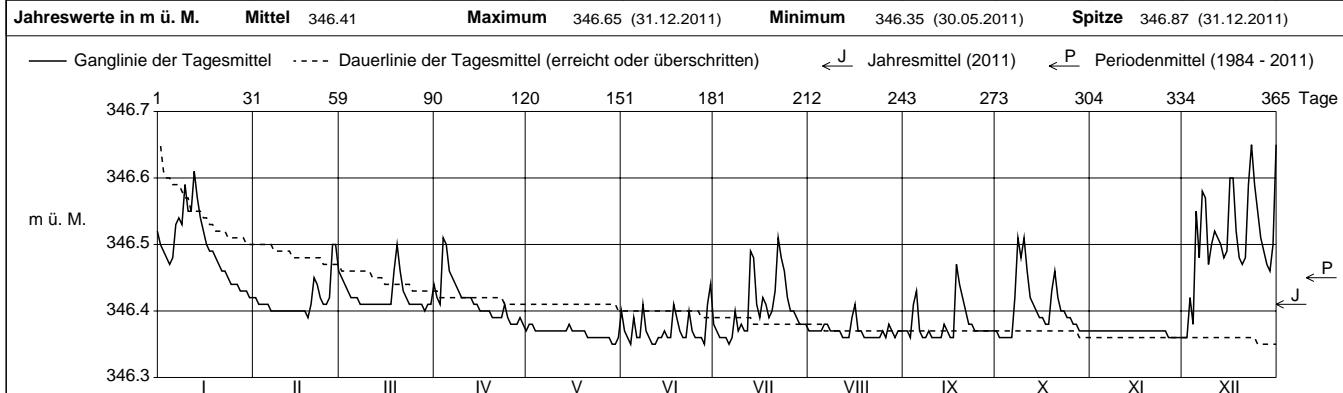


| Abfluss   |       | Hintere Frenke - Bubendorf, Morgental |               |               |                 |   |               |               |                | Kanton Basel-Landschaft                                      |               |               |                   |                            |
|---|-------|---------------------------------------|---------------|---------------|-----------------|---|---------------|---------------|----------------|--|---------------|---------------|-------------------|----------------------------|
|   |       | Stationsnummer: BL 4309               |               |               |                 |   |               |               |                | Tiefbauamt, Geschäftsbereich Wasserbau                       |               |               |                   |                            |
|   |       | Einzugsgebiet: 38.20 km <sup>2</sup>  |               |               |                 |   |               |               |                | Koordinaten: 622 270 / 256 550                               |               |               |                   |                            |
|   |       | Höhe Station: 352.00 m ü. M.          |               |               |                 |   |               |               |                | Mittlere Höhe: 603.00 m ü. M.                                |               |               |                   |                            |
| <b>2011</b>   |       | Januar                                | Februar       | März          | April           | Mai   | Juni          | Juli          | August         | September  | Oktober       | November      | Dezember          |                            |
| <b>Tagesmittel</b><br><br><i>m<sup>3</sup>/s</i>                              | 1     | 0.970                                 | 0.304         | 0.535         | 0.387           | 0.131   | 0.211         | 0.157         | 0.126          | 0.111  | 0.110         | 0.115         | 0.092             | 1                          |
|   | 2     | 0.795                                 | 0.281         | 0.454         | 0.299           | 0.132   | 0.109         | 0.120         | 0.117          | 0.117  | 0.101         | 0.111         | 0.086             | 2                          |
|   | 3     | 0.687                                 | 0.265         | 0.401         | 0.268           | 0.152+  | 0.086         | 0.101         | 0.118          | 0.086  | 0.097         | 0.108         | 0.289             | 3                          |
|   | 4     | 0.631                                 | 0.249         | 0.357         | 1.09 +          | 0.130   | 0.071         | 0.086         | 0.114          | 0.295  | 0.093         | 0.114         | 0.140             | 4                          |
|   | 5     | 0.565                                 | 0.239         | 0.329         | 0.796           | 0.125   | 0.222         | 0.074         | 0.111          | 0.378  | 0.088         | 0.112         | 1.55              | 5                          |
|   | 6     | 0.679                                 | 0.230         | 0.315         | 0.538           | 0.119   | 0.095         | 0.067 -       | 0.137          | 0.134  | 0.079 -       | 0.115         | 0.689             | 6                          |
|   | 7     | 1.10                                  | 0.224         | 0.292         | 0.446           | 0.116   | 0.109         | 0.075         | 0.159          | 0.100  | 0.332         | 0.117         | 1.81              | 7                          |
|   | 8     | 1.22                                  | 0.218         | 0.272         | 0.397           | 0.111   | 0.287         | 0.222         | 0.122          | 0.098  | 1.28 +        | 0.127+        | 1.62              | 8                          |
|   | 9     | 1.17                                  | 0.211         | 0.258         | 0.365           | 0.107   | 0.133         | 0.124         | 0.114          | 0.104  | 0.718         | 0.116         | 0.622             | 9                          |
