

Messungen Ebene Platte (KWK3) vor Kanal MWK1 13.01.2018

g = 9.8066 m/s² Erdbeschleunigung
s = 0.1 m Spannweite
l = 0.06 m Flügeltiefe
A = 0.006 m² Grundfläche
rho = 1.2 kg/m³ Luftdichte
1/2*rho*A = 0.0036 kg/m = 3.6 g/m

Der Support steht beim MWK1 im Luftstrom.
F_A und F_W ohne Tragfläche gemessen.
Support bei 12 m/s

<F_A_S>	<F_W_S>	
21.94	348.45	[mN]

Widerstand und Auftrieb um F_X_S korrigiert.
X steht für A bzw. W.

U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W	<F_A>	<F_W>	<c_A>	<C_W>
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]	[mN]	[mN]	[-]	[-]
0	0	13:13	42.313	-0.04	0.05	-0.098	0.490	-0.098	0.490		
		13:13	42.847	-0.04	0.05	-0.098	0.490				
		13:13	43.630	-0.04	0.05	-0.098	0.490				
		13:13	44.310	-0.04	0.05	-0.098	0.490				
		13:13	44.414	-0.04	0.05	-0.098	0.490				
		13:13	44.826	-0.04	0.05	-0.098	0.490				
		13:13	45.598	-0.04	0.05	-0.098	0.490				
		13:13	45.955	-0.04	0.05	-0.098	0.490				
		13:13	46.383	-0.04	0.05	-0.098	0.490				
		13:13	47.167	-0.04	0.05	-0.098	0.490				
		13:13	48.450	-0.04	0.05	-0.098	0.490				
		13:13	48.706	-0.04	0.05	-0.098	0.490				
12	0	13:14	39.814	-40.46	39.84	6.080	390.695	-18.040	46.710	-0.035	0.090
		13:14	40.250	-39.56	40.91	-13.239	401.188				
		13:14	41.240	-41.16	40.94	2.157	401.482				
		13:14	41.438	-41.08	40.53	5.394	397.461				
		13:14	41.781	-40.63	40.28	3.432	395.010				
		13:14	43.324	-41.14	40.07	10.493	392.950				
		13:14	43.439	-41.12	40.06	10.395	392.852				
		13:14	43.749	-41.14	40.64	4.903	398.540				
		13:14	44.564	-40.7	40.06	6.276	392.852				
		13:14	44.985	-41.15	39.99	11.376	392.166				
		13:14	45.357	-41.62	39.61	19.711	388.439				
		13:14	46.148	-40.59	39.69	8.826	389.224				
		13:14	46.529	-40.68	39.75	9.120	389.812				

Hinweis 1. Die durchgehenden Datenzeilen mit den Mittelwerten können für das Tabellenblatt "Auswertung" in einem Kopiervorgang kopiert werden:
- Zeilennummer anklicken
- zur nächsten Zeile gehen und diese mit gedrückter STRG/CTRL-Taste anklicken.
Bis auf den ersten Mittelwert (12 m/s, 0°) mit 22 Einzelwerten sind alle anderen Mittelwerte über 12 Einzelwerte gemittelt.

Hinweis 2. Die Korrektur der Werte mit den Daten des Supports erst bei den Mittelwerten.
Das Konzept der Waagenanordnung bedingt, dass für den {Messwert} gilt:
{Waage A} * g = -(F_A + F_W)
Deshalb ergibt sich F_A aus
F_A = [-{Waage A} - {Waage B}] * g
Für die **Bildung der Mittelwerte** gilt z.B. bei 12 m/s und 2 deg Anstellwinkel:
I50 = MITTELWERT(G50:G61)-\$J\$6
J50 = MITTELWERT(H50:H61)-\$K\$6

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13:14	46.944	-40.88	39.75	11.081	389.812
13:14	47.712	-40.28	40.27	0.098	394.912
13:14	48.700	-40.38	40.77	-3.825	399.815
13:14	49.535	-40.62	40.99	-3.628	401.973
13:14	49.670	-40.27	40.64	-3.628	398.540
13:14	50.380	-39.86	40.5	-6.276	397.167
13:14	50.480	-40.32	40.53	-2.059	397.461
13:14	51.249	-40.99	40.78	2.059	399.913
13:14	51.649	-40.61	39.9	6.963	391.283

U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	2	13:17	33.216	-45.95	40.53	53.152	397.461	42.960	42.089	0.083	0.081

