

## Grundwasserstände



Birstal

Münchenstein

Abstichpunkt:

OK Terrain:

20.R.17

282.38

282.53

J18 Reinach Nord

m ü.M.

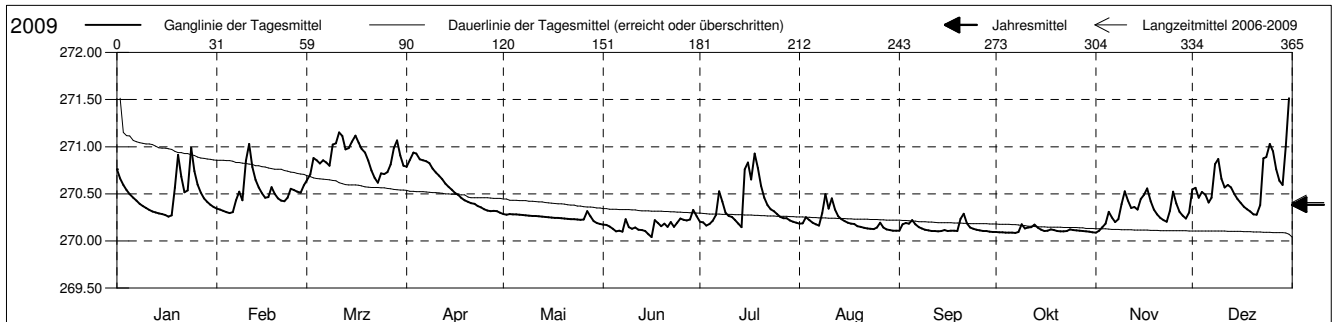
m ü.M.

