 | 119 | 125 | 1355 | 0.74 | 6.60 | 3.43 | 3.83 | 18.80 | 23.20 | 11.50 | 8.50 | 8.20 | 13.40 |
| 34-39 | 0.26 | 1.25 | 0.2 | 109 | 107 | 1064 | 0.77 | 7.10 | 3.77 | 4.11 | 19.30 | 22.80 | 11.50 | 7.30 | 7.30 | 15.60 |
| 41-46 | 0.19 | 0.92 | 0.0 | 114 | 105 | 1054 | 0.35 | 8.27 | 4.59 | 4.19 | 18.00 | 21.40 | 11.30 | 7.40 | 7.30 | 16.80 |
| 50-55 | 0.15 | 0.58 | 0.0 | 120 | 101 | 952 | 1.26 | 10.17 | 6.46 | 5.25 | 18.10 | 19.20 | 10.30 | 7.10 | 6.00 | 15.60 |
| 57-62 | 0.16 | 0.55 | 0.2 | 117 | 96 | 963 | 1.00 | 11.80 | 6.70 | 4.66 | 19.20 | 18.20 | 9.30 | 7.10 | 6.40 | 14.40 |
| 67-72 | 0.29 | 0.57 | 0.0 | 114 | 90 | 938 | 0.90 | 13.22 | 6.07 | 5.05 | 19.10 | 18.20 | 9.00 | 6.90 | 5.80 | 15.10 |
| 73-77 | 0.16 | 0.61 | 0.1 | 122 | 93 | 978 | 1.14 | 12.72 | 5.87 | 4.84 | 17.00 | 17.10 | 10.20 | 7.10 | 6.40 | 17.20 |
| 78-83 | 0.15 | 0.67 | 0.0 | 127 | 92 | 1003 | 0.94 | 13.14 | 5.93 | 4.99 | 17.50 | 16.40 | 9.10 | 7.70 | 6.60 | 17.50 |
| 84-89 | 0.13 | 0.64 | 0.0 | 120 | 84 | 918 | 0.65 | 15.53 | 6.93 | 5.67 | 16.00 | 15.70 | 8.90 | 7.60 | 6.60 | 15.40 |
| 90-95 | 0.11 | 0.60 | 0.0 | 113 | 78 | 868 | 1.39 | 17.88 | 7.33 | 6.07 | 16.10 | 13.90 | 7.70 | 6.70 | 5.20 | 16.70 |
| 96-101 | 0.09 | 0.53 | 0.0 | 121 | 83 | 940 | 1.18 | 19.65 | 7.98 | 6.56 | 16.40 | 12.70 | 7.40 | 5.90 | 5.40 | 15.80 |
| 102-107 | 0.10 | 0.49 | 0.1 | 110 | 72 | 963 | 6.00 | 25.25 | 7.53 | 5.12 | 11.20 | 10.00 | 6.70 | 5.60 | 6.40 | 15.30 |
| 111-116 | 0.14 | 0.52 | 0.0 | 126 | 88 | 970 | 0.78 | 8.87 | 3.91 | 4.61 | 16.80 | 17.60 | 9.70 | 7.40 | 8.50 | 20.90 |
| 117-122 | 0.15 | 0.57 | 0.0 | 128 | 89 | 925 | 0.42 | 5.52 | 2.38 | 3.68 | 16.80 | 19.00 | 11.70 | 7.80 | 7.20 | 24.40 |
| 123-128 | 0.15 | 0.52 | 0.1 | 117 | 81 | 804 | 0.54 | 7.68 | 2.86 | 3.37 | 15.90 | 19.10 | 10.80 | 7.70 | 8.30 | 23.10 |
| 129-134 | 0.14 | 0.50 | 0.0 | 127 | 87 | 941 | 0.88 | 9.79 | 3.47 | 3.07 | 15.30 | 18.20 | 11.00 | 7.30 | 7.60 | 22.90 |
| 137-142 | 0.12 | 0.47 | 0.1 | 116 | 78 | 957 | 1.93 | 15.19 | 5.02 | 3.51 | 12.80 | 15.50 | 9.30 | 6.90 | 7.70 | 21.50 |
| 142-147 | 0.11 | 0.53 | 1.1 | 113 | 75 | 1127 | 2.75 | 16.53 | 5.41 | 4.14 | 11.20 | 13.10 | 9.70 | 7.40 | 8.60 | 20.50 |