|   | 10    | 1.95                                  | 0.208         | 0.248         | 0.329           | 0.108   | 0.085         | 0.156         | 0.124          | 0.096  | 0.968         | 0.111         | 0.853             | 10                         |
|   | 11    | 1.41                                  | 0.197         | 0.244         | 0.298           | 0.107   | 0.072         | 0.114         | 0.111          | 0.090  | 0.535         | 0.113         | 0.970             | 11                         |
|   | 12    | 1.35                                  | 0.195         | 0.238         | 0.305           | 0.122   | 0.063 -       | 0.113         | 0.097          | 0.100  | 0.302         | 0.111         | 0.942             | 12                         |
|   | 13    | 2.10 +                                | 0.196         | 0.236         | 0.309           | 0.117   | 0.083         | 0.860         | 0.089          | 0.085 -  | 0.233         | 0.109         | 0.869             | 13                         |
|   | 14    | 1.63                                  | 0.195         | 0.231         | 0.265           | 0.114   | 0.093         | 0.714         | 0.084          | 0.139  | 0.195         | 0.110         | 0.696             | 14                         |
|   | 15    | 1.23                                  | 0.196         | 0.232         | 0.243           | 0.148   | 0.124         | 0.242         | 0.185          | 0.106  | 0.183         | 0.112         | 0.721             | 15                         |
|   | 16    | 0.996                                 | 0.195         | 0.229         | 0.226           | 0.129   | 0.087         | 0.174         | 0.267 +        | 0.094  | 0.169         | 0.109         | 2.24              | 16                         |
|   | 17    | 0.817                                 | 0.192         | 0.233         | 0.209           | 0.115   | 0.099         | 0.326         | 0.124          | 0.103  | 0.150         | 0.111         | 2.02              | 17                         |
|   | 18    | 0.711                                 | 0.190         | 0.248         | 0.194           | 0.108   | 0.253         | 0.234         | 0.116          | 0.674 +  | 0.142         | 0.108         | 0.978             | 18                         |
|   | 19    | 0.717                                 | 0.185 -       | 0.543         | 0.190           | 0.106   | 0.166         | 0.187         | 0.103          | 0.431  | 0.477         | 0.110         | 0.654             | 19                         |
|   | 20    | 0.650                                 | 0.289         | 0.776 +       | 0.186           | 0.109   | 0.114         | 0.213         | 0.089          | 0.305  | 0.510         | 0.107         | 0.571             | 20                         |
|   | 21    | 0.581                                 | 0.467         | 0.526         | 0.183           | 0.101   | 0.094         | 0.431         | 0.087          | 0.190  | 0.289         | 0.107         | 0.666             | 21                         |
|   | 22    | 0.534                                 | 0.381         | 0.378         | 0.175           | 0.099   | 0.112         | 0.954 +       | 0.082 -        | 0.157  | 0.215         | 0.107         | 1.96              | 22                         |
|   | 23    | 0.492                                 | 0.283         | 0.303         | 0.171           | 0.099   | 0.227         | 0.661         | 0.088          | 0.138  | 0.190         | 0.106         | 2.68              | 23                         |
|   | 24    | 0.459                                 | 0.261         | 0.266         | 0.262           | 0.095   | 0.108         | 0.500         | 0.095          | 0.128  | 0.175         | 0.104         | 1.85              | 24                         |
|   | 25    | 0.437                                 | 0.255         | 0.247         | 0.165           | 0.087   | 0.089         | 0.321         | 0.120          | 0.124  | 0.162         | 0.104         | 1.36              | 25                         |
