

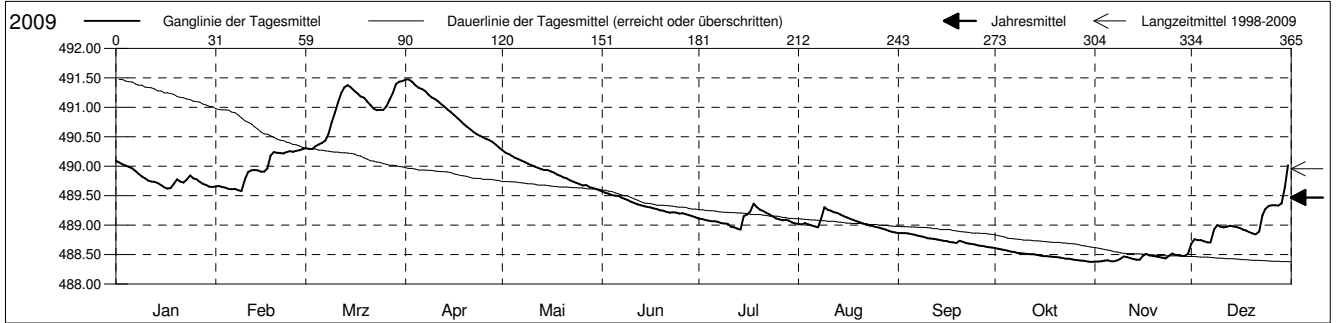
**Grundwasserstände**



Frenketal  
 Oberdorf 92.J.02 Sekundarschule  
 Abstichpunkt: 499.66 m ü.M.  
 OK Terrain: 500.26 m ü.M.

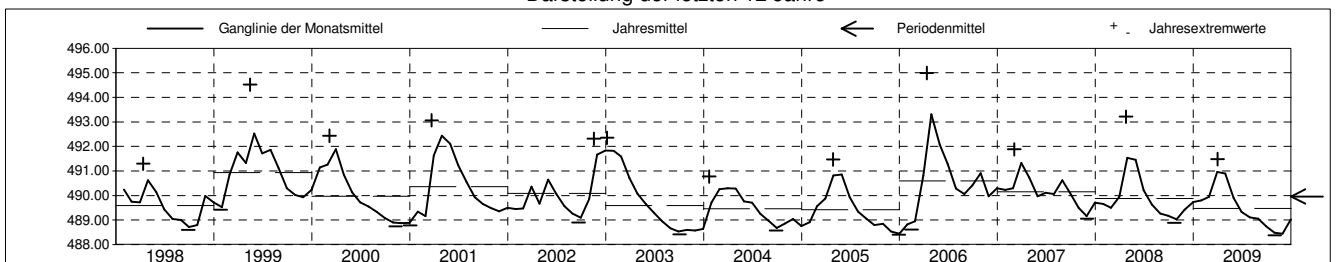
**Amt für Umweltschutz und Energie**  
**Kanton Basel-Landschaft**  
 Koordinaten: 623726.25 / 249322.64

