

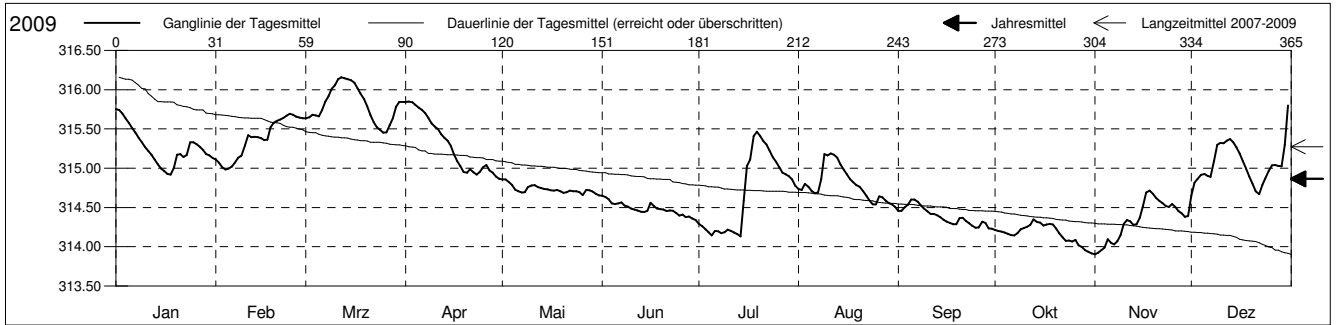
Grundwasserstände



Frenketal
 Liestal 39.G.10 Bus Altmarkt
 Abstichpunkt: 327.17 m ü.M.
 OK Terrain: 327.35 m ü.M.

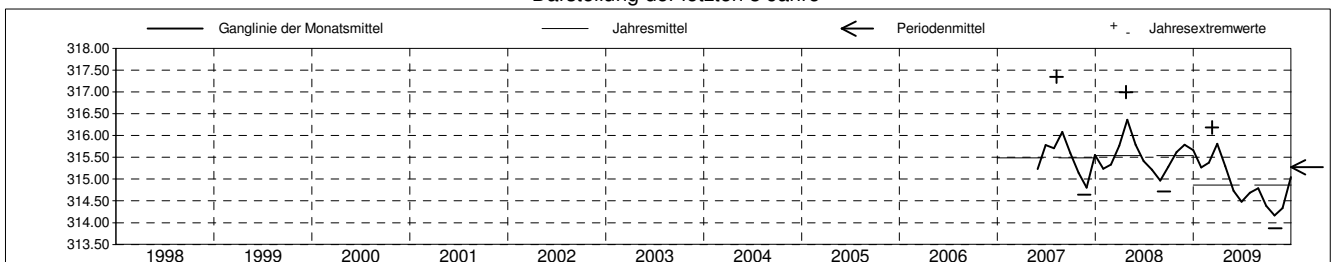
Amt für Umweltschutz und Energie
 Kanton Basel-Landschaft
 Koordinaten: 623090.81 / 258597.09