|   | 26    | 0.421                                 | 0.292         | 0.243         | 0.142           | 0.081   | 0.082         | 0.228         | 0.102          | 0.121  | 0.142         | 0.103         | 0.925             | 26                         |
|   | 27    | 0.403                                 | 0.875 +       | 0.257         | 0.139           | 0.078   | 0.076         | 0.198         | 0.136          | 0.118  | 0.136         | 0.101         | 0.711             | 27                         |
|   | 28    | 0.376                                 | 0.787         | 0.260         | 0.142           | 0.082   | 0.063 -       | 0.172         | 0.107          | 0.117  | 0.129         | 0.098         | 0.609             | 28                         |
|   | 29    | 0.360                                 |               | 0.226 -       | 0.195           | 0.069   | 0.313         | 0.152         | 0.103          | 0.114  | 0.123         | 0.096         | 0.548             | 29                         |
|   | 30    | 0.350                                 |               | 0.246         | 0.133 -         | 0.063 -                                       | 0.414 +       | 0.150         | 0.110          | 0.111  | 0.119         | 0.095 -       | 0.854             | 30                         |
|   | 31    | 0.321 -                               |               | 0.272         |                 | 0.087   |               | 0.132         | 0.107          |  | 0.115         |               | 3.06 +            | 31                         |
| Monatsmittel  |       | 0.842                                 | 0.288         | 0.319         | 0.301           | 0.108 -                                       | 0.138         | 0.266         | 0.118          | 0.165  | 0.276         | 0.109         | 1.08 +            | m <sup>3</sup> /s          |
| Maximum (Spitze)  |       | 2.59<br>13.                           | 1.10<br>27.   | 0.928<br>20.  | 2.69<br>04.     | 0.372<br>31.                                  | 2.39<br>05.   | 3.21<br>13.   | 0.776<br>15.   | 2.63<br>02.  | 4.03<br>08.   | 0.140-<br>07. | 6.48 +<br>31.     | m <sup>3</sup> /s<br>Datum |
| <b>Jahresmittel</b>   |       | 0.337 m <sup>3</sup> /s               |               |               |                 |   |               |               |                |  |               |               |                   |                            |
|   |       |                                       |               |               |                 |   |               |               |                |  |               |               |                   |                            |
| <b>Periode</b>  |       | 1984 – 2011 (28 Jahre)                |               |               |                 |   |               |               |                |  |               |               |                   |                            |
| Monatsmittel  |       | 0.746                                 | 0.709         | 0.900+        | 0.867           | 0.636   | 0.514         | 0.354         | 0.290-         | 0.333  | 0.438         | 0.600         | 0.810             | m <sup>3</sup> /s          |
| Maximum (Spitze)  |       | 8.53 -<br>1995                        | 14.8<br>1999  | 17.6<br>2001  | 21.1<br>2006    | 24.9<br>1999                                  | 19.6<br>1990  | 18.1<br>1997  | 30.1 +<br>2007 | 15.3<br>2006   | 10.5<br>2002  | 16.0<br>1995  | 12.8<br>2010      | m <sup>3</sup> /s Jahr     |
| Minimum (Momentanwert)  |       | 0.095<br>1989                         | 0.084<br>1989 | 0.093<br>1986 | 0.112 +<br>1996 | 0.057<br>2011                                 | 0.053<br>1989 | 0.046<br>1984 | 0.020<br>1984  | 0.016 -<br>1984  | 0.051<br>1985 | 0.060<br>1985 | 0.025<br>1986     | m <sup>3</sup> /s Jahr     |