13:17	34.757	-46.68	39.44	71.000	386.772
13:17	35.152	-46.58	39.49	69.529	387.263
13:17	35.513	-45.98	39.76	60.997	389.910
13:17	36.297	-46.54	39.84	65.704	390.695
13:17	36.729	-46.16	39.75	62.860	389.812
13:17	37.124	-45.95	39.93	59.036	391.578
13:17	37.907	-46.79	39.83	68.254	390.597
13:17	38.293	-46.75	39.72	68.940	389.518
13:17	38.693	-46.54	39.94	64.724	391.676
13:17	39.940	-46.86	40.25	64.822	394.716
13:17	40.674	-46.52	39.41	69.725	386.478
13:17	41.443	-46.46	39.41	69.137	386.478
13:17	41.800	-46.64	39.49	70.117	387.263

U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	4	13:18	35.696	-51.3	40.27	108.167	394.912	85.848	47.022	0.166	0.091

13:18	36.440	-51.49	40.14	111.305	393.637
13:18	36.464	-51.49	40.22	110.520	394.421
13:18	36.875	-51.09	40.08	107.971	393.049
13:18	37.656	-51.42	40.18	110.226	394.029
13:18	38.120	-51.21	40.79	102.185	400.011
13:18	39.221	-51.03	40.4	104.244	396.187
13:18	39.631	-51.2	40.08	109.049	393.049
13:18	40.500	-51.45	40.3	109.344	395.206
13:18	41.522	-51.29	40.76	103.263	399.717
13:18	41.641	-51.53	40.38	109.344	395.991
13:18	41.973	-51.59	40.38	109.932	395.991

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13:18	42.758	-51.64	40.55	108.755	397.658
13:18	43.157	-51.44	40.73	105.029	399.423
13:18	43.553	-51.3	40.84	102.577	400.502

U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	6	13:19	18.537	-58.38	41.73	163.280	409.229	144.752	55.336	0.279	0.107
		13:19	19.314	-58.18	40.99	168.575	401.973				
		13:19	19.712	-58.14	40.55	172.498	397.658				
		13:19	20.106	-57.62	41.49	158.180	406.876				
		13:19	20.500	-57.85	41.03	164.947	402.365				
		13:19	21.276	-58.66	41.26	170.635	404.620				
		13:19	21.674	-58.79	41.39	170.635	405.895				
		13:19	22.320	-58.47	41.58	165.633	407.758				
		13:19	22.819	-57.94	41.24	163.770	404.424				
		13:19	24.194	-57.85	41.02	165.045	402.267				
		13:19	24.430	-58.52	41.01	171.714	402.169				
		13:19	24.807	-57.67	40.81	165.339	400.207				
		13:19	25.215	-57.64	41.16	161.613	403.640				
		13:19	25.610	-58.1	41.28	164.947	404.816				
		13:19	26.394	-57.53	41.35	158.671	405.503				
		13:19	26.769	-57.39	41.43	156.513	406.287				
		13:19	27.178	-57.69	41.17	162.005	403.738				

U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	8	13:20	30.340	-63.35	43.08	198.780	422.468	178.877	72.511	0.345	0.140
		13:20	31.648	-64.17	42.74	210.155	419.134				
		13:20	32.370	-63.81	42.66	207.410	418.350				
		13:20	32.813	-63.73	43.05	202.800	422.174				
		13:20	33.213	-63.55	43.37	197.897	425.312				
		13:20	33.616	-63.31	43.23	196.917	423.939				
		13:20	34.425	-63.16	42.59	201.722	417.663				
		13:20	34.779	-62.76	42.94	194.367	421.095				
		13:20	35.537	-63.16	43.13	196.426	422.959				
		13:20	36.321	-63.13	42.74	199.957	419.134				
		13:20	37.544	-63.31	42.66	202.506	418.350				
		13:20	37.934	-63.58	42.56	206.135	417.369				