| 147-152 | 0.09 | 0.40 | 6.0 | 102 | 72 | 947 | 4.30 | 20.85 | 6.21 | 4.40 | 11.90 | 13.20 | 7.90 | 6.10 | 6.20 | 18.10 |
| 152-157 | 0.09 | 0.44 | 10.8 | 97 | 75 | 995 | 5.69 | 24.11 | 6.08 | 4.24 | 9.20 | 11.70 | 8.80 | 6.50 | 7.50 | 15.80 |
| 157-162 | 0.08 | 0.39 | 14.6 | 89 | 73 | 830 | 4.95 | 28.61 | 6.97 | 4.83 | 7.80 | 11.10 | 8.50 | 6.70 | 6.30 | 13.70 |
| 162-167 | 0.09 | 0.30 | 15.1 | 93 | 74 | 860 | 4.06 | 34.76 | 5.51 | 3.49 | 5.90 | 9.40 | 8.20 | 6.20 | 6.40 | 15.50 |
| 167-173 | 0.16 | 0.70 | 0.8 | 150 | 92 | 996 | 0.45 | 10.24 | 3.31 | 1.51 | 7.30 | 16.60 | 16.50 | 10.50 | 8.00 | 25.50 |
| 173-178 | 0.20 | 0.88 | 0.2 | 165 | 97 | 1056 | 0.19 | 3.39 | 1.16 | 0.66 | 5.70 | 17.90 | 20.50 | 12.30 | 9.10 | 29.00 |
| 178-184 | 0.21 | 1.02 | 0.1 | 170 | 99 | 1088 | 0.08 | 1.21 | 0.50 | 0.66 | 5.50 | 18.50 | 22.40 | 13.20 | 9.80 | 27.90 |
| 184-192 | 0.18 | 1.15 | 0.1 | 180 | 100 | 1094 | 0.06 | 0.45 | 0.21 | 0.42 | 5.40 | 17.90 | 23.30 | 13.90 | 9.50 | 28.70 |
| 192-201 | 0.14 | 1.15 | 0.0 | 185 | 102 | 891 | 0.01 | 0.13 | 0.07 | 0.31 | 5.30 | 18.00 | 24.90 | 14.50 | 9.60 | 27.10 |
| 201-210 | 0.12 | 0.79 | 0.0 | 178 | 98 | 730 | 0.01 | 0.09 | 0.04 | 0.38 | 6.10 | 18.60 | 25.20 | 14.50 | 8.70 | 26.40 |
| 210-218 | 0.12 | 0.55 | 0.0 | 178 | 97 | 717 | 0.01 | 0.06 | 0.02 | 0.49 | 5.50 | 18.20 | 26.00 | 14.70 | 8.90 | 25.90 |
| 218-224 | 0.12 | 0.41 | 0.0 | 176 | 97 | 740 | 0.01 | 0.05 | 0.03 | 0.24 | 4.70 | 17.50 | 26.80 | 14.60 | 8.40 | 27.40 |
| 224-230 | 0.19 | 0.39 | 0.0 | 175 | 97 | 657 | 0.17 | 0.09 | 0.04 | 0.31 | 5.80 | 17.90 | 27.10 | 14.50 | 8.40 | 25.40 |
| 230-236 | 0.12 | 0.43 | 0.1 | 178 | 96 | 926 | 0.05 | 0.14 | 0.07 | 0.34 | 5.00 | 16.10 | 27.40 | 15.10 | 8.90 | 26.90 |
| 236-242 | 0.12 | 0.51 | 0.0 | 180 | 96 | 847 | 0.12 | 0.31 | 0.16 | 0.49 | 4.20 | 16.20 | 26.70 | 14.90 | 9.30 | 27.40 |
| 242-248 | 0.12 | 0.51 | 0.0 | 169 | 88 | 816 | 0.29 | 0.34 | 0.08 | 0.22 | 3.30 | 14.30 | 26.30 | 15.70 | 9.50 | 29.70 |
| 248-254 | 0.13 | 0.35 | 0.1 | 181 | 94 | 1018 | 0.47 | 0.34 | 0.08 | 0.18 | 3.20 | 13.20 | 26.70 | 15.70 | 9.00 | 31.00 |
| 254-260 | 0.13 | 0.31 | 0.0 | 176 | 91 | 1166 | 0.49 | 0.53 | 0.10 | 0.20 | 3.40 | 13.30 | 25.30 | 15.40 | 9.50 | 31.80 |