| <b>Grösstes Jahresmittel</b>  |       | 0.952 (1999) m <sup>3</sup> /s        |               |               |                 | <b>Periodenmittel</b> 0.599 m <sup>3</sup> /s |               |               |                | <b>Kleinstes Jahresmittel</b> 0.283 (1989) m <sup>3</sup> /s |               |               |                   |                            |
| <b>Dauer der Tagesmittelwerte des Abflusses (erreicht oder überschritten)</b> |       |                                       |               |               |                 |   |               |               |                |  |               |               |                   |                            |
| Tage  | 1     | 3                                     | 6             | 9             | 18              | 36  | 55            | 73            | 91             | 114  | 137           | 160           |                   |                            |
| 2011  | 3.06  | 2.24                                  | 1.96          | 1.81          | 1.22            | 0.796   | 0.631         | 0.459         | 0.357          | 0.289  | 0.244         | 0.213         | m <sup>3</sup> /s |                            |
| 1984 - 2011   | 5.29  | 3.73                                  | 3.03          | 2.67          | 2.04            | 1.47  | 1.10          | 0.871         | 0.716          | 0.572  | 0.469         | 0.386         | m <sup>3</sup> /s |                            |
| Tage  | 182   | 205                                   | 228           | 251           | 274             | 292   | 310           | 329           | 347            | 356  | 362           | 365           |                   |                            |
| 2011  | 0.185 | 0.142                                 | 0.124         | 0.115         | 0.111           | 0.107   | 0.101         | 0.093         | 0.085          | 0.076  | 0.067         | 0.063         | m <sup>3</sup> /s |                            |
| 1984 - 2011   | 0.324 | 0.271                                 | 0.229         | 0.193         | 0.167           | 0.149   | 0.130         | 0.111         | 0.092          | 0.078  | 0.066         | 0.024         | m <sup>3</sup> /s |                            |



|                    |  |  |  |  |  |  |  |  |  |  |  |  |
|--------------------|--|--|--|--|--|--|--|--|--|--|--|--|
| <b>Wasserstand</b> | <b>Hintere Frenke - Bubendorf, Morgental</b> |  |  |  |  |  |  |  | <b>Kanton Basel-Landschaft</b>         |  |  |  |
|                    | Stationsnummer: BL 4309                      |  |  |  |  |  |  |  | Tiefbauamt, Geschäftsbereich Wasserbau |  |  |  |
|                    | Einzugsgebiet: 38.20 km <sup>2</sup>         |  |  |  |  |  |  |  | Koordinaten: 622 270 / 256 550         |  |  |  |
|                    | Höhe Station: 352.00 m ü. M.                 |  |  |  |  |  |  |  | Mittlere Höhe: 603.00 m ü. M.          |  |  |  |

|                  |    | Januar | Februar | März   | April  | Mai    | Juni   | Juli   | August | September | Oktober | November | Dezember |           |     |
|------------------|----|--------|---------|--------|--------|--------|--------|--------|--------|-----------|---------|----------|----------|-----------|-----|
| <b>2011</b>      |    |        |         |        |        |        |        |        |        |           |         |          |          |           |     |
| Tagesmittel      | 1  | 346.52 | 346.42  | 346.46 | 346.44 | 346.37 | 346.40 | 346.38 | 346.37 | 346.37    | 346.37  | 346.37   | 346.36   | - 1       |     |
|                  | 2  | 346.50 | 346.42  | 346.45 | 346.42 | 346.38 | 346.37 | 346.37 | 346.37 | 346.37    | 346.36  | 346.37   | 346.36   | - 2       |     |
|                  | 3  | 346.49 | 346.41  | 346.44 | 346.41 | 346.38 | 346.36 | 346.36 | 346.37 | 346.36    | 346.36  | 346.37   | 346.42   | - 3       |     |
|                  | 4  | 346.48 | 346.41  | 346.43 | 346.51 | +      | 346.37 | 346.35 | 346.36 | 346.37    | 346.41  | 346.36   | 346.37   | + 4       |     |
|                  | 5  | 346.47 | 346.41  | 346.42 | 346.50 | 346.37 | 346.39 | 346.36 | 346.37 | 346.43    | 346.43  | 346.36   | 346.55   | - 5       |     |