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U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W										
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]										
12	10	13:21	14.884	-70.21	44.69	250.264	438.257	235.725	86.758	0.455	0.167						
		13:21	15.281	-70.44	44.42	255.168	435.609										
		13:21	15.675	-70.65	44.19	259.483	433.354										
		13:21	16.462	-70.9	43.9	264.778	430.510										
		13:21	16.809	-70.81	44.18	261.150	433.256										
		13:21	17.236	-70.83	43.46	268.407	426.195										
		13:21	17.643	-70.51	43.62	263.699	427.764										
		13:21	18.419	-70.66	44.49	256.639	436.296										
		13:21	18.816	-70.6	44.69	254.089	438.257										
		13:21	20.211	-70.9	44.75	256.443	438.845										
		13:21	20.384	-70.81	45.2	251.147	443.258										
		13:21	20.780	-70.52	44.96	250.657	440.905										
		13:21	21.553	-69.82	44.55	247.813	436.884										
		13:21	21.953	-70.24	45.05	247.028	441.787										
12	12	13:22	1.266	-77.23	46.56	300.768	456.595	283.228	108.840	0.546	0.210						
		13:22	2.947	-77.05	46.09	303.612	451.986										
		13:22	3.226	-77.76	46.91	302.534	460.028										
		13:22	4.900	-78.02	46.83	305.868	459.243										
		13:22	4.410	-77.76	46.72	304.397	458.164										
		13:22	4.793	-77.99	46.52	308.614	456.203										
		13:22	5.575	-78.23	46.38	312.340	454.830										
		13:22	5.976	-77.58	46.33	306.456	454.340										
		13:22	6.386	-77.52	46.81	301.161	459.047										
		13:22	7.161	-77.94	46.71	306.260	458.066										
		13:22	7.544	-78.16	47.08	304.789	461.695										
		12	14	13:22	59.439	-85.6	49.31					355.882	483.563	337.646	131.101	0.651	0.253
				13:22	59.822	-85.19	49.24					352.547	482.877				
				13:23	0.236	-85.6	48.61					362.746	476.699				
13:23	0.636			-86.19	48.77	366.963	478.268										
13:23	1.406			-84.8	49.27	348.428	483.171										
13:23	1.766			-84.5	49.49	343.329	485.329										
13:23	2.191			-84.86	49.32	348.527	483.662										
13:23	4.460			-85.31	48.3	362.942	473.659										

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13:23	4.941	-86.25	48.7	368.238	477.581
13:23	5.299	-86.54	48.54	372.651	476.012
13:23	5.716	-86.41	48.36	373.141	474.247
13:23	6.508	-85.61	48.46	364.315	475.228

U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	16	13:23	54.478	-90.46	50.34	393.441	493.664	371.072	144.273	0.716	0.278
		13:23	54.857	-90.21	50.3	391.381	493.272				
		13:23	55.648	-90.37	49.86	397.265	488.957				
		13:23	56.400	-90.59	50.53	392.852	495.527				
		13:23	56.448	-90.69	50.15	397.560	491.801				
		13:23	57.216	-90.22	50.62	388.341	496.410				
		13:23	57.615	-90.59	50.88	389.420	498.960				
		13:23	59.334	-90.35	49.75	398.148	487.878				
		13:23	59.541	-90.42	49.93	397.069	489.644				
		13:23	59.971	-89.99	50.02	391.970	490.526				
		13:24	0.751	-90.03	50.02	392.362	490.526				
		13:24	1.151	-89.92	50.53	386.282	495.527				
		13:24	1.550	-90.04	49.71	395.500	487.486				
		13:24	1.928	-90.23	49.52	399.227	485.623				

U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	18	13:24	35.312	-95.27	51.8	426.293	507.982	395.826	161.590	0.764	0.312
		13:24	36.136	-94.96	52.12	420.115	511.120				
		13:24	36.519	-94.52	52.06	416.388	510.532				
		13:24	36.924	-93.44	51.73	409.033	507.295				
		13:24	37.705	-94.59	52.02	417.467	510.139				
		13:24	38.104	-95.07	52.01	422.272	510.041				
		13:24	38.502	-95.34	52.15	423.547	511.414				
		13:24	38.883	-94.88	52.23	418.251	512.199				
		13:24	39.681	-93.44	51.71	409.229	507.099				
		13:24	40.290	-94.62	52.07	417.271	510.630				
		13:24	41.653	-94.69	52.11	417.565	511.022				
		13:24	42.280	-94.5	52.11	415.702	511.022				
		13:24	42.809	-94.87	51.99	420.507	509.845				

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U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	20	13:25	36.242	-98.67	53.38	444.141	523.476	419.991	178.997	0.810	0.345
		13:25	37.580	-98.97	53.88	442.180	528.380				
		13:25	37.465	-98.52	53.69	439.630	526.516				
		13:25	37.852	-98.73	53.98	438.845	529.360				
		13:25	38.637	-98.65	53.72	440.611	526.811				
		13:25	39.220	-98.27	53.64	437.669	526.026				
		13:25	39.435	-98.95	53.75	443.258	527.105				
		13:25	40.205	-99.01	53.98	441.591	529.360				
		13:25	40.559	-98.86	54.11	438.845	530.635				
		13:25	40.985	-99.69	54.22	445.906	531.714				
		13:25	42.545	-98.63	53.33	444.239	522.986				
		13:25	42.950	-99.24	53.74	446.200	527.007				
		13:25	43.737	-98.7	53.74	440.905	527.007				
		13:25	44.153	-98.35	53.37	441.101	523.378				