Amt für Umweltschutz und Energie

Kanton Basel-Landschaft

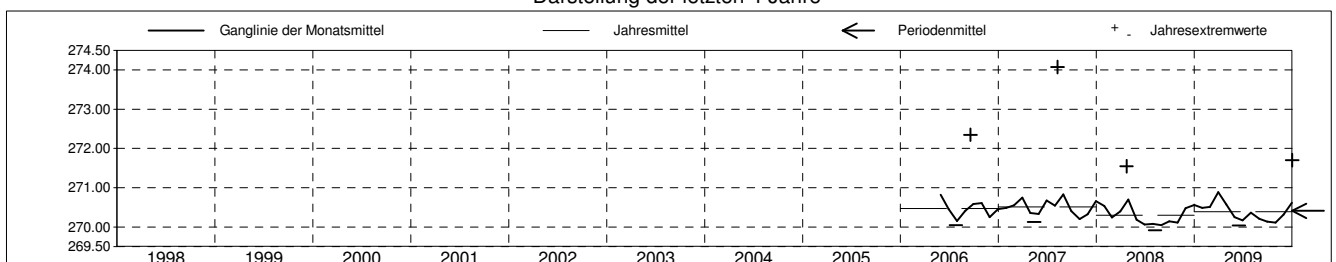
Koordinaten: 612799.81 / 261811.50

| 2009         | Januar   | Februar       | März     | April    | Mai             | Juni     | Juli     | August          | September | Oktober   | November | Dezember |    |
|--------------|----------|---------------|----------|----------|-----------------|----------|----------|-----------------|-----------|-----------|----------|----------|----|
| 1            | 270.76   | 270.34        | 270.64   | 270.79   | 270.28          | 270.17   | 270.20   | 270.18          | 270.11    | 270.10    | 270.09 - | 270.54   | 1  |
| 2            | 270.66   | 270.33        | 270.71   | 270.86   | 270.28          | 270.17   | 270.20   | 270.19          | 270.18    | 270.09    | 270.11   | 270.56   | 2  |
| 3            | 270.59   | 270.32        | 270.88   | 270.94 + | 270.29          | 270.15   | 270.16   | 270.25          | 270.19    | 270.09    | 270.15   | 270.46   | 3  |
| 4            | 270.54   | 270.30 -      | 270.85   | 270.93   | 270.28          | 270.13   | 270.18   | 270.22          | 270.18    | 270.09    | 270.18   | 270.52   | 4  |
| 5            | 270.49   | 270.30 -      | 270.82   | 270.87   | 270.28          | 270.10   | 270.21   | 270.19          | 270.22    | 270.09    | 270.31   | 270.49   | 5  |
| Tagesmittel  |          |               |          |          |                 |          |          |                 |           |           |          |          |    |
| 6            | 270.46   | 270.31        | 270.86   | 270.85   | 270.28          | 270.11   | 270.28   | 270.18          | 270.18    | 270.09    | 270.25   | 270.41   | 6  |
| 7            | 270.43   | 270.43        | 270.83   | 270.85   | 270.27          | 270.10   | 270.53   | 270.16          | 270.14    | 270.08 -  | 270.20   | 270.46   | 7  |
| 8            | 270.39   | 270.52        | 270.80   | 270.82   | 270.27          | 270.23   | 270.42   | 270.30          | 270.13    | 270.10    | 270.23   | 270.82   | 8  |
| 9            | 270.37   | 270.43        | 271.02   | 270.77   | 270.27          | 270.14   | 270.30   | 270.50 +        | 270.12    | 270.18 +  | 270.39   | 270.87   | 9  |
| 10           | 270.35   | 270.85        | 271.03   | 270.73   | 270.27          | 270.13   | 270.26   | 270.34          | 270.11    | 270.13    | 270.53   | 270.66   | 10 |
| 11           | 270.33   | 271.03 +      | 271.15 + | 270.69   | 270.26          | 270.14   | 270.25   | 270.45          | 270.11    | 270.14    | 270.43   | 270.57   | 11 |
| 12           | 270.31   | 270.79        | 271.11   | 270.65   | 270.26          | 270.12   | 270.22   | 270.33          | 270.11    | 270.15    | 270.35   | 270.59   | 12 |
| 13           | 270.30   | 270.65        | 270.97   | 270.61   | 270.26          | 270.11   | 270.18   | 270.26          | 270.10 -  | 270.17    | 270.36   | 270.57   | 13 |
| 14           | 270.29   | 270.57        | 270.98   | 270.57   | 270.25          | 270.11   | 270.15 - | 270.23          | 270.11    | 270.14    | 270.33   | 270.50   | 14 |
| Max. +       | 270.28   | 270.51        | 271.05   | 270.54   | 270.25          | 270.07   | 270.76   | 270.21          | 270.12    | 270.12    | 270.44   | 270.44   | 15 |
| 16           | 270.27   | 270.46        | 271.12   | 270.51   | 270.25          | 270.04 - | 270.83   | 270.19          | 270.10 -  | 270.10    | 270.49   | 270.40   | 16 |
| 17           | 270.26 - | 270.46        | 271.04   | 270.49   | 270.25          | 270.22   | 270.65   | 270.18          | 270.11    | 270.11    | 270.56 + | 270.36   | 17 |
| 18           | 270.27   | 270.57        | 270.98   | 270.45   | 270.24          | 270.19   | 270.93 + | 270.18          | 270.11    | 270.12    | 270.42   | 270.34   | 18 |
| 19           | 270.56   | 270.50        | 270.94   | 270.43   | 270.24          | 270.15   | 270.77   | 270.16          | 270.10 -  | 270.11    | 270.33   | 270.31   | 19 |
| Min. -       | 270.91   | 270.45        | 270.85   | 270.41   | 270.24          | 270.18   | 270.58   | 270.15          | 270.23    | 270.11    | 270.28   | 270.28 - | 20 |
| 21           | 270.68   | 270.43        | 270.75   | 270.40   | 270.23          | 270.15   | 270.46   | 270.14          | 270.29 +  | 270.10    | 270.24   | 270.28 - | 21 |
| 22           | 270.52   | 270.42        | 270.67   | 270.39   | 270.23          | 270.20   | 270.38   | 270.13          | 270.19    | 270.10    | 270.22   | 270.38   | 22 |
| 23           | 270.54   | 270.46        | 270.62 - | 270.37   | 270.23          | 270.15   | 270.34   | 270.13          | 270.14    | 270.10    | 270.20   | 270.88   | 23 |
| 24           | 270.99 + | 270.56        | 270.72   | 270.36   | 270.23          | 270.20   | 270.32   | 270.13          | 270.13    | 270.12    | 270.32   | 270.89   | 24 |
| 25           | 270.74   | 270.54        | 270.71   | 270.34   | 270.22          | 270.24   | 270.28   | 270.14          | 270.12    | 270.11    | 270.52   | 271.03   | 25 |
| 26           | 270.60   | 270.52        | 270.73   | 270.32   | 270.23          | 270.22   | 270.25   | 270.19          | 270.11    | 270.11    | 270.40   | 270.95   | 26 |
| 27           | 270.51   | 270.51        | 270.81   | 270.31   | 270.31 +        | 270.22   | 270.24   | 270.14          | 270.11    | 270.11    | 270.31   | 270.76   | 27 |
| 28           | 270.45   | 270.59        | 270.98   | 270.32   | 270.26          | 270.23   | 270.24   | 270.12          | 270.10 -  | 270.11    | 270.27   | 270.64   | 28 |
| 29           | 270.41   |               | 271.07   | 270.31   | 270.21          | 270.33 + | 270.22   | 270.12          | 270.10 -  | 270.10    | 270.24   | 270.59   | 29 |
| 30           | 270.38   |               | 270.91   | 270.30 - | 270.19          | 270.26   | 270.20   | 270.11 -        | 270.10 -  | 270.10    | 270.30   | 271.00   | 30 |
| 31           | 270.36   |               | 270.80   |          | 270.18 -        |          | 270.19   | 270.11 -        |           | 270.09    |          | 271.51 + | 31 |
| Monatsmittel | 270.48   | 270.51        | 270.88 + | 270.57   | 270.25          | 270.17   | 270.36   | 270.20          | 270.14    | 270.11 -  | 270.31   | 270.61   |    |
| Maximum      | 271.09   | 271.21        | 271.24   | 270.96   | 270.34          | 270.36   | 271.06   | 270.60          | 270.37    | 270.20 -  | 270.60   | 271.70 + |    |
| Datum        | 24.01    | 10.02         | 11.03    | 04.04    | 27.05           | 29.06    | 15.07    | 09.08           | 20.09     | 09.10     | 17.11    | 31.12    |    |
| Amplitude    | 0.84     | 0.92          | 0.63     | 0.66     | 0.17            | 0.32     | 0.96     | 0.49            | 0.27      | 0.12      | 0.51     | 1.43     |    |
| Jahr 2009    | Mittel   | 270.38 m ü.M. |          | Maximum  | 271.70 (31.Dez) |          | Minimum  | 270.04 (15.Jun) |           | Amplitude | 1.66 m   |          |    |