2009	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember	
1	315.75 +	315.11	315.64	315.85 +	314.86 +	314.65 +	314.29	314.73	314.46	314.21	313.91 -	314.65 -	1
2	315.74	315.07	315.65	315.85 +	314.86 +	314.63	314.26	314.72	314.46	314.20	313.93	314.82	2
3	315.70	315.01	315.68	315.84	314.83	314.60	314.22	314.80	314.50	314.19	313.96	314.87	3
4	315.64	314.99 -	315.67	315.81	314.79	314.55	314.18	314.77	314.54	314.18	313.99	314.92	4
5	315.58	314.99 -	315.66	315.77	314.73	314.54	314.15	314.71	314.60 +	314.16	314.09	314.93	5
Tagesmittel													
6	315.51	315.02	315.74	315.74	314.71	314.55	314.20	314.68	314.60 +	314.15	314.05	314.90	6
7	315.45	315.07	315.85	315.70	314.69	314.56	314.20	314.69	314.57	314.14	314.03	314.89	7
8	315.39	315.14	315.92	315.64	314.70	314.52	314.18	314.86	314.53	314.18	314.07	315.09	8
9	315.33	315.16	316.01	315.57	314.76	314.51	314.18	315.18	314.49	314.22	314.15	315.30	9
10	315.27	315.29	316.06	315.53	314.78	314.49	314.22	315.16	314.45	314.24	314.29	315.32	10
11	315.22	315.42	316.13	315.50	314.78	314.48	314.20	315.19 +	314.42	314.26	314.34	315.32	11
12	315.17	315.39	316.16 +	315.43	314.76	314.46	314.18	315.17	314.42	314.28	314.33	315.35	12
13	315.11	315.40	316.15	315.39	314.75	314.45	314.16	315.13	314.40	314.35 +	314.28	315.37	13
14	315.05	315.40	316.14	315.35	314.74	314.44	314.13 -	315.05	314.38	314.32	314.29	315.33	14
Max. +	315.00	315.38	316.12	315.28	314.73	314.46	314.59	314.99	314.34	314.31	314.37	315.27	15
16	314.96	315.36	316.09	315.17	314.72	314.56	315.03	314.92	314.32	314.27	314.52	315.19	16
17	314.93	315.36	316.02	315.09	314.72	314.52	315.11	314.86	314.30	314.28	314.69	315.09	17
18	314.92 -	315.52	315.95	315.02	314.72	314.49	315.41	314.82	314.29	314.29	314.72 +	314.99	18
19	315.00	315.58	315.88	314.95	314.71	314.48	315.47 +	314.78	314.29	314.28	314.67	314.89	19
Min. -	315.17	315.60	315.79	314.94	314.69	314.48	315.41	314.76	314.36	314.23	314.62	314.80	20
21	315.18	315.62	315.68	314.99	314.69	314.45	315.35	314.71	314.37	314.17	314.58	314.71	21
22	315.14	315.64	315.59	314.95	314.72	314.46	315.30	314.65	314.33	314.12	314.56	314.67	22
23	315.17	315.67	315.52	314.92	314.71	314.46	315.22	314.59	314.30	314.08	314.52	314.79	23
24	315.33	315.70 +	315.49	314.95	314.71	314.43	315.14	314.54	314.27	314.08	314.51	314.87	24
25	315.33	315.68	315.45 -	315.01	314.69	314.40	315.08	314.54	314.24	314.07	314.54	314.97	25
26	315.31	315.66	315.46	315.04	314.66	314.41	315.01	314.64	314.25	314.09	314.51	315.04	26
27	315.27	315.64	315.55	314.97	314.72	314.37	314.94	314.63	314.32	314.02	314.45	315.04	27
28	315.23	315.64	315.64	314.94	314.72	314.38	314.93	314.59	314.31	314.00	314.43	315.03	28
29	315.18		315.78	314.89	314.70	314.36	314.90	314.56	314.23 -	313.96	314.38	315.03	29
30	315.16		315.85	314.87 -	314.67	314.34 -	314.86	314.54	314.23 -	313.94	314.39	315.30	30
31	315.13		315.84		314.65 -		314.78	314.51 -		313.92 -		315.80 +	31
Monatsmittel	315.27	315.38	315.81 +	315.30	314.73	314.48	314.69	314.79	314.38	314.17 -	314.34	315.05	
Maximum	315.76	315.73	316.18 +	315.89	314.89	314.68	315.50	315.22	314.63	314.36 -	314.73	316.09	
Datum	01.01	24.02	11.03	02.04	01.05	01.06	19.07	11.08	05.09	13.10	18.11	31.12	
Amplitude	0.88	0.78	0.77	1.04	0.27	0.37	1.39	0.73	0.42	0.46	0.85	1.57	
Jahr 2009	Mittel	314.86 m ü.M.		Maximum	316.18 (11.Mrz)		Minimum	313.88 (02.Nov)		Amplitude	2.31 m		



Periode	2007 - 2009												
Monatsmittel	315.25	315.36	315.79	315.83 +	315.25	315.23	315.20	315.28	315.09	314.98 -	314.98 -	315.42	
Maximum	315.76	315.73 -	316.18	316.99	316.50	316.46	316.03	317.35 +	316.30	316.78	316.76	316.29	
Jahr	2009	2009	2009	2008	2008	2007	2007	2007	2008	2008	2008	2008	
Minimum	314.88	314.96	315.22 +	314.85	314.63	314.31	314.11	314.48	314.21	313.90	313.88 -	314.52	
Jahr	2009	2009	2008	2009	2009	2009	2009	2009	2009	2009	2009	2009	
Amplitude	0.88	0.78 -	0.87	1.30	1.06	1.23	1.39	2.13 +	1.58	1.79	1.42	1.57	
Jahr	2009	2009	2008	2008	2008	2007	2009	2007	2008	2008	2008	2010	
Periode	Mittel	315.27 m ü.M.		Maximum	317.35 (09.Aug 2007)		Minimum	313.88 (02.Nov 2009)		Amplitude	3.47 m		