U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	22	13:26	26.192	-100.81	54.63	452.869	535.735	432.249	192.816	0.834	0.372
		13:26	26.587	-101.24	54.85	454.928	537.892				
		13:26	27.404	-101.89	55.08	459.047	540.148				
		13:26	27.834	-101.77	55.08	457.870	540.148				
		13:26	28.164	-101.69	55.57	452.280	544.953				
		13:26	28.574	-101.87	55.27	456.988	542.011				
		13:26	29.344	-101.59	55.18	455.124	541.128				
		13:26	29.702	-101.38	54.98	455.026	539.167				
		13:26	31.900	-100.95	55.4	446.691	543.286				
		13:26	31.311	-102.34	55.51	459.243	544.364				
		13:26	32.117	-101.56	55.42	452.477	543.482				
		13:26	32.453	-101.01	55.36	447.671	542.893				
		13:26	32.879	-102.23	56.21	451.300	551.229				
		13:26	33.663	-103.44	55.98	465.421	548.973				
		13:26	34.640	-103.23	55.74	465.715	546.620				

U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	24	13:27	19.858	-102.36	56.14	453.261	550.543	444.417	207.681	0.857	0.401
		13:27	20.530	-102.95	56.72	453.359	556.230				
		13:27	20.448	-104.44	56.55	469.638	554.563				
		13:27	21.222	-105.27	56.75	475.816	556.525				

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13:27	21.620	-104.94	57.39	466.304	562.801
13:27	22.350	-104.44	56.91	466.108	558.094
13:27	22.817	-104.73	56.76	470.423	556.623
13:27	23.194	-104.35	57	464.343	558.976
13:27	23.600	-103.74	56.34	464.833	552.504
13:27	23.985	-103.62	56.41	462.970	553.190
13:27	24.748	-104.89	56.57	473.855	554.759
13:27	26.340	-105.45	56.98	475.326	558.780
13:27	26.698	-104.32	56.59	468.069	554.955

U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	26	13:28	5.651	-107.52	58.53	480.425	573.980	443.932	225.226	0.856	0.434

13:28	6.550	-106.58	58.32	473.267	571.921
13:28	6.441	-105.11	58.29	459.145	571.627
13:28	7.225	-104.46	58.54	450.319	574.078
13:28	8.655	-105.44	58.37	461.597	572.411
13:28	9.579	-104.71	58.47	453.457	573.392
13:28	9.960	-105.45	58.04	464.931	569.175
13:28	10.354	-104.57	57.89	457.772	567.704
13:28	10.719	-105.63	58.94	457.870	578.001
13:28	11.503	-107.96	59.09	479.249	579.472
13:28	11.930	-108.62	59.01	486.505	578.687
13:28	12.330	-107.03	58.29	477.974	571.627

U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	28	13:28	51.640	-104.57	59.65	440.512	584.964	424.437	234.617	0.819	0.453

13:28	52.270	-101.49	58.77	418.938	576.334
13:28	52.416	-102.63	59.24	425.508	580.943
13:28	53.201	-104.71	59.56	442.768	584.081
13:28	53.601	-103.17	58.87	434.432	577.315
13:28	53.977	-106.35	59.75	456.988	585.944
13:28	54.742	-103.82	58.44	445.024	573.098
13:28	55.169	-105.02	58.83	452.967	576.922
13:28	55.572	-107.84	60.83	461.008	596.535
13:28	55.977	-107.52	59.89	467.088	587.317
13:28	57.493	-106.87	60.22	457.478	590.553
13:28	57.927	-105.7	59.43	453.751	582.806
13:28	58.320	-104.39	59.13	443.847	579.864

U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W
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Messung vom 13.01.2018