| Periode      | 2006 - 2009 |               |          |         |                      |        |         |                      |          |           |          |          |
|--------------|-------------|---------------|----------|---------|----------------------|--------|---------|----------------------|----------|-----------|----------|----------|
| Monatsmittel | 270.50      | 270.43        | 270.67 + | 270.54  | 270.39               | 270.34 | 270.28  | 270.37               | 270.32   | 270.26 -  | 270.34   | 270.57   |
| Maximum      | 271.19      | 271.21        | 271.68   | 271.55  | 271.50               | 271.46 | 271.06  | 274.07 +             | 272.35   | 271.77    | 271.01 - | 271.70   |
| Jahr         | 2008        | 2009          | 2007     | 2008    | 2006                 | 2007   | 2009    | 2007                 | 2006     | 2006      | 2008     | 2009     |
| Minimum      | 270.17 +    | 270.10        | 270.12   | 270.16  | 270.01               | 269.95 | 269.95  | 269.92 -             | 269.92 - | 269.92 -  | 270.09   | 270.17 + |
| Jahr         | 2007        | 2008          | 2008     | 2007    | 2008                 | 2008   | 2008    | 2008                 | 2008     | 2008      | 2009     | 2006     |
| Amplitude    | 0.95        | 0.92          | 1.28     | 1.28    | 1.04                 | 1.13   | 0.96    | 3.84 +               | 2.21     | 1.55      | 0.78 -   | 1.43     |
| Jahr         | 2008        | 2009          | 2007     | 2008    | 2006                 | 2007   | 2009    | 2007                 | 2006     | 2006      | 2007     | 2009     |
| Periode      | Mittel      | 270.41 m ü.M. |          | Maximum | 274.07 (09.Aug 2007) |        | Minimum | 269.92 (07.Aug 2008) |          | Amplitude | 4.16 m   |          |

Darstellung der letzten 4 Jahre



## Grundwassertemperatur



Birstal

Münchenstein

20.R.17

J18 Reinach Nord

Abstichpunkt:

282.38

m ü.M.