Darstellung der letzten 3 Jahre



Grundwassertemperatur



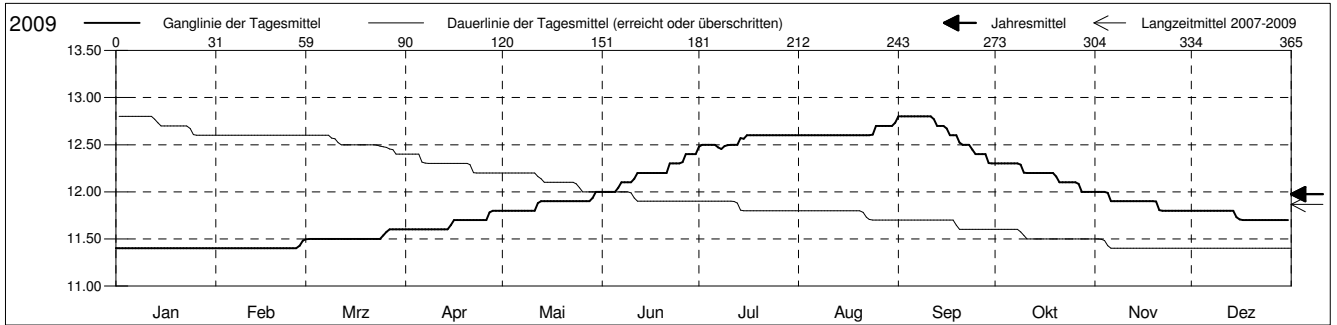
Frenketal

Liestal 39.G.10 Bus Altmarkt
 Abstichpunkt: 327.17 m ü.M.
 OK Terrain: 327.35 m ü.M.

Amt für Umweltschutz und Energie

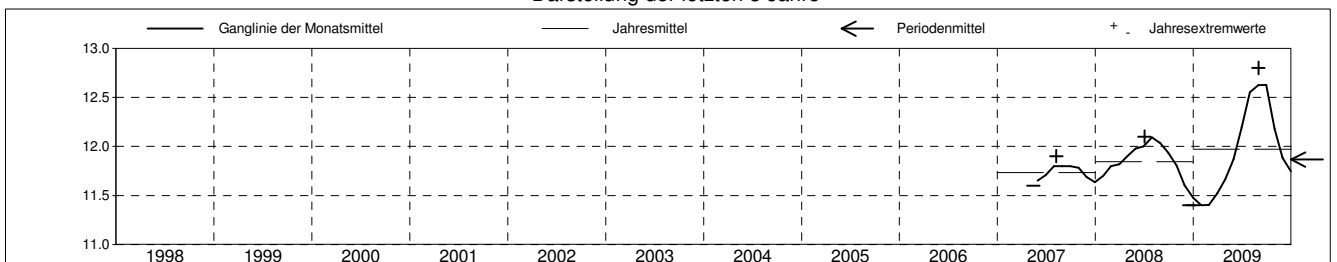
Kanton Basel-Landschaft
 Koordinaten: 623090.81 / 258597.09