[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	30	13:29	46.430	-104.75	59.62	442.572	584.669	410.331	236.651	0.792	0.457
		13:29	46.687	-105.11	59.41	448.162	582.610				
		13:29	47.320	-104.25	58.87	445.024	577.315				
		13:29	47.444	-101.26	60.2	402.659	590.357				
		13:29	47.845	-103.44	59.64	429.529	584.866				
		13:29	48.627	-102.42	59.56	420.311	584.081				
		13:29	49.460	-104.03	60.01	431.687	588.494				
		13:29	49.409	-104.28	59.66	437.570	585.062				
		13:29	50.195	-104.66	59.41	443.749	582.610				
		13:29	50.596	-105.2	60.01	443.160	588.494				
		13:29	50.952	-102.52	60.16	415.408	589.965				
		13:29	52.566	-103	59.42	427.372	582.708				
		13:29	52.948	-103.35	60.24	422.763	590.750				
		13:29	53.727	-102.68	59.92	419.330	587.611				
		13:29	54.131	-104.19	60.22	431.196	590.553				
U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	32	13:31	23.505	-102.7	60.56	413.250	593.888	393.267	238.848	0.759	0.461
		13:31	23.718	-104.14	60.05	432.373	588.886				
		13:31	24.502	-101.91	59.59	415.015	584.375				
		13:31	24.938	-101.09	59.27	410.112	581.237				
		13:31	25.333	-101.6	59.96	408.347	588.004				
		13:31	26.113	-101.7	60.18	407.170	590.161				
		13:31	26.469	-103.31	60.15	423.253	589.867				
		13:31	26.889	-103.4	59.94	426.195	587.808				
		13:31	27.680	-101.89	60.24	408.445	590.750				
		13:31	28.990	-102.3	59.73	417.467	585.748				
		13:31	28.465	-100.46	59.1	405.601	579.570				
		U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	34	13:32	6.631	-101.02	61.41	388.439	602.223	372.837	254.075	0.719	0.490
		13:32	6.956	-101.33	61.24	393.147	600.556				
		13:32	7.382	-101.14	61.51	388.636	603.204				
		13:32	8.166	-101.73	61.71	392.460	605.165				
		13:32	8.570	-100.52	61.74	380.300	605.459				
		13:32	8.950	-101.49	61.87	388.537	606.734				
		13:32	9.359	-102.61	61.47	403.444	602.812				
		13:32	10.134	-102.79	61.47	405.209	602.812				

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13:32	10.491	-102.03	61.45	397.952	602.616
13:32	10.922	-103.38	61.42	411.485	602.321
13:32	12.459	-100.27	60.73	387.753	595.555
13:32	12.886	-102.05	61.27	399.913	600.850

U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	36	13:32	49.490	-103.33	62.97	395.794	617.522	368.822	265.121	0.711	0.511

13:32	49.436	-103.08	62.86	394.421	616.443
13:32	50.219	-103.84	63.47	395.892	622.425
13:32	50.626	-101.8	62.42	386.184	612.128
13:32	50.980	-102.39	62.04	395.696	608.401
13:32	51.764	-102.32	62.21	393.343	610.069
13:32	52.191	-101.31	61.73	388.145	605.361
13:32	52.591	-101.6	62.61	382.359	613.991
13:32	52.987	-101.91	62.9	382.555	616.835
13:32	53.757	-102.52	62.8	389.518	615.854
13:32	55.341	-102.45	62.23	394.421	610.265
13:32	56.125	-100.25	61.49	380.104	603.008

U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	38	13:33	35.190	-102.77	63.6	384.125	623.700	362.118	275.365	0.699	0.531

13:33	35.851	-102.43	63.36	383.144	621.346
13:33	36.214	-101.78	63.33	377.064	621.052
13:33	37.812	-102.36	63.82	377.946	625.857
13:33	38.579	-103.24	64.05	384.321	628.113
13:33	38.961	-102.92	63.67	384.909	624.386
13:33	39.363	-103.13	63.71	386.576	624.778
13:33	40.161	-103.53	63.81	389.518	625.759
13:33	40.567	-103.23	63.59	388.734	623.602
13:33	41.340	-103.34	64.03	385.497	627.917
13:33	42.115	-101.79	62.76	382.752	615.462
13:33	42.472	-103.5	63.69	390.401	624.582