| m ü. M.          | 6  | 346.48 | 346.41  | 346.42 | 346.46 | 346.37 | 346.36 | 346.35 | -      | 346.38    | 346.37  | 346.36   | -        | 346.48    | 6   |
|                  | 7  | 346.53 | 346.40  | 346.42 | 346.45 | 346.37 | 346.36 | 346.36 | 346.38 | 346.36    | 346.36  | 346.42   | 346.37   | + 7       |     |
|                  | 8  | 346.54 | 346.40  | 346.41 | 346.44 | 346.37 | 346.41 | 346.40 | 346.37 | 346.36    | 346.51  | +        | 346.57   | - 8       |     |
|                  | 9  | 346.53 | 346.40  | 346.41 | 346.43 | 346.37 | 346.37 | 346.37 | 346.37 | 346.37    | 346.48  | 346.37   | 346.47   | - 9       |     |
|                  | 10 | 346.59 | 346.40  | 346.41 | 346.42 | 346.37 | 346.36 | 346.38 | 346.37 | 346.36    | 346.51  | +        | 346.50   | - 10      |     |
|                  | 11 | 346.55 | 346.40  | 346.41 | 346.42 | 346.37 | 346.35 | -      | 346.37 | 346.37    | 346.46  | 346.37   | + 346.52 | - 11      |     |
|                  | 12 | 346.55 | 346.40  | 346.41 | 346.42 | 346.37 | 346.35 | -      | 346.37 | 346.36    | 346.42  | 346.37   | + 346.51 | - 12      |     |
|                  | 13 | 346.61 | +       | 346.40 | 346.41 | 346.42 | 346.37 | 346.36 | 346.49 | 346.36    | 346.41  | 346.37   | + 346.50 | - 13      |     |
|                  | 14 | 346.57 | 346.40  | 346.41 | 346.41 | 346.37 | 346.36 | 346.48 | 346.36 | 346.38    | 346.40  | 346.37   | + 346.48 | - 14      |     |
|                  | 15 | 346.54 | 346.40  | 346.41 | 346.41 | 346.38 | +      | 346.37 | 346.41 | 346.39    | 346.37  | 346.37   | + 346.49 | - 15      |     |
|                  | 16 | 346.52 | 346.40  | 346.41 | 346.40 | 346.37 | 346.36 | 346.39 | 346.41 | +         | 346.36  | -        | 346.60   | - 16      |     |
|                  | 17 | 346.50 | 346.40  | 346.41 | 346.40 | 346.37 | 346.36 | 346.42 | 346.37 | 346.36    | 346.38  | 346.37   | + 346.60 | - 17      |     |
|                  | 18 | 346.49 | 346.40  | 346.41 | 346.40 | 346.37 | 346.41 | 346.41 | 346.37 | 346.47    | +       | 346.38   | - 346.52 | - 18      |     |
|                  | 19 | 346.49 | 346.39  | -      | 346.46 | 346.40 | 346.37 | 346.39 | 346.36 | -         | 346.44  | 346.43   | - 346.48 | - 19      |     |
|                  | 20 | 346.48 | 346.41  | 346.50 | +      | 346.39 | 346.37 | 346.40 | 346.36 | -         | 346.42  | 346.46   | - 346.47 | - 20      |     |
|                  | 21 | 346.47 | 346.45  | 346.46 | 346.39 | 346.36 | 346.36 | 346.43 | 346.36 | -         | 346.40  | 346.42   | - 346.48 | - 21      |     |
|                  | 22 | 346.46 | 346.44  | 346.43 | 346.39 | 346.36 | 346.36 | 346.42 | 346.36 | +         | 346.36  | 346.38   | - 346.59 | - 22      |     |
|                  | 23 | 346.46 | 346.42  | 346.42 | 346.39 | 346.36 | 346.40 | 346.48 | 346.36 | -         | 346.38  | 346.40   | - 346.65 | - 23      |     |
| + Maximum        | 24 | 346.45 | 346.41  | 346.41 | 346.41 | 346.36 | 346.37 | 346.46 | 346.36 | -         | 346.37  | 346.39   | - 346.59 | - 24      |     |
|                  | 25 | 346.44 | 346.41  | 346.41 | 346.39 | 346.36 | 346.36 | 346.42 | 346.37 | -         | 346.37  | 346.39   | - 346.55 | - 25      |     |
| - Minimum        | 26 | 346.44 | 346.42  | 346.41 | 346.38 | -      | 346.36 | 346.40 | 346.36 | -         | 346.37  | 346.38   | - 346.51 | - 26      |     |
|                  | 27 | 346.44 | 346.50  | +      | 346.41 | 346.38 | -      | 346.36 | 346.40 | 346.38    | -       | 346.36   | - 346.49 | - 27      |     |
|                  | 28 | 346.43 | 346.50  | +      | 346.41 | 346.38 | -      | 346.36 | 346.35 | -         | 346.37  | 346.37   | - 346.47 | - 28      |     |
|                  | 29 | 346.43 | 346.40  | 346.40 | 346.39 | 346.35 | -      | 346.41 | 346.38 | 346.36    | -       | 346.37   | - 346.46 | - 29      |     |
|                  | 30 | 346.43 | 346.41  | 346.41 | 346.38 | -      | 346.35 | 346.44 | 346.37 | -         | 346.37  | 346.36   | - 346.50 | - 30      |     |