OK Terrain:

282.53

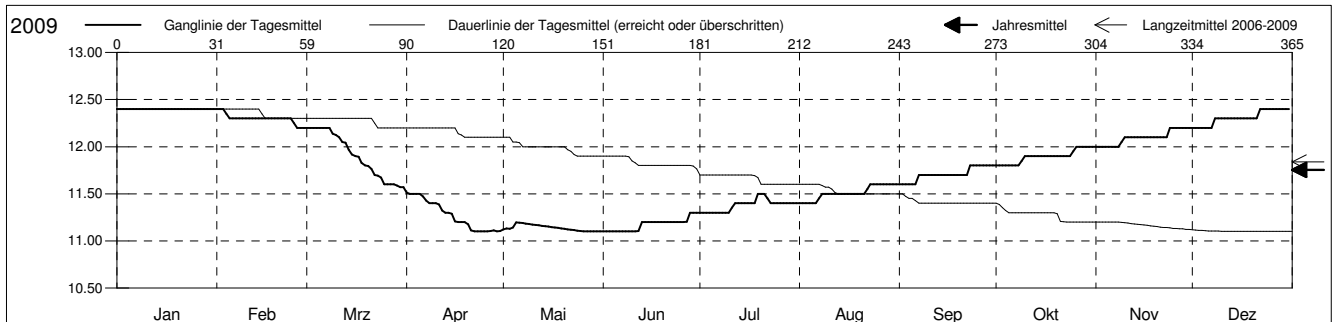
m ü.M.