Messprotokoll und Auswertung für Waage KWK3

U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F A	F W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	40	13:34	36.719	-102.86	64.75	373.730	634.977	359.729	287.597	0.694	0.555
		13:34	37.147	-103.65	65.3	376.083	640.371				
		13:34	38.719	-103.26	64.55	379.613	633.016				
		13:34	39.495	-103.92	65.04	381.281	637.821				
		13:34	39.904	-103.26	64.8	377.162	635.468				
		13:34	40.251	-103.53	64.3	384.713	630.564				
		13:34	40.675	-104.66	65.02	388.734	637.625				
		13:34	41.463	-104.56	65.8	380.104	645.274				
		13:34	41.856	-104.73	64.88	390.793	636.252				
		13:34	42.219	-104.96	64.66	395.206	634.095				
		13:34	43.200	-103.16	64.66	377.554	634.095				
		13:34	43.430	-102.79	64.55	375.004	633.016				
U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F A	F W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	90	13:35	46.317	-92.63	93.33	-6.865	915.250	-32.559	569.161	-0.063	1.098
		13:35	47.880	-92.63	93.56	-9.120	917.505				
		13:35	47.495	-92.18	93.75	-15.396	919.369				
		13:35	47.908	-92.48	93.99	-14.808	921.722				
		13:35	48.682	-93.76	95.19	-14.023	933.490				
		13:35	49.630	-92.82	94.06	-12.160	922.409				
		13:35	49.464	-93.26	93.78	-5.099	919.663				
		13:35	49.820	-92.76	93.4	-6.276	915.936				
		13:35	50.604	-94.05	94.96	-8.924	931.235				
		13:35	52.610	-91	92.34	-13.141	905.541				
		13:35	52.998	-90.76	91.86	-10.787	900.834				
		13:35	53.414	-91.52	92.63	-10.885	908.385				
		13:35	54.139	-91.89	93.16	-12.454	913.583				
		13:35	54.571	-92.37	93.16	-7.747	913.583				
		13:35	54.968	-91.65	92.57	-9.022	907.797				
		13:35	55.797	-92.61	93.01	-3.923	912.112				
		13:35	56.168	-92.17	93.8	-15.985	919.859				
		13:35	56.536	-93.91	95.57	-16.279	937.217				
		13:35	58.730	-91.51	92.42	-8.924	906.326				
		13:35	58.857	-91.43	92.35	-9.022	905.640				
		13:35	59.282	-93.34	93.42	-0.785	916.133				
		13:35	59.684	-93.46	94.25	-7.747	924.272				
		13:36	0.467	-94.88	94.35	5.197	925.253				

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			13:36	0.826	-95.43	95.64	-2.059	937.903				
			13:36	1.265	-93.81	94.03	-2.157	922.115				
U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W					
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]					
0	0	13:46	18.743	0	0	0.000	0.000	0.000	0.000			
		13:46	19.120	0	0	0.000	0.000					
		13:46	19.477	0	0	0.000	0.000					
		13:46	19.904	0	0	0.000	0.000					
		13:46	20.695	0	0	0.000	0.000					
		13:46	21.860	0	0	0.000	0.000					
		13:46	21.486	0	0	0.000	0.000					
		13:46	22.252	0	0	0.000	0.000					
		13:46	22.655	0	0	0.000	0.000					
		13:46	23.640	0	0	0.000	0.000					
		13:46	24.623	0	0	0.000	0.000					
		13:46	24.980	0	0	0.000	0.000					
U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W					
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]					
12	0	13:47	1.180	-39.33	39.08	2.452	383.242	-20.840	39.400	-0.040	0.076	
		13:47	1.606	-40.02	39.33	6.767	385.694					
		13:47	2.200	-39.78	39.7	0.785	389.322					
		13:47	2.802	-39.84	39.59	2.452	388.243					
		13:47	3.146	-39.04	39.62	-5.688	388.537					
		13:47	3.580	-38.96	39.79	-8.139	390.205					
		13:47	4.358	-39.74	39.54	1.961	387.753					
		13:47	4.757	-39.77	39.58	1.863	388.145					
		13:47	5.143	-39.85	39.66	1.863	388.930					
		13:47	5.544	-39.87	39.83	0.392	390.597					
		13:47	7.108	-39.9	39.63	2.648	388.636					
		13:47	7.522	-39.84	39.25	5.786	384.909					
		13:47	7.893	-39.5	39.48	0.196	387.165					
		13:47	8.293	-39.14	39.74	-5.884	389.714					
U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W					
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]					
12	-2	13:47	37.458	-34.23	38.7	-43.836	379.515	-59.290	28.479	-0.114	0.055	
		13:47	37.770	-34.59	38.33	-36.677	375.887					
		13:47	38.560	-34.07	38.59	-44.326	378.437					
		13:47	38.917	-34.03	38.14	-40.305	374.024					
		13:47	39.343	-34.55	38.38	-37.559	376.377					

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13:47	40.128	-35.55	37.75	-21.575	370.199
13:47	40.528	-35.1	37.91	-27.557	371.768
13:47	40.884	-34.46	38.12	-35.892	373.828
13:47	41.311	-34.42	39.11	-45.993	383.536
13:47	42.940	-34.81	38.86	-39.717	381.084
13:47	42.485	-35.09	38.91	-37.461	381.575