2009	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember	
1	490.09 +	489.66	490.31	491.47 +	490.27 +	489.57 +	489.11	489.02	488.87 +	488.61 +	488.38 -	488.69 -	1
2	490.07	489.66	490.29 -	491.47 +	490.23	489.55	489.10	489.01	488.86	488.60	488.38 -	488.76	2
3	490.03	489.65	490.29 -	491.43	490.21	489.53	489.09	489.03	488.86	488.59	488.38 -	488.74	3
4	490.01	489.63	490.34	491.38	490.18	489.51	489.08	489.01	488.86	488.57	488.40	488.75	4
5	489.99	489.62	490.37	491.33	490.14	489.50	489.07	489.00	488.85	488.57	488.40	488.72	5
Tagesmittel													
6	489.96	489.61	490.40	491.31	490.12	489.50	489.07	488.98	488.84	488.55	488.39	488.71	6
7	489.92	489.61	490.44	491.28	490.09	489.47	489.05	488.96	488.82	488.55	488.39	488.71	7
8	489.87	489.59	490.55	491.22	490.07	489.45	489.03	489.12	488.81	488.53	488.40	488.93	8
9	489.83	489.58 -	490.74	491.17	490.04	489.42	489.03	489.30 +	488.80	488.52	488.43	489.00	9
10	489.79	489.78	490.91	491.14	490.02	489.40	489.02	489.26	488.78	488.52	488.47	488.97	10
11	489.76	489.90	491.09	491.10	490.00	489.38	488.98	489.24	488.77	488.51	488.46	488.96	11
12	489.74	489.93	491.25	491.06	489.97	489.35	488.96	489.22	488.77	488.50	488.44	488.97	12
13	489.73	489.93	491.34	491.01	489.95	489.34	488.94	489.21	488.75	488.50	488.43	488.99	13
14	489.71	489.93	491.38	490.96	489.93	489.32	488.92 -	489.18	488.75	488.49	488.42	488.98	14
15	489.68	489.91	491.34	490.92	489.94	489.31	489.15	489.15	488.73	488.49	488.42	488.97	15
Max. +													
16	489.64	489.91	491.28	490.87	489.91	489.30	489.18	489.13	488.73	488.48	488.48	488.95	16
17	489.62 -	489.96	491.23	490.82	489.89	489.29	489.23	489.11	488.72	488.47	488.51	488.93	17
18	489.63	490.18	491.19	490.77	489.86	489.27	489.36 +	489.09	488.71	488.47	488.49	488.91	18
19	489.70	490.24	491.16	490.72	489.84	489.25	489.30	489.07	488.69	488.46	488.48	488.88	19
20	489.78	490.23	491.10	490.67	489.81	489.24	489.26	489.05	488.74	488.46	488.47	488.86	20
Min. -													
21	489.74	490.22	491.04	490.63	489.79	489.23	489.24	489.03	488.72	488.45	488.46	488.84	21
22	489.72	490.22	490.98	490.58	489.76	489.22	489.21	489.01	488.70	488.44	488.45	488.89	22
23	489.77	490.24	490.95	490.55	489.74	489.22	489.18	489.00	488.69	488.43	488.43	489.17	23
24	489.84	490.26	490.96	490.52	489.72	489.21	489.15	488.99	488.68	488.43	488.48	489.27	24
25	489.80	490.24	490.96	490.49	489.70	489.20	489.11	488.97	488.67	488.42	488.51	489.33	25
26	489.78	490.26	491.02	490.47	489.68	489.20	489.10	488.96	488.65	488.41	488.50	489.34	26
27	489.73	490.27	491.13	490.44	489.68	489.19	489.08	488.94	488.65	488.40	488.49	489.34	27
28	489.70	490.29 +	491.25	490.41	489.65	489.17	489.09	488.92	488.64	488.40	488.48	489.33	28
29	489.68		491.40	490.37	489.63	489.15	489.08	488.90	488.63	488.39	488.48	489.37	29
30	489.65		491.44	490.32 -	489.61	489.13 -	489.05	488.89	488.62 -	488.38 -	488.52 +	489.64	30
31	489.65		491.45 +		489.59 -		489.03	488.88 -		488.38 -		490.02 +	31
Monatsmittel	489.79	489.95	490.95 +	490.90	489.90	489.33	489.10	489.05	488.74	488.48	488.45 -	489.03	
Maximum	490.10	490.31	491.47	491.48 +	490.30	489.58	489.40	489.34	488.88	488.62	488.60 -	490.22	
Datum	01.01	28.02	31.03	01.04	01.05	01.06	18.07	08.08	03.09	01.10	30.11	31.12	
Amplitude	0.49	0.75	1.19	1.18	0.72	0.46	0.48	0.47	0.26	0.25	0.23	1.60	
Jahr 2009	Mittel	489.47 m ü.M.		Maximum	491.48 (01.Apr)		Minimum	488.37 (31.Okt)		Amplitude	3.11 m		