| 260-266 | 0.13 | 0.32 | 0.0 | 176 | 92 | 1179 | 0.80 | 0.85 | 0.17 | 0.35 | 3.40 | 13.10 | 24.80 | 15.10 | 9.80 | 31.60 |
| 266-272 | 0.12 | 0.26 | 0.0 | 173 | 92 | 871 | 1.42 | 1.42 | 0.27 | 0.63 | 4.90 | 15.50 | 24.10 | 14.30 | 8.60 | 28.40 |
| 272-278 | 0.11 | 0.24 | 0.0 | 166 | 92 | 773 | 1.91 | 2.19 | 0.38 | 0.90 | 6.60 | 17.10 | 22.60 | 13.50 | 8.00 | 26.60 |
| 278-284 | 0.10 | 0.20 | 0.0 | 156 | 89 | 704 | 3.13 | 2.92 | 0.52 | 1.13 | 8.20 | 18.10 | 21.10 | 12.40 | 7.30 | 24.70 |

**Supporting table TA-4:** Analytical values of core Trebnitz TC32

*(χ = mass-specific magnetic susceptibility, TOC = Total Organic Carbon; grey shading indicates soils/paleosols)*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Depth *[cm]*** | **χ**  ***[10-6 m3/kg]*** | **TOC *[%]*** | **CaCO3**  ***[%]*** | **Rb**  ***[mg/***  ***kg]*** | **Sr**  ***[mg/***  ***kg]*** | **P**  ***[mg/***  ***kg]*** | **Coarse sand**  ***[%]*** | **Middle sand**  ***[%]*** | **Fine sand**  ***[%]*** | **Very fine sand**  ***[%]*** | **Coarse silt**  ***[%]*** | **Middle silt**  ***[%]*** | **Fine silt**  ***[%]*** | **Coarse clay**  ***[%]*** | **Middle clay**  ***[%]*** | **Fine clay**  ***[%]*** |
| 0-6 | 0.30 | 2.22 | 0.06 | 124 | 110 | 1359 | 0.3 | 5.5 | 4.8 | 7.2 | 17.2 | 19.0 | 13.3 | 9.5 | 8.5 | 14.3 |
| 6-12 | 0.38 | 1.98 | 0.05 | 122 | 108 | 1313 | 0.2 | 5.3 | 4.7 | 7.3 | 17.3 | 19.0 | 13.2 | 9.2 | 8.0 | 15.1 |
| 12-18 | 0.37 | 1.41 | 0.05 | 124 | 111 | 1237 | 0.4 | 4.9 | 4.3 | 7.1 | 17.1 | 18.9 | 13.3 | 9.3 | 7.9 | 15.6 |
| 18-25 | 0.43 | 1.41 | 0.04 | 124 | 112 | 1228 | 0.6 | 4.7 | 4.1 | 7.0 | 17.0 | 19.7 | 12.5 | 9.2 | 7.8 | 16.7 |
| 25-31 | 0.97 | 2.12 | 0.28 | 130 | 130 | 1509 | 0.2 | 2.5 | 2.3 | 4.4 | 13.6 | 21.9 | 16.8 | 10.9 | 8.4 | 18.2 |
| 31-36 | 1.21 | 1.94 | 0.65 | 129 | 126 | 1219 | 0.3 | 2.1 | 1.9 | 3.8 | 13.3 | 22.6 | 16.5 | 11.1 | 9.3 | 18.3 |
| 36-42 | 0.84 | 1.53 | 0.23 | 124 | 118 | 1005 | 0.5 | 2.2 | 1.9 | 3.7 | 14.0 | 22.9 | 16.2 | 10.6 | 8.7 | 18.8 |
| 42-48 | 0.36 | 1.24 | 0.09 | 124 | 115 | 868 | 0.1 | 1.5 | 1.8 | 3.6 | 14.1 | 24.3 | 16.1 | 9.9 | 8.5 | 19.4 |
| 48-54 | 0.22 | 0.96 | 0.09 | 124 | 114 | 790 | 0.1 | 0.7 | 1.1 | 3.2 | 15.3 | 26.9 | 16.0 | 9.6 | 8.2 | 18.5 |