2009	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember	
1	11.4 +	11.4 -	11.5 -	11.6 -	11.8 -	12.0 -	12.5 -	12.6 -	12.8 +	12.3 +	12.0 +	11.8 +	1
2	11.4 +	11.4 -	11.5 -	11.6 -	11.8 -	12.0 -	12.5 -	12.6 -	12.8 +	12.3 +	12.0 +	11.8 +	2
3	11.4 +	11.4 -	11.5 -	11.6 -	11.8 -	12.0 -	12.5 -	12.6 -	12.8 +	12.3 +	12.0 +	11.8 +	3
4	11.4 +	11.4 -	11.5 -	11.6 -	11.8 -	12.0 -	12.5 -	12.6 -	12.8 +	12.3 +	12.0 +	11.8 +	4
5	11.4 +	11.4 -	11.5 -	11.6 -	11.8 -	12.0 -	12.5 -	12.6 -	12.8 +	12.3 +	12.0 +	11.8 +	5
Tagesmittel													
6	11.4 +	11.4 -	11.5 -	11.6 -	11.8 -	12.0 -	12.5 -	12.6 -	12.8 +	12.3 +	11.9	11.8 +	6
7	11.4 +	11.4 -	11.5 -	11.6 -	11.8 -	12.1	12.5 -	12.6 -	12.8 +	12.3 +	11.9	11.8 +	7
8	11.4 +	11.4 -	11.5 -	11.6 -	11.8 -	12.1	12.5 -	12.6 -	12.8 +	12.3 +	11.9	11.8 +	8
9	11.4 +	11.4 -	11.5 -	11.6 -	11.8 -	12.1	12.5 -	12.6 -	12.8 +	12.3 +	11.9	11.8 +	9
10	11.4 +	11.4 -	11.5 -	11.6 -	11.8 -	12.1	12.5 -	12.6 -	12.8 +	12.2	11.9	11.8 +	10
11	11.4 +	11.4 -	11.5 -	11.6 -	11.8 -	12.1	12.5 -	12.6 -	12.8 +	12.2	11.9	11.8 +	11
12	11.4 +	11.4 -	11.5 -	11.6 -	11.9	12.2	12.5 -	12.6 -	12.8 +	12.2	11.9	11.8 +	12
13	11.4 +	11.4 -	11.5 -	11.6 -	11.9	12.2	12.5 -	12.6 -	12.7	12.2	11.9	11.8 +	13
14	11.4 +	11.4 -	11.5 -	11.6 -	11.9	12.2	12.6 +	12.6 -	12.7	12.2	11.9	11.8 +	14
15	11.4 +	11.4 -	11.5 -	11.6 -	11.9	12.2	12.6 +	12.6 -	12.7	12.2	11.9	11.7 -	15
Max. +													
16	11.4 +	11.4 -	11.5 -	11.7	11.9	12.2	12.6 +	12.6 -	12.7	12.2	11.9	11.7 -	16
17	11.4 +	11.4 -	11.5 -	11.7	11.9	12.2	12.6 +	12.6 -	12.6	12.2	11.9	11.7 -	17
18	11.4 +	11.4 -	11.5 -	11.7	11.9	12.2	12.6 +	12.6 -	12.6	12.2	11.9	11.7 -	18
19	11.4 +	11.4 -	11.5 -	11.7	11.9	12.2	12.6 +	12.6 -	12.6	12.2	11.9	11.7 -	19
20	11.4 +	11.4 -	11.5 -	11.7	11.9	12.2	12.6 +	12.6 -	12.5	12.2	11.9	11.7 -	20
Min. -													
21	11.4 +	11.4 -	11.5 -	11.7	11.9	12.2	12.6 +	12.6 -	12.5	12.1	11.8 -	11.7 -	21
22	11.4 +	11.4 -	11.5 -	11.7	11.9	12.3	12.6 +	12.6 -	12.5	12.1	11.8 -	11.7 -	22
23	11.4 +	11.4 -	11.5 -	11.7	11.9	12.3	12.6 +	12.6 -	12.5	12.1	11.8 -	11.7 -	23
24	11.4 +	11.4 -	11.5 -	11.7	11.9	12.3	12.6 +	12.6 -	12.4	12.1	11.8 -	11.7 -	24
25	11.4 +	11.4 -	11.5 -	11.7	11.9	12.3	12.6 +	12.7 +	12.4	12.1	11.8 -	11.7 -	25
26	11.4 +	11.4 -	11.6 +	11.7	11.9	12.3	12.6 +	12.7 +	12.4	12.1	11.8 -	11.7 -	26
27	11.4 +	11.4 -	11.6 +	11.8 +	11.9	12.4 +	12.6 +	12.7 +	12.4	12.1	11.8 -	11.7 -	27
28	11.4 +	11.5 +	11.6 +	11.8 +	11.9	12.4 +	12.6 +	12.7 +	12.4	12.0 -	11.8 -	11.7 -	28
29	11.4 +		11.6 +	11.8 +	11.9	12.4 +	12.6 +	12.7 +	12.3 -	12.0 -	11.8 -	11.7 -	29
30	11.4 +		11.6 +	11.8 +	12.0 +	12.4 +	12.6 +	12.7 +	12.3 -	12.0 -	11.8 -	11.7 -	30
31	11.4 +		11.6 +		12.0 +		12.6 +	12.7 +		12.0 -		11.7 -	31
Monatsmittel	11.4 -	11.4 -	11.5	11.7	11.9	12.2	12.6 +	12.6 +	12.6 +	12.2	11.9	11.7	
Maximum	11.4 -	11.5	11.6	11.8	12.0	12.4	12.6	12.8 +	12.8 +	12.3	12.0	11.8	
Datum	01.01	27.02	25.03	27.04	29.05	26.06	14.07	31.08	01.09	01.10	01.11	01.12	
Minimum	11.4 -	11.4 -	11.4 -	11.6	11.8	12.0	12.4	12.6 +	12.3	12.0	11.8	11.7	
Datum	01.01	01.02	01.03	01.04	01.05	01.06	01.07	01.08	29.09	27.10	20.11	15.12	
Amplitude	0.0 +	0.1	0.2	0.2	0.2	0.4	0.2	0.2	0.5	0.3	0.2	0.1	
Jahr 2009	Mittel	12.0 °C		Maximum	12.8 (31.Aug)		Minimum	11.4 (01.Jan)		Amplitude	1.4 °C		