|                  | 31 | 346.42 | -       |        | 346.41 | -      | 346.36 | -      | 346.37 | -         | 346.37  | -        | 346.65   | + 31      |     |
| Monatsmittel     |    | 346.49 | 346.41  | 346.42 | 346.41 | 346.37 | -      | 346.37 | -      | 346.40    | 346.37  | -        | 346.51   | + m ü. M. |     |
| Maximum (Spitze) |    | 346.64 | 346.53  | 27.    | 346.51 | 20.    | 346.65 | 346.43 | 31.    | 346.63    | 05.     | 346.68   | 13.      | 346.50    | 15. |
|                  |    |        |         |        |        |        |        |        |        |           |         |          | 346.74   | 02.       |     |
|                  |    |        |         |        |        |        |        |        |        |           |         |          | 346.87   | 08.       |     |
|                  |    |        |         |        |        |        |        |        |        |           |         |          | 346.87   | 31.       |     |
|                  |    |        |         |        |        |        |        |        |        |           |         |          |          | Datum     |     |



| Periode                | 1984 – 2011 |        |        |      |        |      |        |        |        |        |        |        | (28 Jahre) |        |        |         |        |      |        |      |        |      |        |      |              |
|------------------------|-------------|--------|--------|------|--------|------|--------|--------|--------|--------|--------|--------|------------|--------|--------|---------|--------|------|--------|------|--------|------|--------|------|--------------|
| Monatsmittel           | 346.47      | 346.47 | 346.49 | +    | 346.49 | +    | 346.46 | 346.44 | 346.41 | 346.40 | -      | 346.41 | 346.43     | 346.45 | 346.48 | m ü. M. |        |      |        |      |        |      |        |      |              |
| Maximum (Spitze)       | 346.93      | -      | 347.14 | 1999 | 347.22 | 2001 | 347.43 | 2006   | 347.38 | 1999   | 347.29 | 1990   | 347.23     | 1997   | 347.70 | 2007    | 347.23 | 2006 | 347.00 | 2002 | 347.17 | 1995 | 347.14 | 2010 | m ü. M. Jahr |
| Minimum (Momentanwert) | 346.37      | +      | 346.36 | 1989 | 346.37 | +    | 346.37 | +      | 346.35 | 2011   | 346.34 | 1989   | 346.34     | 1984   | 346.32 | -       | 346.32 | -    | 346.34 | 1985 | 346.35 | 1985 | 346.33 | 1986 | m ü. M. Jahr |

| Grösstes Jahresmittel   | 346.49 (1999) | m ü. M. | Periodenmittel | 346.45 | m ü. M. | Kleinstes Jahresmittel | 346.41 (1989) | m ü. M. |        |        |        |        |         |
|---|---------------|---------|----------------|--------|---------|------------------------|---------------|---------|--------|--------|--------|--------|---------|
| <b>Dauer der Tagesmittelwerte des Wasserstandes (erreicht oder überschritten)</b> |               |         |                |        |         |                        |               |         |        |        |        |        |         |
| Tage  | 1             | 3       | 6              | 9      | 18      | 36                     | 55            | 73      | 91     | 114    | 137    | 160    |         |
| 2011  | 346.65        | 346.61  | 346.59         | 346.58 | 346.53  | 346.50                 | 346.47        | 346.45  | 346.43 | 346.41 | 346.41 | 346.40 | m ü. M. |
| 1984 - 2011   | 346.79        | 346.70  | 346.66         | 346.64 | 346.60  | 346.56                 | 346.53        | 346.51  | 346.49 | 346.47 | 346.45 | 346.44 | m ü. M. |
| Tage  | 182           | 205     | 228            | 251    | 274     | 292                    | 310           | 329     | 347    | 356    | 362    | 365    |         |
| 2011  | 346.39        | 346.38  | 346.37         | 346.37 | 346.37  | 346.36                 | 346.36        | 346.36  | 346.36 | 346.36 | 346.35 | 346.33 | m ü. M. |
| 1984 - 2011   | 346.43        | 346.42  | 346.41         | 346.40 | 346.39  | 346.39                 | 346.38        | 346.37  | 346.36 | 346.36 | 346.35 | 346.33 | m ü. M. |