| 54-62 | 0.17 | 0.78 | 0.06 | 124 | 114 | 753 | 0.0 | 0.4 | 0.5 | 1.7 | 14.9 | 27.5 | 16.2 | 10.0 | 8.2 | 19.9 |
| 62-68 | 0.18 | 0.79 | 0.09 | 123 | 109 | 752 | 0.1 | 0.5 | 0.6 | 1.5 | 15.7 | 26.7 | 16.2 | 10.2 | 8.3 | 20.0 |
| 68-74 | 0.15 | 0.71 | 0.05 | 127 | 110 | 714 | 0.0 | 0.3 | 0.4 | 1.0 | 12.1 | 27.9 | 18.3 | 10.4 | 9.2 | 20.1 |
| 74-79 | 0.14 | 0.66 | 0.04 | 126 | 107 | 682 | 0.0 | 0.2 | 0.4 | 1.0 | 10.8 | 29.4 | 18.1 | 10.2 | 10.0 | 19.8 |
| 79-86 | 0.18 | 0.71 | 0.09 | 129 | 108 | 738 | 0.0 | 0.5 | 0.6 | 1.5 | 11.0 | 26.5 | 16.7 | 11.2 | 11.2 | 20.4 |
| 86-92 | 0.15 | 0.57 | 0.05 | 128 | 104 | 709 | 0.0 | 0.1 | 0.6 | 1.4 | 11.4 | 28.0 | 18.1 | 11.0 | 8.2 | 20.9 |
| 92-98 | 0.15 | 0.53 | 0.05 | 124 | 100 | 714 | 0.0 | 0.1 | 0.4 | 1.1 | 11.2 | 27.7 | 18.3 | 10.6 | 9.2 | 21.0 |
| 100-105 | 0.15 | 0.67 | 0.04 | 129 | 109 | 686 | 0.0 | 0.3 | 0.3 | 0.8 | 11.6 | 27.7 | 18.0 | 10.6 | 8.8 | 21.7 |
| 105-110 | 0.14 | 0.61 | 0.05 | 128 | 107 | 688 | 0.0 | 0.1 | 0.2 | 1.1 | 10.4 | 27.7 | 18.2 | 11.0 | 9.6 | 21.1 |
| 110-115 | 0.15 | 0.55 | 0.04 | 129 | 104 | 726 | 0.0 | 0.1 | 0.3 | 1.1 | 11.5 | 28.3 | 18.6 | 10.9 | 9.0 | 20.1 |
| 115-120 | 0.15 | 0.53 | 0.05 | 128 | 104 | 730 | 0.0 | 0.1 | 0.3 | 1.3 | 11.9 | 27.7 | 18.4 | 10.6 | 8.2 | 21.3 |
| 120-125 | 0.15 | 0.61 | 0.09 | 127 | 102 | 754 | 0.0 | 0.3 | 1.2 | 3.2 | 12.3 | 27.3 | 17.5 | 10.0 | 8.3 | 19.5 |
| 125-130 | 0.15 | 0.55 | 0.08 | 123 | 98 | 781 | 0.0 | 0.5 | 3.2 | 8.3 | 14.8 | 23.7 | 15.6 | 9.3 | 7.3 | 16.7 |
| 130-135 | 0.16 | 0.55 | 0.08 | 123 | 99 | 773 | 0.1 | 0.6 | 3.3 | 5.6 | 14.6 | 25.3 | 14.7 | 8.5 | 7.6 | 19.0 |
| 135-140 | 0.17 | 0.58 | 0.06 | 128 | 100 | 826 | 0.1 | 0.8 | 5.8 | 10.0 | 16.6 | 20.5 | 13.3 | 8.8 | 7.4 | 16.1 |
| 141-146 | 0.14 | 0.56 | 0.06 | 130 | 101 | 855 | 0.1 | 0.4 | 0.9 | 2.5 | 12.4 | 25.6 | 18.3 | 10.6 | 9.5 | 19.2 |
| 146-151 | 0.16 | 0.54 | 0.08 | 130 | 99 | 861 | 0.1 | 0.4 | 0.6 | 2.0 | 11.9 | 26.3 | 19.7 | 10.7 | 9.2 | 19.2 |
| 151-156 | 0.15 | 0.51 | 0.09 | 123 | 94 | 791 | 0.0 | 0.2 | 0.3 | 1.3 | 9.4 | 28.2 | 19.8 | 10.6 | 8.4 | 21.6 |
| 156-161 | 0.15 | 0.49 | 0.09 | 135 | 99 | 815 | 0.1 | 0.2 | 0.2 | 0.8 | 8.8 | 25.7 | 19.6 | 11.3 | 10.7 | 22.5 |