Amt für Umweltschutz und Energie

Kanton Basel-Landschaft

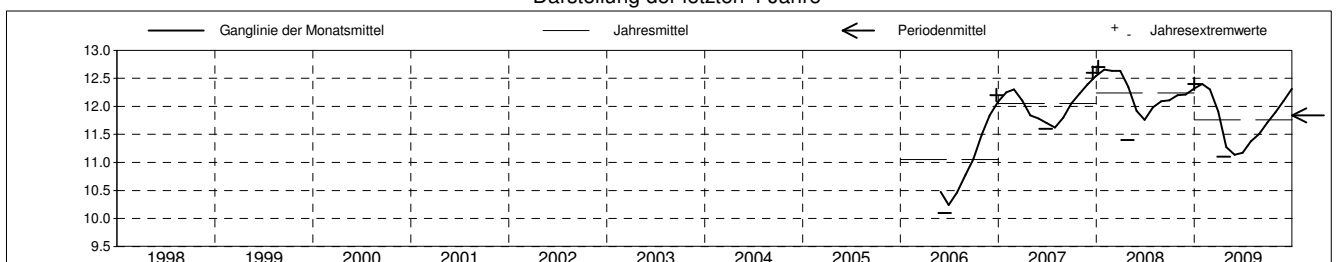
Koordinaten: 612799.81 / 261811.50

| 2009         | Januar | Februar | März    | April         | Mai     | Juni          | Juli      | August | September | Oktober | November | Dezember |    |
|--------------|--------|---------|---------|---------------|---------|---------------|-----------|--------|-----------|---------|----------|----------|----|
| 1            | 12.4 + | 12.4 +  | 12.2 +  | 11.5 +        | 11.1 -  | 11.1 -        | 11.3 -    | 11.4 - | 11.6 -    | 11.8 -  | 12.0 -   | 12.2 -   | 1  |
| 2            | 12.4 + | 12.4 +  | 12.2 +  | 11.5 +        | 11.1 -  | 11.1 -        | 11.3 -    | 11.4 - | 11.6 -    | 11.8 -  | 12.0 -   | 12.2 -   | 2  |
| 3            | 12.4 + | 12.4 +  | 12.2 +  | 11.5 +        | 11.1 -  | 11.1 -        | 11.3 -    | 11.4 - | 11.6 -    | 11.8 -  | 12.0 -   | 12.2 -   | 3  |
| 4            | 12.4 + | 12.4 +  | 12.2 +  | 11.5 +        | 11.1 -  | 11.1 -        | 11.3 -    | 11.4 - | 11.6 -    | 11.8 -  | 12.0 -   | 12.2 -   | 4  |
| 5            | 12.4 + | 12.3    | 12.2 +  | 11.5 +        | 11.2 +  | 11.1 -        | 11.3 -    | 11.4 - | 11.6 -    | 11.8 -  | 12.0 -   | 12.2 -   | 5  |
| Tagesmittel  | 12.4 + | 12.3    | 12.2 +  | 11.5 +        | 11.2 +  | 11.1 -        | 11.3 -    | 11.4 - | 11.6 -    | 11.8 -  | 12.0 -   | 12.2 -   | 6  |
| 6            | 12.4 + | 12.3    | 12.2 +  | 11.4          | 11.2 +  | 11.1 -        | 11.3 -    | 11.4 - | 11.7      | 11.8 -  | 12.0 -   | 12.2 -   | 7  |
| 7            | 12.4 + | 12.3    | 12.2 +  | 11.4          | 11.2 +  | 11.1 -        | 11.3 -    | 11.5   | 11.7      | 11.8 -  | 12.0 -   | 12.3     | 8  |
| 8            | 12.4 + | 12.3    | 12.1    | 11.4          | 11.2 +  | 11.1 -        | 11.3 -    | 11.5   | 11.7      | 11.9    | 12.1     | 12.3     | 9  |
| 9            | 12.4 + | 12.3    | 12.1    | 11.4          | 11.2 +  | 11.1 -        | 11.3 -    | 11.5   | 11.7      | 11.9    | 12.1     | 12.3     | 10 |
| 10           | 12.4 + | 12.3    | 12.1    | 11.4          | 11.2 +  | 11.1 -        | 11.3 -    | 11.5   | 11.7      | 11.9    | 12.1     | 12.3     | 11 |
| 11           | 12.4 + | 12.3    | 12.1    | 11.3          | 11.2 +  | 11.1 -        | 11.4      | 11.5   | 11.7      | 11.9    | 12.1     | 12.3     | 12 |
| 12           | 12.4 + | 12.3    | 12.0    | 11.3          | 11.2 +  | 11.2          | 11.4      | 11.5   | 11.7      | 11.9    | 12.1     | 12.3     | 13 |
| 13           | 12.4 + | 12.3    | 12.0    | 11.3          | 11.2 +  | 11.2          | 11.4      | 11.5   | 11.7      | 11.9    | 12.1     | 12.3     | 14 |
| 14           | 12.4 + | 12.3    | 12.0    | 11.3          | 11.2 +  | 11.2          | 11.4      | 11.5   | 11.7      | 11.9    | 12.1     | 12.3     | 15 |
| 15           | 12.4 + | 12.3    | 11.9    | 11.3          | 11.2 +  | 11.2          | 11.4      | 11.5   | 11.7      | 11.9    | 12.1     | 12.3     | 16 |
| Max. +       | 12.4 + | 12.3    | 11.9    | 11.2          | 11.1 -  | 11.2          | 11.4      | 11.5   | 11.7      | 11.9    | 12.1     | 12.3     | 17 |
| 16           | 12.4 + | 12.3    | 11.9    | 11.2          | 11.1 -  | 11.2          | 11.4      | 11.5   | 11.7      | 11.9    | 12.1     | 12.3     | 18 |
| 17           | 12.4 + | 12.3    | 11.8    | 11.2          | 11.1 -  | 11.2          | 11.4      | 11.5   | 11.7      | 11.9    | 12.1     | 12.3     | 19 |
| 18           | 12.4 + | 12.3    | 11.8    | 11.2          | 11.1 -  | 11.2          | 11.4      | 11.5   | 11.7      | 11.9    | 12.1     | 12.3     | 20 |
| 19           | 12.4 + | 12.3    | 11.8    | 11.2          | 11.1 -  | 11.2          | 11.5 +    | 11.5   | 11.7      | 11.9    | 12.1     | 12.3     | 21 |
| 20           | 12.4 + | 12.3    | 11.8    | 11.2          | 11.1 -  | 11.2          | 11.5 +    | 11.5   | 11.7      | 11.9    | 12.1     | 12.3     | 22 |
| Min. -       | 12.4 + | 12.3    | 11.8    | 11.1 -        | 11.1 -  | 11.2          | 11.5 +    | 11.5   | 11.7      | 11.9    | 12.1     | 12.3     | 23 |
| 21           | 12.4 + | 12.3    | 11.7    | 11.1 -        | 11.1 -  | 11.2          | 11.4      | 11.6 + | 11.7      | 11.9    | 12.1     | 12.4 +   | 24 |
| 22           | 12.4 + | 12.3    | 11.7    | 11.1 -        | 11.1 -  | 11.2          | 11.4      | 11.6 + | 11.8 +    | 11.9    | 12.1     | 12.4 +   | 25 |
| 23           | 12.4 + | 12.3    | 11.7    | 11.1 -        | 11.1 -  | 11.2          | 11.4      | 11.6 + | 11.8 +    | 11.9    | 12.2 +   | 12.4 +   | 26 |
| 24           | 12.4 + | 12.3    | 11.7    | 11.1 -        | 11.1 -  | 11.2          | 11.4      | 11.6 + | 11.8 +    | 11.9    | 12.2 +   | 12.4 +   | 27 |
| 25           | 12.4 + | 12.3    | 11.6 -  | 11.1 -        | 11.1 -  | 11.2          | 11.4      | 11.6 + | 11.8 +    | 11.9    | 12.2 +   | 12.4 +   | 28 |
| 26           | 12.4 + | 12.2 -  | 11.6 -  | 11.1 -        | 11.1 -  | 11.2          | 11.4      | 11.6 + | 11.8 +    | 12.0 +  | 12.2 +   | 12.4 +   | 29 |
| 27           | 12.4 + | 12.2 -  | 11.6 -  | 11.1 -        | 11.1 -  | 11.2          | 11.4      | 11.6 + | 11.8 +    | 12.0 +  | 12.2 +   | 12.4 +   | 30 |
| 28           | 12.4 + | 12.2 -  | 11.6 -  | 11.1 -        | 11.1 -  | 11.3 +        | 11.4      | 11.6 + | 11.8 +    | 12.0 +  | 12.2 +   | 12.4 +   | 31 |
| 29           | 12.4 + |         | 11.6 -  | 11.1 -        | 11.1 -  | 11.3 +        | 11.4      | 11.6 + | 11.8 +    | 12.0 +  | 12.2 +   | 12.4 +   | 32 |
| 30           | 12.4 + |         | 11.6 -  | 11.1 -        | 11.1 -  | 11.3 +        | 11.4      | 11.6 + | 11.8 +    | 12.0 +  | 12.2 +   | 12.4 +   | 33 |
| 31           | 12.4 + |         | 11.6 -  |               | 11.1 -  |               | 11.4      | 11.6 + |           | 12.0 +  |          | 12.4 +   | 34 |
| Monatsmittel | 12.4 + | 12.3    | 11.9    | 11.3          | 11.1 -  | 11.2          | 11.4      | 11.5   | 11.7      | 11.9    | 12.1     | 12.3     |    |
| Maximum      | 12.4 + | 12.4 +  | 12.2    | 11.6          | 11.2 -  | 11.3          | 11.5      | 11.6   | 11.8      | 12.0    | 12.2     | 12.4 +   |    |
| Datum        | 01.01  | 01.02   | 01.03   | 01.04         | 01.05   | 27.06         | 19.07     | 22.08  | 23.09     | 25.10   | 24.11    | 22.12    |    |
| Minimum      | 12.4 + | 12.2    | 11.5    | 11.1 -        | 11.1 -  | 11.1 -        | 11.3      | 11.4   | 11.6      | 11.8    | 12.0     | 12.2     |    |
| Datum        | 01.01  | 25.02   | 29.03   | 20.04         | 01.05   | 01.06         | 01.07     | 01.08  | 01.09     | 01.10   | 01.11    | 01.12    |    |
| Amplitude    | 0.0 +  | 0.2     | 0.7     | 0.5           | 0.1     | 0.2           | 0.2       | 0.2    | 0.2       | 0.2     | 0.2      | 0.2      |    |
| Jahr 2009    | Mittel | 11.8 °C | Maximum | 12.4 (01.Jan) | Minimum | 11.1 (20.Apr) | Amplitude | 1.3 °C |           |         |          |          |    |