Periode	1998 - 2009												
Monatsmittel	489.89	490.05	490.77	491.04 +	490.77	490.17	489.77	489.53	489.27 -	489.27 -	489.41	489.56	
Maximum	492.35	492.95	493.07	494.99 +	494.52	492.34	492.60	491.69	491.51	491.42 -	492.31	492.14	
Jahr	2003	1999	2001	2006 +	1999	1999	1999	1999	2006	2006	2002	2002	
Minimum	488.61	488.61	489.01	489.53 +	489.50	489.05	488.83	488.55	488.43	488.37 -	488.37 -	488.40	
Jahr	2004	2006	2001	2002 +	2003	2006	1998	2003	2003	2009	2009	2005	
Amplitude	2.16	3.26	4.06 +	3.70	3.52	2.71	1.57	1.74	1.69	1.10 -	2.12	1.81	
Jahr	2004	1999	2001	2006 +	1999	2006	1999	2007	2006	2002	2002	1999	
Periode	Mittel	489.96 m ü.M.		Maximum	494.99 (12.Apr 2006)		Minimum	488.37 (31.Okt 2009)		Amplitude	6.62 m		

Darstellung der letzten 12 Jahre



**Grundwassertemperatur**



Frenketal

Oberdorf

Abstichpunkt:

OK Terrain:

92.J.02

499.66

500.26

Sekundarschule

m ü.M.

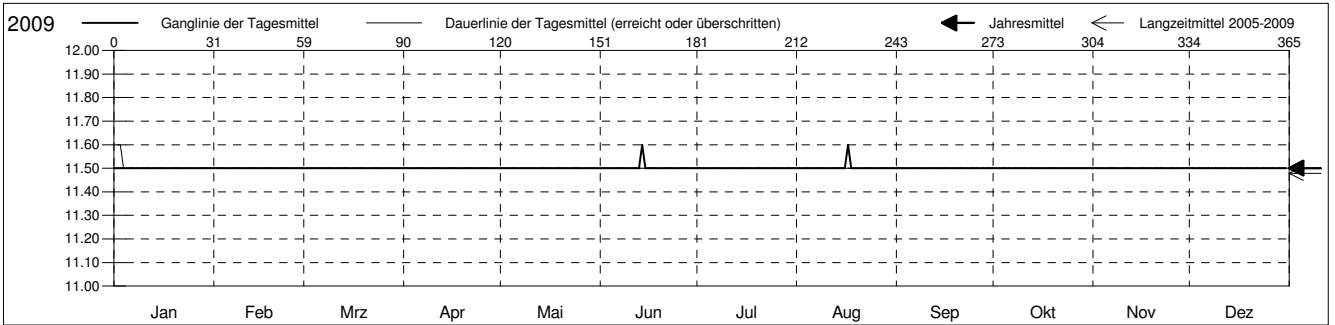
m ü.M.