| 161-166 | 0.14 | 0.53 | 0.10 | 126 | 95 | 876 | 0.0 | 0.1 | 0.1 | 0.6 | 10.7 | 28.9 | 17.8 | 10.6 | 9.4 | 21.6 |
| 166-171 | 0.11 | 0.47 | 0.05 | 122 | 94 | 814 | 0.0 | 0.2 | 0.2 | 0.9 | 13.2 | 28.9 | 16.9 | 9.8 | 8.8 | 20.5 |
| 171-176 | 0.11 | 0.43 | 0.04 | 130 | 96 | 736 | 0.0 | 0.2 | 0.2 | 0.7 | 8.0 | 25.0 | 21.7 | 11.3 | 9.1 | 23.6 |
| 176-181 | 0.13 | 0.44 | 0.05 | 136 | 99 | 765 | 0.0 | 0.2 | 0.2 | 0.5 | 5.2 | 22.6 | 22.5 | 11.5 | 9.7 | 27.5 |
| 181-186 | 0.14 | 0.48 | 0.05 | 140 | 101 | 853 | 0.0 | 0.4 | 0.5 | 0.9 | 5.8 | 20.3 | 21.6 | 12.5 | 11.4 | 26.2 |
| 186-191 | 0.13 | 0.50 | 0.05 | 136 | 100 | 840 | 0.0 | 0.8 | 1.0 | 1.7 | 6.9 | 22.6 | 21.8 | 11.7 | 9.2 | 23.9 |

**Supporting table TA-5:** Analytical values of core Meilitz MC71

*(χ = mass-specific magnetic susceptibility, TOC = Total Organic Carbon; grey shading indicates soils/paleosols)*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Depth *[cm]*** | **χ**  ***[10-6 m3/kg]*** | **TOC *[%]*** | **CaCO3**  ***[%]*** | **Rb**  ***[mg/***  ***kg]*** | **Sr**  ***[mg/***  ***kg]*** | **P**  ***[mg/***  ***kg]*** | **Coarse sand**  ***[%]*** | **Middle sand**  ***[%]*** | **Fine sand**  ***[%]*** | **Very fine sand**  ***[%]*** | **Coarse silt**  ***[%]*** | **Middle silt**  ***[%]*** | **Fine silt**  ***[%]*** | **Coarse clay**  ***[%]*** | **Middle clay**  ***[%]*** | **Fine clay**  ***[%]*** |
| 15-20 | 17.5 | 0.7 | 2.15 | 160 | 115 | 1.39 | 1278 | 0.9 | 2.9 | 1.7 | 3.6 | 11.1 | 20.3 | 19.9 | 13.1 | 10.2 |
| 20-25 | 22.5 | 0.6 | 1.88 | 164 | 121 | 1.36 | 1246 | 1.1 | 2.9 | 1.7 | 3.5 | 11.0 | 20.1 | 19.1 | 13.3 | 11.0 |
| 25-30 | 27.5 | 0.6 | 1.65 | 162 | 121 | 1.34 | 1253 | 1.1 | 3.0 | 1.8 | 3.6 | 10.9 | 2.0 | 19.3 | 12.9 | 10.7 |
| 30-35 | 32.5 | 0.6 | 1.52 | 161 | 122 | 1.31 | 1235 | 0.9 | 3.0 | 1.7 | 3.6 | 11.4 | 20.0 | 19.2 | 13.3 | 10.4 |
| 35-40 | 37.5 | 0.7 | 1.29 | 162 | 122 | 1.33 | 1216 | 0.7 | 2.8 | 1.6 | 3.3 | 11.1 | 20.0 | 19.0 | 13.0 | 9.9 |
| 40-45 | 42.5 | 0.7 | 1.19 | 160 | 119 | 1.34 | 1179 | 0.6 | 2.5 | 1.5 | 3.4 | 11.4 | 20.0 | 18.8 | 13.4 | 9.9 |
| 45-50 | 37.5 | 0.6 | 0.97 | 164 | 116 | 1.42 | 1212 | 0.3 | 1.6 | 1.1 | 2.8 | 10.6 | 18.8 | 19.5 | 14.3 | 11.3 |