| Periode      | 2006 - 2009 |         |         |                    |         |                    |           |        |      |      |      |      |
|--------------|-------------|---------|---------|--------------------|---------|--------------------|-----------|--------|------|------|------|------|
| Monatsmittel | 12.4 +      | 12.4 +  | 12.2    | 11.8               | 11.3    | 11.2 -             | 11.4      | 11.5   | 11.7 | 12.0 | 12.1 | 12.3 |
| Maximum      | 12.7 +      | 12.7 +  | 12.7 +  | 12.7 +             | 12.2    | 11.9 -             | 12.0      | 12.1   | 12.2 | 12.3 | 12.5 | 12.6 |
| Jahr         | 2008        | 2008    | 2008    | 2008               | 2008    | 2008               | 2008      | 2008   | 2008 | 2007 | 2007 | 2007 |
| Minimum      | 12.2 +      | 12.2 +  | 11.5    | 11.1               | 10.2    | 10.1 -             | 10.3      | 10.6   | 10.9 | 11.2 | 11.7 | 11.9 |
| Jahr         | 2007        | 2009    | 2009    | 2009               | 2006    | 2006               | 2006      | 2006   | 2006 | 2006 | 2006 | 2006 |
| Amplitude    | 0.1 -       | 0.2     | 0.7     | 1.3 +              | 0.5     | 0.2                | 0.3       | 0.3    | 0.3  | 0.5  | 0.2  | 0.3  |
| Jahr         | 2007        | 2009    | 2009    | 2008               | 2006    | 2006               | 2006      | 2006   | 2006 | 2006 | 2006 | 2006 |
| Periode      | Mittel      | 11.8 °C | Maximum | 12.7 (08.Jan 2008) | Minimum | 10.1 (14.Jun 2006) | Amplitude | 2.6 °C |      |      |      |      |