**Amt für Umweltschutz und Energie**

**Kanton Basel-Landschaft**

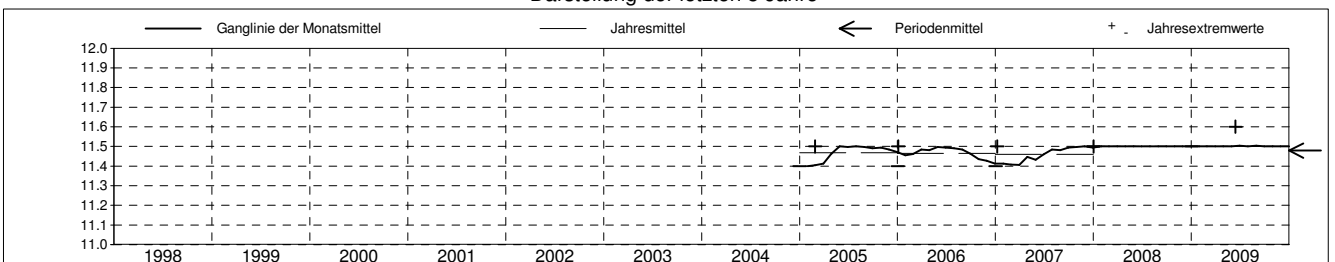
Koordinaten: 623726.25 / 249322.64

2009	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember	
1	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 -	11.5 +	11.5 -	11.5 +	11.5 +	11.5 +	11.5 +	1
2	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 -	11.5 +	11.5 -	11.5 +	11.5 +	11.5 +	11.5 +	2
3	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 -	11.5 +	11.5 -	11.5 +	11.5 +	11.5 +	11.5 +	3
4	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 -	11.5 +	11.5 -	11.5 +	11.5 +	11.5 +	11.5 +	4
5	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 -	11.5 +	11.5 -	11.5 +	11.5 +	11.5 +	11.5 +	5
Tagesmittel													
6	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 -	11.5 +	11.5 -	11.5 +	11.5 +	11.5 +	11.5 +	6
7	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 -	11.5 +	11.5 -	11.5 +	11.5 +	11.5 +	11.5 +	7
8	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 -	11.5 +	11.5 -	11.5 +	11.5 +	11.5 +	11.5 +	8
9	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 -	11.5 +	11.5 -	11.5 +	11.5 +	11.5 +	11.5 +	9
10	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 -	11.5 +	11.5 -	11.5 +	11.5 +	11.5 +	11.5 +	10
11	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 -	11.5 +	11.5 -	11.5 +	11.5 +	11.5 +	11.5 +	11
12	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 -	11.5 +	11.5 -	11.5 +	11.5 +	11.5 +	11.5 +	12
13	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 -	11.5 +	11.5 -	11.5 +	11.5 +	11.5 +	11.5 +	13
14	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.6 +	11.5 +	11.5 -	11.5 +	11.5 +	11.5 +	11.5 +	14
Max. +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 -	11.5 +	11.5 -	11.5 +	11.5 +	11.5 +	11.5 +	15
16	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 -	11.5 +	11.5 -	11.5 +	11.5 +	11.5 +	11.5 +	16
17	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 -	11.5 +	11.6 +	11.5 +	11.5 +	11.5 +	11.5 +	17
18	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 -	11.5 +	11.5 -	11.5 +	11.5 +	11.5 +	11.5 +	18
19	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 -	11.5 +	11.5 -	11.5 +	11.5 +	11.5 +	11.5 +	19
20	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 -	11.5 +	11.5 -	11.5 +	11.5 +	11.5 +	11.5 +	20
Min. -	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 -	11.5 +	11.5 -	11.5 +	11.5 +	11.5 +	11.5 +	21
21	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 -	11.5 +	11.5 -	11.5 +	11.5 +	11.5 +	11.5 +	21
22	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 -	11.5 +	11.5 -	11.5 +	11.5 +	11.5 +	11.5 +	22
23	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 -	11.5 +	11.5 -	11.5 +	11.5 +	11.5 +	11.5 +	23
24	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 -	11.5 +	11.5 -	11.5 +	11.5 +	11.5 +	11.5 +	24
25	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 -	11.5 +	11.5 -	11.5 +	11.5 +	11.5 +	11.5 +	25
26	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 -	11.5 +	11.5 -	11.5 +	11.5 +	11.5 +	11.5 +	26
27	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 -	11.5 +	11.5 -	11.5 +	11.5 +	11.5 +	11.5 +	27
28	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 -	11.5 +	11.5 -	11.5 +	11.5 +	11.5 +	11.5 +	28
29	11.5 +		11.5 +	11.5 +	11.5 +	11.5 -	11.5 +	11.5 -	11.5 +	11.5 +	11.5 +	11.5 +	29
30	11.5 +		11.5 +	11.5 +	11.5 +	11.5 -	11.5 +	11.5 -	11.5 +	11.5 +	11.5 +	11.5 +	30
31	11.5 +		11.5 +		11.5 +		11.5 +	11.5 -		11.5 +		11.5 +	31
Monatsmittel	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	
Maximum	11.5 -	11.5 -	11.5 -	11.5 -	11.5 -	11.6 +	11.5 -	11.6 +	11.5 -	11.5 -	11.5 -	11.5 -	
Datum	01.01	01.02	01.03	01.04	01.05	14.06	01.07	17.08	01.09	01.10	01.11	01.12	
Minimum	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	
Datum	01.01	01.02	01.03	01.04	01.05	01.06	01.07	01.08	01.09	01.10	01.11	01.12	
Amplitude	0.0 +	0.0 +	0.0 +	0.0 +	0.0 +	0.1	0.0 +	0.1	0.0 +	0.0 +	0.0 +	0.0 +	
Jahr 2009	Mittel	11.5 °C		Maximum	11.6 (14.Jun)		Minimum	11.5 (01.Jan)		Amplitude	0.1 °C		