| 50-55 | 52.5 | 0.8 | 0.95 | 163 | 112 | 1.45 | 1198 | 0.4 | 1.8 | 1.2 | 3.0 | 10.9 | 18.7 | 19.0 | 14.0 | 11.0 |
| 55-60 | 57.5 | 0.7 | 0.88 | 163 | 107 | 1.52 | 1193 | 0.4 | 1.6 | 1.2 | 2.7 | 11.5 | 19.3 | 19.5 | 13.9 | 10.3 |
| 60-65 | 62.5 | 0.7 | 0.83 | 159 | 103 | 1.53 | 1180 | 0.5 | 1.7 | 1.4 | 3.4 | 11.3 | 20.3 | 18.8 | 13.6 | 10.9 |
| 65-70 | 67.5 | 0.7 | 0.78 | 157 | 101 | 1.55 | 1157 | 0.1 | 1.4 | 1.2 | 3.3 | 12.3 | 20.7 | 19.5 | 13.6 | 9.6 |
| 70-75 | 72.5 | 0.7 | 0.74 | 153 | 98 | 1.55 | 1138 | 0.2 | 1.5 | 1.3 | 3.9 | 12.7 | 21.6 | 19.0 | 12.9 | 9.1 |
| 75-80 | 77.5 | 0.7 | 0.73 | 151 | 98 | 1.54 | 1138 | 0.3 | 1.1 | 0.9 | 3.8 | 12.8 | 20.4 | 18.8 | 13.5 | 8.8 |
| 80-85 | 82.5 | 0.8 | 0.76 | 151 | 97 | 1.56 | 1102 | 0.2 | 1.3 | 1.1 | 3.5 | 12.5 | 21.2 | 20.4 | 13.6 | 8.5 |
| 85-90 | 87.5 | 0.9 | 0.78 | 153 | 98 | 1.57 | 1122 | 0.2 | 1.2 | 1.1 | 3.5 | 13.3 | 21.6 | 20.0 | 13.3 | 9.6 |
| 90-95 | 92.5 | 0.8 | 0.75 | 155 | 97 | 1.60 | 1217 | 0.3 | 1.1 | 1.0 | 3.5 | 11.8 | 21.1 | 20.4 | 13.9 | 10.5 |
| 95-100 | 97.5 | 0.7 | 0.70 | 153 | 96 | 1.60 | 1237 | 0.0 | 1.0 | 0.9 | 3.4 | 11.8 | 21.6 | 21.0 | 14.0 | 9.8 |
| 100-105 | 102.5 | 0.7 | 0.56 | 145 | 96 | 1.51 | 944 | 0.0 | 1.3 | 1.3 | 5.7 | 15.9 | 20.2 | 18.2 | 13.1 | 9.0 |
| 105-110 | 107.5 | 0.8 | 0.63 | 142 | 94 | 1.50 | 885 | 0.1 | 1.0 | 1.3 | 5.5 | 15.6 | 20.8 | 18.3 | 12.8 | 10.0 |
| 110-115 | 112.5 | 1.0 | 0.73 | 132 | 91 | 1.45 | 787 | 0.1 | 2.0 | 2.2 | 5.3 | 16.6 | 21.8 | 17.5 | 11.2 | 8.8 |
| 115-120 | 117.5 | 1.0 | 0.80 | 137 | 93 | 1.47 | 792 | 0.0 | 3.1 | 3.2 | 5.5 | 15.3 | 20.4 | 16.4 | 11.3 | 8.1 |
| 120-125 | 122.5 | 0.9 | 0.69 | 136 | 91 | 1.49 | 752 | 0.1 | 4.3 | 4.5 | 6.4 | 15.0 | 19.4 | 15.7 | 10.3 | 8.9 |
| 125-130 | 127.5 | 0.7 | 0.56 | 139 | 92 | 1.52 | 765 | 0.1 | 5.1 | 5.8 | 7.4 | 14.5 | 18.5 | 15.1 | 10.1 | 8.0 |
| 130-135 | 132.5 | 0.5 | 0.37 | 137 | 91 | 1.51 | 721 | 0.0 | 6.9 | 7.5 | 9.2 | 13.9 | 16.7 | 14.3 | 9.8 | 7.1 |
| 135-140 | 137.5 | 0.6 | 0.50 | 138 | 92 | 1.49 | 741 | 0.1 | 5.6 | 6.1 | 7.7 | 13.8 | 18.1 | 15.4 | 10.0 | 7.6 |
| 140-145 | 142.5 | 0.5 | 0.34 | 135 | 90 | 1.50 | 688 | 0.1 | 7.6 | 8.5 | 9.7 | 13.5 | 16.2 | 13.6 | 9.5 | 5.6 |