Periode	2007 - 2009												
Monatsmittel	11.6 -	11.6 -	11.7	11.8	11.8	12.0	12.1	12.2 +	12.1	11.9	11.7	11.6 -	
Maximum	11.8 -	11.8 -	11.9	12.0	12.0	12.4	12.6	12.8 +	12.8 +	12.3	12.0	11.8 -	
Jahr	2008	2008	2008	2008	2008	2009	2009	2009	2009	2009	2009	2009	
Minimum	11.4 -	11.4 -	11.4 -	11.6	11.6	11.7	11.8 +	11.8 +	11.8 +	11.7	11.5	11.4 -	
Jahr	2009	2009	2009	2009	2007	2007	2007	2007	2007	2007	2008	2008	
Amplitude	0.2	0.1 -	0.2	0.2	0.2	0.4	0.2	0.2	0.5 +	0.3	0.2	0.1 -	
Jahr	2008	2009	2009	2009	2009	2009	2009	2009	2009	2009	2008	2008	
Periode	Mittel	11.9 °C		Maximum	12.8 (31.Aug 2009)		Minimum	11.4 (16.Dez 2008)		Amplitude	1.4 °C		

Darstellung der letzten 3 Jahre



Grundwasserspiegel im Frenketal

Station 39.G.10 Liestal

Opm 219632

Bus Altmarkt

Koordinaten: 623'090.8 / 258'597.1

Messwerte: **Grundwasserspiegel**
Temperatur

OK. Terrain
327.35 m ü.M.

OK.Rohr
327.17 m ü.M.

FA GM

Grundwasserspiegel

Kies-Schotter

10.00	317.35	Maximum
14.80		09.08.2007 12.8 °C
12.08	315.27	Mittelwert
12.72		2007-2009 11.9 °C
13.47	313.88	Minimum
11.33		02.11.2009 11.4 °C

Sondenhöhe = 310.17

4.5" HPE-Rohr
geschliffen von 304.31 bis 315.74m ü.M.

302.55

Fels

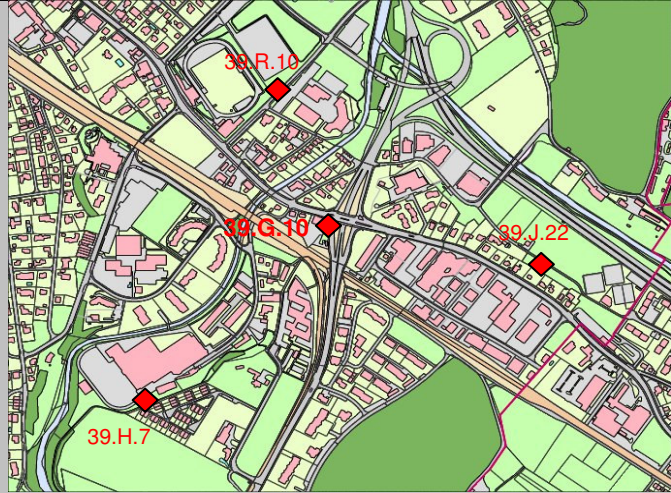
Opalinus-
ton (Dogger)

UK. Sondierung
301.35

FA= Flurabstände

GM= Grundwassermächtigkeit in m

Kartenausschnitt Liestal



Situationsplan Liestal