Periode	2005 - 2009												
Monatsmittel	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +	11.5 +
Maximum	11.5 -	11.5 -	11.5 -	11.5 -	11.5 -	11.6 +	11.5 -	11.6 +	11.5 -	11.5 -	11.5 -	11.5 -	11.5 -
Jahr	2006	2005	2005	2005	2005	2009	2005	2009	2005	2005	2005	2005	2005
Minimum	11.4 +	11.4 +	11.4 +	11.4 +	11.4 +	11.4 +	11.4 +	11.4 +	11.4 +	11.4 +	11.4 +	11.4 +	11.4 +
Jahr	2005	2005	2005	2005	2006	2005	2006	2005	2005	2005	2005	2005	2005
Amplitude	0.1 +	0.1 +	0.1 +	0.1 +	0.1 +	0.1 +	0.1 +	0.1 +	0.1 +	0.1 +	0.1 +	0.1 +	0.1 +
Jahr	2006	2005	2005	2005	2006	2005	2006	2005	2005	2005	2005	2005	2005
Periode	Mittel	11.5 °C		Maximum	11.6 (14.Jun 2009)		Minimum	11.4 (01.Jan 2005)		Amplitude	0.2 °C		

Darstellung der letzten 5 Jahre



**Leitfähigkeit**



Frenketal

Oberdorf

Abstichpunkt:

OK Terrain:

92.J.02

499.66

500.26

Sekundarschule

m ü.M.

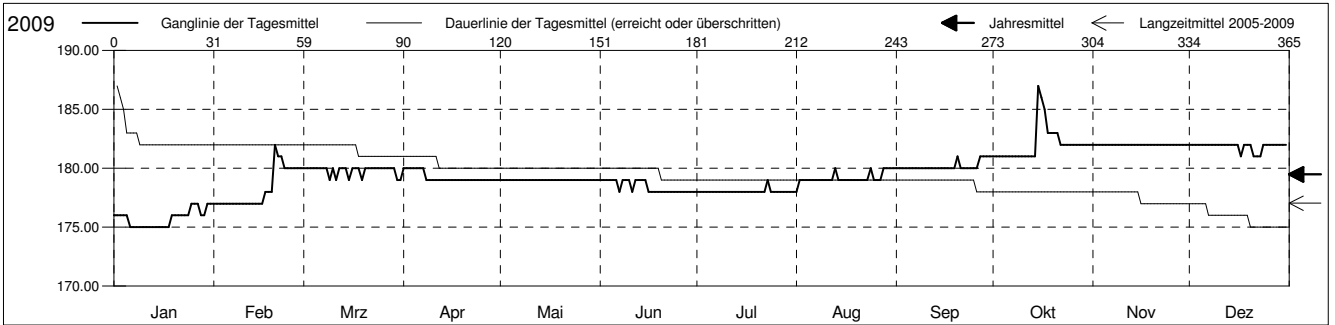
m ü.M.