U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	-4	13:48	20.623	-30.92	39.56	-84.729	387.949	-105.953	38.959	-0.204	0.075
		13:48	21.400	-30.88	39.73	-86.788	389.616				
		13:48	21.370	-30.88	39.73	-86.788	389.616				
		13:48	22.154	-30.88	39.84	-87.867	390.695				
		13:48	22.582	-30.61	40.09	-92.967	393.147				
		13:48	22.975	-30.52	39.69	-89.927	389.224				
		13:48	23.759	-31.03	39.23	-80.414	384.713				
		13:48	24.148	-30.55	39.13	-84.141	383.732				
		13:48	24.556	-31.06	38.96	-77.472	382.065				
		13:48	24.905	-32.09	39.22	-69.921	384.615				
		13:48	26.513	-30.69	39.35	-84.925	385.890				
		13:48	27.299	-31.14	39.53	-82.277	387.655				
		13:48	27.657	-30.8	39.73	-87.573	389.616				

U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	-6	13:49	12.101	-26.26	39.73	-132.095	389.616	-155.894	46.820	-0.301	0.090
		13:49	12.500	-26.15	40.3	-138.763	395.206				
		13:49	12.899	-26.13	40.59	-141.803	398.050				
		13:49	13.283	-26.44	40.49	-137.783	397.069				
		13:49	14.630	-26.53	40.37	-135.723	395.892				
		13:49	15.607	-26.74	40.49	-134.841	397.069				
		13:49	16.330	-26.22	40.27	-137.783	394.912				
		13:49	16.433	-26.35	40.06	-134.448	392.852				
		13:49	17.209	-27.18	40.1	-126.701	393.245				
		13:49	17.576	-27.31	40.64	-130.722	398.540				
		13:49	18.200	-27.17	40.56	-131.310	397.756				
		13:49	18.411	-27.28	40.08	-125.524	393.049				

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U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	-8	13:49	52.977	-23.48	41.54	-177.107	407.366	-213.458	67.316	-0.412	0.130
		13:49	53.771	-22.15	42.08	-195.446	412.662				
		13:49	54.169	-22.8	42.54	-193.582	417.173				
		13:49	54.561	-22.89	42.68	-194.073	418.546				
		13:49	54.952	-22.57	42.52	-195.642	416.977				
		13:49	55.738	-23.14	42.74	-192.209	419.134				
		13:49	56.940	-22.98	42.58	-192.209	417.565				
		13:49	56.511	-23.3	42.32	-186.522	415.015				
		13:49	58.800	-22.57	43.04	-200.741	422.076				
		13:49	58.846	-22.35	42.96	-202.114	421.292				
		13:49	59.273	-22.92	42.05	-187.600	412.368				
		13:49	59.690	-23.25	41.71	-181.030	409.033				
		13:50	0.710	-23.77	41.82	-177.009	410.112				
		13:50	0.841	-23.09	42.23	-187.698	414.133				
U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	-10	13:50	41.736	-19.98	43.72	-232.809	428.745	-255.210	80.661	-0.492	0.156
		13:50	42.514	-19.98	43.78	-233.397	429.333				
		13:50	42.869	-20.1	43.67	-231.142	428.254				
		13:50	43.296	-19.66	43.69	-235.653	428.450				
		13:50	43.697	-19.94	43.55	-231.534	427.077				
		13:50	44.502	-20.27	43.92	-231.926	430.706				
		13:50	44.837	-19.9	43.8	-234.378	429.529				
		13:50	45.265	-19.47	44.08	-241.340	432.275				
		13:50	46.845	-20.46	43.29	-223.885	424.528				
		13:50	47.226	-20.46	43.63	-227.219	427.862				
		13:50	48.150	-19.76	43.78	-235.555	429.333				
		13:50	48.372	-19.66	44.18	-240.458	433.256				
		13:50	48.800	-19.79	43.95	-236.927	431.000				
U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	-12	13:51	23.355	-16.97	46.46	-289.197	455.615	-313.821	111.446	-0.605	0.215
		13:51	23.785	-16.44	46.79	-297.630	458.851				
		13:51	24.566	-16.92	46.64	-291.452	457.380				
		13:51	24.965	-17.31	46.44	-285.666	455.419				
		13:51	25.322	-17.58	46.4	-282.626	455.026				
		13:51	26.107	-17.04	46.66	-290.471	457.576				

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13:51	26.534	-16.8	46.74	-293.610	458.360
13:51	26.947	-16.75	46.83	-294.983	459.243
13:51	27.330	-16.8	46.9	-295.179	459.930
13:51	28.920	-17.46	47.2	-291.648	462.872
13:51	29.687	-17.46	47.93	-298.807	470.030
13:51	30.740	-18.06	47.77	-291.354	468.461
13:51	30.482	-18.18	47.5	-287.530	465.814