| 145-150 | 147.5 | 0.4 | 0.23 | 135 | 90 | 1.50 | 695 | 0.1 | 9.2 | 9.4 | 10.4 | 12.9 | 14.7 | 12.8 | 9.3 | 6.8 |
| 150-155 | 152.5 | 0.4 | 0.27 | 136 | 90 | 1.51 | 695 | 0.0 | 10.5 | 10.4 | 10.7 | 12.4 | 13.7 | 12.5 | 9.1 | 6.3 |
| 155-160 | 157.5 | 0.3 | 0.19 | 134 | 89 | 1.50 | 716 | 0.0 | 10.3 | 10.4 | 10.9 | 12.1 | 13.3 | 12.4 | 8.9 | 7.0 |
| 160-165 | 162.5 | 0.3 | 0.19 | 131 | 87 | 1.51 | 731 | 0.0 | 13.2 | 10.6 | 11.3 | 12.7 | 12.2 | 10.6 | 8.4 | 6.6 |
| 165-170 | 167.5 | 0.2 | 0.17 | 127 | 87 | 1.46 | 700 | 0.2 | 10.4 | 9.6 | 11.2 | 14.1 | 13.4 | 11.1 | 8.3 | 7.0 |
| 170-175 | 172.5 | 0.2 | 0.17 | 127 | 86 | 1.47 | 740 | 0.1 | 10.4 | 9.1 | 11.2 | 13.4 | 12.9 | 11.7 | 9.2 | 7.1 |
| 175-180 | 177.5 | 0.2 | 0.17 | 124 | 89 | 1.40 | 710 | 0.1 | 5.7 | 5.0 | 8.9 | 15.7 | 16.3 | 13.5 | 9.3 | 7.8 |
| 180-185 | 182.5 | 0.3 | 0.20 | 135 | 86 | 1.58 | 788 | 0.2 | 26.8 | 11.0 | 8.5 | 6.7 | 8.4 | 10.2 | 8.5 | 7.3 |

**Supporting table TA-6:** Analytical values of core Meilitz MC2

*(χ = mass-specific magnetic susceptibility, TOC = Total Organic Carbon; grey shading indicates soils/paleosols)*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Depth *[cm]*** | **χ**  ***[10-6 m3/kg]*** | **TOC *[%]*** | **CaCO3**  ***[%]*** | **Rb**  ***[mg/***  ***kg]*** | **Sr**  ***[mg/***  ***kg]*** | **P**  ***[mg/***  ***kg]*** | **Coarse sand**  ***[%]*** | **Middle sand**  ***[%]*** | **Fine sand**  ***[%]*** | **Very fine sand**  ***[%]*** | **Coarse silt**  ***[%]*** | **Middle silt**  ***[%]*** | **Fine silt**  ***[%]*** | **Coarse clay**  ***[%]*** | **Middle clay**  ***[%]*** | **Fine clay**  ***[%]*** |
| 0-5 | - | 2.54 | 0.01 | 115 | 96 | 1195 | 0.8 | 14.3 | 10.5 | 11.5 | 10.0 | 12.3 | 12.9 | 10.2 | 6.4 | 10.4 |
| 5-10 | - | 1.93 | 0.01 | 115 | 95 | 1136 | 0.8 | 14.3 | 10.4 | 11.8 | 10.8 | 12.2 | 12.8 | 9.9 | 5.3 | 10.9 |
| 10-15 | - | 1.76 | 0.00 | 115 | 97 | 1125 | 1.4 | 13.1 | 10.5 | 11.8 | 11.7 | 12.3 | 12.2 | 9.2 | 5.7 | 11.0 |
| 15-21 | 0.62 | 1.79 | 0.05 | 116 | 97 | 1131 | 1.0 | 12.5 | 9.8 | 11.5 | 11.5 | 12.8 | 12.6 | 10.0 | 6.3 | 11.0 |
| 21-27 | 0.62 | 1.76 | 0.04 | 112 | 95 | 1101 | 1.2 | 12.9 | 10.0 | 11.5 | 10.8 | 12.4 | 12.4 | 9.9 | 5.5 | 12.1 |