**Amt für Umweltschutz und Energie**

**Kanton Basel-Landschaft**

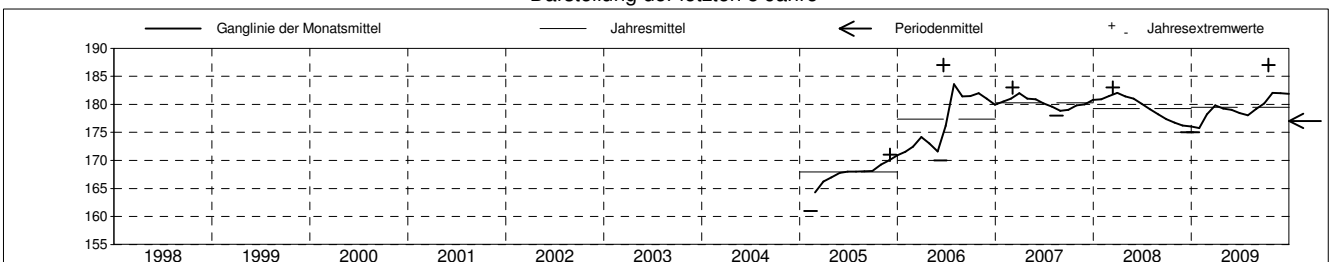
Koordinaten: 623726.25 / 249322.64

2009	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember	
1	176	177 -	180 +	180 +	179 +	179 +	178 -	178 -	180 -	181 -	182 +	182 +	1
2	176	177 -	180 +	180 +	179 +	179 +	178 -	179	180 -	181 -	182 +	182 +	2
3	176	177 -	180 +	180 +	179 +	179 +	178 -	179	180 -	181 -	182 +	182 +	3
4	176	177 -	180 +	180 +	179 +	179 +	178 -	179	180 -	181 -	182 +	182 +	4
5	176	177 -	180 +	180 +	179 +	179 +	178 -	179	180 -	181 -	182 +	182 +	5
Tagesmittel													
6	175 -	177 -	180 +	180 +	179 +	179 +	178 -	179	180 -	181 -	182 +	182 +	6
7	175 -	177 -	180 +	180 +	179 +	178 -	178 -	179	180 -	181 -	182 +	182 +	7
8	175 -	177 -	180 +	179 -	179 +	179 +	178 -	179	180 -	181 -	182 +	182 +	8
9	175 -	177 -	179 -	179 -	179 +	179 +	178 -	179	180 -	181 -	182 +	182 +	9
10	175 -	177 -	180 +	179 -	179 +	179 +	178 -	179	180 -	181 -	182 +	182 +	10
11	175 -	177 -	179 -	179 -	179 +	178 -	178 -	179	180 -	181 -	182 +	182 +	11
12	175 -	177 -	180 +	179 -	179 +	179 +	178 -	179	180 -	181 -	182 +	182 +	12
13	175 -	177 -	180 +	179 -	179 +	179 +	178 -	180 +	180 -	181 -	182 +	182 +	13
14	175 -	177 -	180 +	179 -	179 +	179 +	178 -	179	180 -	181 -	182 +	182 +	14
15	175 -	177 -	179 -	179 -	179 +	179 +	178 -	179	180 -	187 +	182 +	182 +	15
Max. +													
16	175 -	177 -	180 +	179 -	179 +	178 -	178 -	179	180 -	186	182 +	182 +	16
17	175 -	178	180 +	179 -	179 +	178 -	178 -	179	180 -	185	182 +	181 -	17
18	175 -	178	180 +	179 -	179 +	178 -	178 -	179	180 -	183	182 +	182 +	18
19	176	178	179 -	179 -	179 +	178 -	178 -	179	180 -	183	182 +	182 +	19
20	176	182 +	180 +	179 -	179 +	178 -	178 -	179	181 +	183	182 +	182 +	20
Min. -													
21	176	181	180 +	179 -	179 +	178 -	178 -	179	180 -	183	182 +	181 -	21
22	176	181	180 +	179 -	179 +	178 -	178 -	179	180 -	182	182 +	181 -	22
23	176	180	180 +	179 -	179 +	178 -	179 +	179	180 -	182	182 +	181 -	23
24	176	180	180 +	179 -	179 +	178 -	178 -	180 +	180 -	182	182 +	182 +	24
25	177 +	180	180 +	179 -	179 +	178 -	178 -	179	180 -	182	182 +	182 +	25
26	177 +	180	180 +	179 -	179 +	178 -	178 -	179	180 -	182	182 +	182 +	26
27	177 +	180	180 +	179 -	179 +	178 -	178 -	179	181 +	182	182 +	182 +	27
28	176	180	180 +	179 -	179 +	178 -	178 -	180 +	181 +	182	182 +	182 +	28
29	176		180 +	179 -	179 +	178 -	178 -	180 +	181 +	182	182 +	182 +	29
30	177 +		179 -	179 -	179 +	178 -	178 -	180 +	181 +	182	182 +	182 +	30
31	177 +		179 -		179 +		178 -	180 +		182		182 +	31
Monatsmittel	176 -	178	180	179	179	178	178	179	180	182 +	182 +	182 +	
Maximum	177 -	182	180	180	179	179	179	180	181	187 +	182	182	
Datum	25.01	20.02	01.03	01.04	01.05	01.06	23.07	13.08	20.09	15.10	01.11	01.12	
Minimum	175 -	177	179	179	179	178	178	178	180	181	182 +	181	
Datum	06.01	01.02	09.03	08.04	01.05	07.06	01.07	01.08	01.09	01.10	01.11	17.12	
Amplitude	2	5	1	1	0 +	1	1	2	1	6	0 +	1	
Jahr 2009	Mittel	179 µs/cm	Maximum	187 (15.Okt)	Minimum	175 (06.Jan)	Amplitude	12 µs/cm					