## Darstellung der letzten 4 Jahre



# Grundwasserspiegel im Birstal

Station 20.R.17 Münchenstein

Opm 208415

J18 Reinach Nord

Koordinaten: 612'799.8 / 261'811.5

OK.Abstich = 282.38 m ü.M.

Trottoir

OK. Terrain  
282.53 m ü.M.

Anschluss-Strassenbrücke J18

OK.Rohr  
282.38 m ü.M.

FA GM

4" Rohr  
geschlitz bis 273.03 m ü.M.

Kies-Auffüllung

Grundwasserspiegel

8.46 **274.07 Maximum**  
6.87 09.08.2007  
12.7°C

Lehm  
272.90

12.02 **270.51 h-Jahresmittel**  
3.31 2007

12.34 **270.19 Mittelwert**  
2.99 **1985-2009**

11.8°C  
12.73 **269.80 t-Jahresmittel**  
2.60 1989

13.15 **269.38 Minimum**  
2.18 06.12.1989  
10.1°C

267.20 Fels

UK.Sondierung = 264.90

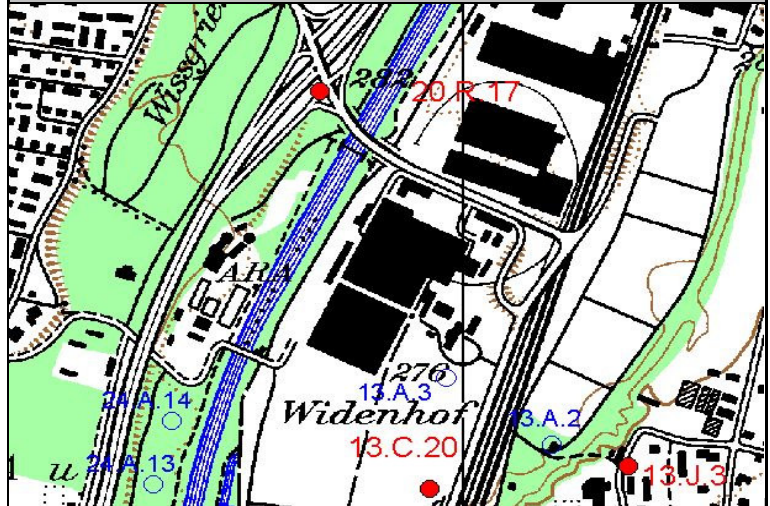
Elsäss.  
Molasse

FA= Flurabstände

GM= Grundwassermächtigkeit

Messwerte: Grundwasserspiegel  
Temperatur

Kartenausschnitt Münchenstein



Situationsplan Münchenstein