| 27-33 | 0.61 | 1.69 | 0.01 | 115 | 101 | 1046 | 0.7 | 11.0 | 9.4 | 11.7 | 11.6 | 12.9 | 13.5 | 10.2 | 6.0 | 11.8 |
| 33-39 | 0.46 | 1.04 | 0.05 | 110 | 94 | 834 | 0.3 | 9.9 | 10.4 | 12.9 | 12.9 | 13.4 | 12.5 | 10.0 | 5.8 | 10.4 |
| 39-45 | 0.47 | 1.04 | 0.04 | 113 | 94 | 871 | 0.3 | 10.7 | 10.8 | 13.5 | 12.7 | 12.7 | 12.4 | 9.5 | 5.8 | 10.2 |
| 45-51 | 0.38 | 0.66 | 0.04 | 108 | 85 | 740 | 0.3 | 12.0 | 10.7 | 13.1 | 11.3 | 11.7 | 12.9 | 10.1 | 6.5 | 9.9 |
| 51-56 | 0.36 | 0.53 | 0.01 | 106 | 81 | 678 | 0.4 | 15.4 | 12.8 | 14.5 | 11.4 | 10.8 | 10.6 | 8.2 | 5.0 | 9.8 |
| 56-62 | 0.33 | 0.55 | 0.01 | 105 | 83 | 712 | 0.3 | 9.6 | 8.6 | 12.8 | 9.2 | 14.0 | 15.0 | 10.9 | 6.8 | 11.3 |
| 62-69 | 0.34 | 0.57 | 0.03 | 104 | 83 | 732 | 0.4 | 5.7 | 7.1 | 14.1 | 14.4 | 14.6 | 14.1 | 10.1 | 7.3 | 10.5 |
| 69-77 | 0.35 | 0.52 | 0.00 | 105 | 82 | 726 | 0.4 | 5.4 | 5.5 | 10.0 | 20.8 | 16.8 | 14.2 | 10.0 | 6.2 | 9.4 |
| 77-85 | 0.36 | 0.56 | 0.00 | 106 | 83 | 730 | 0.6 | 5.8 | 5.2 | 8.3 | 22.7 | 17.7 | 14.1 | 9.4 | 5.3 | 9.4 |
| 85-92 | 0.36 | 0.44 | 0.01 | 106 | 83 | 730 | 0.6 | 6.7 | 5.5 | 9.0 | 20.0 | 16.5 | 13.8 | 10.2 | 6.0 | 10.0 |
| 92-99 | 0.36 | 0.42 | 0.01 | 105 | 80 | 709 | 1.1 | 8.7 | 6.5 | 9.6 | 19.6 | 16.0 | 13.0 | 8.9 | 5.9 | 9.1 |
| 99-106 | 0.36 | 0.42 | 0.02 | 102 | 79 | 710 | 1.4 | 8.2 | 5.5 | 8.7 | 20.1 | 16.0 | 13.6 | 9.8 | 6.0 | 9.4 |
| 106-114 | 0.36 | 0.40 | 0.02 | 106 | 83 | 721 | 1.3 | 8.5 | 5.5 | 8.8 | 20.1 | 16.2 | 13.6 | 9.4 | 5.7 | 9.9 |
| 114-121 | 0.35 | 0.40 | 0.01 | 103 | 80 | 723 | 0.8 | 9.2 | 6.7 | 9.7 | 18.7 | 15.4 | 13.1 | 9.7 | 5.6 | 10.0 |
| 121-128 | 0.34 | 0.40 | 0.02 | 105 | 81 | 722 | 0.7 | 9.9 | 7.7 | 9.6 | 19.0 | 16.0 | 13.1 | 8.7 | 5.6 | 8.9 |
| 128-135 | 0.33 | 0.39 | 0.02 | 106 | 78 | 715 | 1.2 | 12.5 | 8.7 | 9.8 | 16.6 | 14.2 | 12.5 | 8.8 | 5.5 | 9.5 |
| 135-142 | 0.31 | 0.38 | 0.04 | 107 | 78 | 722 | 2.2 | 15.4 | 9.2 | 9.0 | 14.8 | 12.9 | 12.0 | 8.6 | 5.2 | 9.8 |
| 142-149 | 0.31 | 0.37 | 0.05 | 108 | 76 | 713 | 2.0 | 19.8 | 9.8 | 9.2 | 12.6 | 12.0 | 11.0 | 7.9 | 4.7 | 9.8 |
| 149-157 | 0.27 | 0.29 | 0.04 | 101 | 65 | 678 | 16.2 | 28.4 | 6.7 | 6.1 | 7.8 | 8.3 | 8.2 | 6.3 | 3.6 | 7.5 |