Periode	2005 - 2009												
Monatsmittel	177	175 -	177	176	176	177	178 +	177	177	178 +	178 +	178 +	
Maximum	181 -	182	183	182	181 -	187 +	184	183	182	187 +	182	182	
Jahr	2007	2008	2007	2007	2007	2006	2006	2006	2006	2009	2006	2009	
Minimum	171 +	161 -	165	167	167	168	168	168	167	169	170	170	
Jahr	2006	2005	2005	2005	2005	2005	2005	2005	2005	2005	2005	2005	
Amplitude	2	5	4	2	1 -	17 +	1 -	3	2	6	1 -	2	
Jahr	2009	2009	2006	2006	2005	2006	2006	2006	2005	2009	2006	2006	
Periode	Mittel	177 µs/cm	Maximum	187 (20.Jun 2006)	Minimum	161 (10.Feb 2005)	Amplitude	26 µs/cm					

Darstellung der letzten 5 Jahre



# Grundwasserspiegel im Frenketal

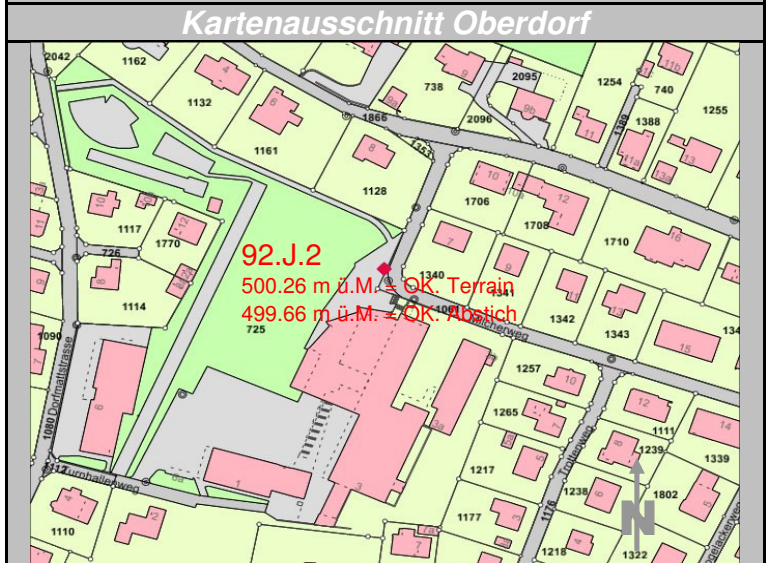
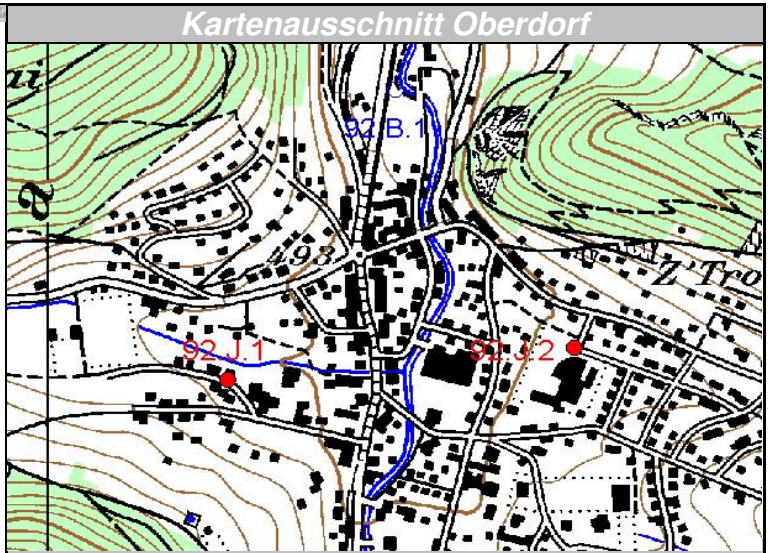
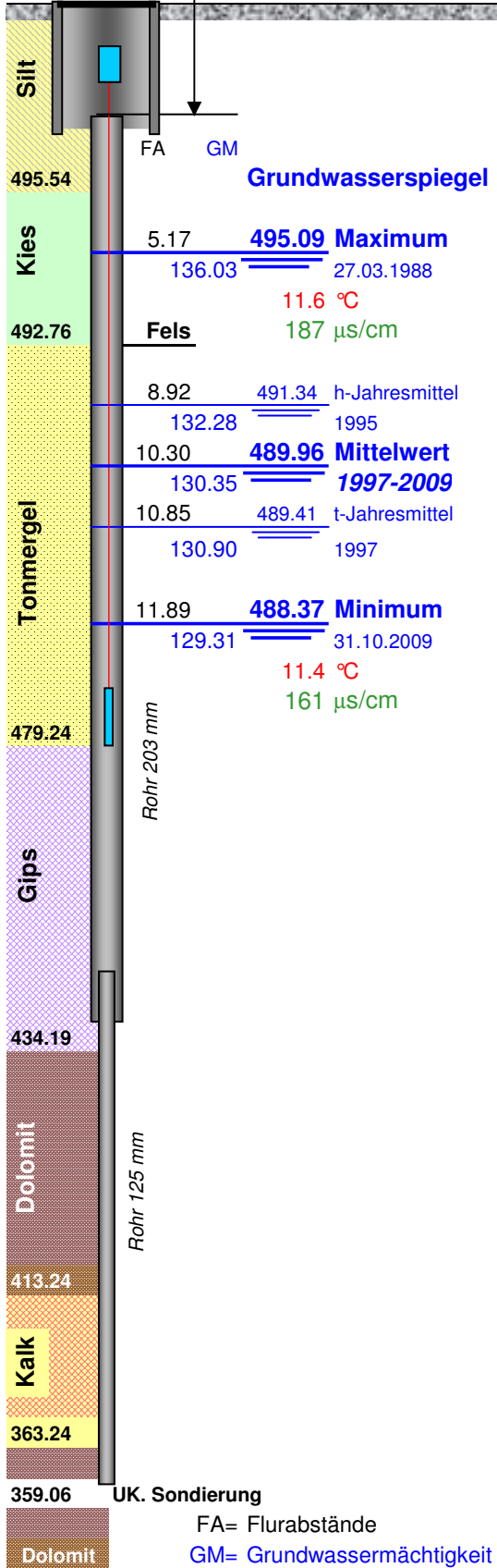
Station 92.J.2 Oberdorf  
Felsgrundwasser

Sekundarschule

Koordinaten: 623'726.25 / 249'322.64

Messwerte: Grundwasserspiegel  
Temperatur (ab 2005)  
Leitfähigkeit (ab 2005)

OK. Abstich "Blechabdeckung"  
499.66 m ü.M. OK. Terrain = Schulhausplatz  
500.26 m ü.M.



FA= Flurabstände  
GM= Grundwassermächtigkeit in m