U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	-14	13:52	7.190	-14.64	49.12	-338.132	481.700	-354.424	133.356	-0.684	0.257
		13:52	7.422	-14.99	49.3	-336.464	483.465				
		13:52	8.222	-15.38	49.47	-334.307	485.133				
		13:52	8.585	-15.03	49.14	-334.503	481.896				
		13:52	9.772	-15.37	49.3	-332.738	483.465				
		13:52	10.171	-15.19	49.55	-336.955	485.917				
		13:52	10.556	-15.37	49.02	-329.992	480.720				
		13:52	12.970	-14.99	48.72	-330.777	477.778				
		13:52	12.881	-15.21	48.87	-330.090	479.249				
		13:52	13.298	-15.54	48.87	-326.854	479.249				
		13:52	13.707	-15.78	49.08	-326.560	481.308				

U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	-16	13:52	49.477	-15.06	53.2	-374.024	521.711	-390.173	168.201	-0.753	0.324
		13:52	50.615	-15.14	52.6	-367.355	515.827				
		13:52	51.430	-14.68	52.85	-374.318	518.279				
		13:52	51.443	-14.93	53.39	-377.162	523.574				
		13:52	51.830	-15.41	53.39	-372.455	523.574				
		13:52	52.639	-15.19	53.27	-373.435	522.398				
		13:52	53.600	-15.39	52.39	-362.844	513.768				
		13:52	53.421	-15.28	51.81	-358.235	508.080				
		13:52	54.977	-15.11	51.71	-358.922	507.099				
		13:52	55.745	-15.21	51.62	-357.058	506.217				
		13:52	56.118	-15.15	52.77	-368.924	517.494				
		13:52	56.545	-15.06	53.21	-374.122	521.809				
		13:52	56.948	-15.64	52.8	-364.413	517.788				

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U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	-18	13:53	31.527	-15.31	54.93	-388.537	538.677	-416.303	195.655	-0.803	0.377
		13:53	31.941	-15.47	55.42	-391.774	543.482				
		13:53	32.732	-15.53	55.06	-387.655	539.951				
		13:53	33.710	-15.38	55.69	-395.304	546.130				
		13:53	34.281	-14.94	55.06	-393.441	539.951				
		13:53	34.676	-15.01	56.22	-404.130	551.327				
		13:53	35.620	-14.97	55.7	-399.423	546.228				
		13:53	35.478	-15.06	55.67	-398.246	545.933				
		13:53	36.256	-14.95	55.85	-401.090	547.699				
		13:53	37.820	-15.6	54.97	-386.086	539.069				
		13:53	38.207	-15.74	55.75	-392.362	546.718				
		13:53	38.574	-15.54	56.26	-399.325	551.719				
U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	-20	13:54	14.375	-16.55	58.99	-416.192	578.491	-440.653	227.327	-0.850	0.439
		13:54	14.768	-15.84	58.84	-421.684	577.020				
		13:54	15.166	-15.99	59.02	-421.978	578.786				
		13:54	15.550	-15.86	58.76	-420.703	576.236				
		13:54	16.334	-15.57	58.97	-425.606	578.295				
		13:54	16.735	-16.23	58.57	-415.211	574.373				
		13:54	17.920	-15.88	58.93	-422.174	577.903				
		13:54	17.876	-15.73	58.31	-417.565	571.823				
		13:54	18.302	-16.2	58.23	-412.171	571.038				
		13:54	18.711	-15.84	58.85	-421.782	577.118				
		13:54	20.122	-15.97	58.71	-419.134	575.745				
		13:54	20.262	-16.53	58.38	-410.406	572.509				
		13:54	20.661	-17.03	57.92	-400.992	567.998				
U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	-22	13:54	51.718	-16.97	60.52	-427.077	593.495	-443.227	245.597	-0.855	0.474
		13:54	52.760	-17.44	60.76	-424.822	595.849				
		13:54	52.860	-17.97	60.5	-417.075	593.299				
		13:54	53.298	-17.66	59.83	-413.544	586.729				
		13:54	53.694	-17.83	60.15	-415.015	589.867				
		13:54	54.720	-17.9	60.7	-419.722	595.261				
		13:54	54.853	-18.05	60.4	-415.310	592.319				
		13:54	55.253	-18.14	60.53	-415.702	593.593				

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13:54	56.612	-17.44	60.95	-426.685	597.712
13:54	56.835	-17.03	61.25	-433.648	600.654
13:54	57.222	-17.35	60.75	-425.606	595.751
13:54	57.579	-17.33	60.49	-423.253	593.201
13:54	57.654		60.78	-596.045	596.045

U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	-24	13:55	42.825	-21.24	61.97	-399.423	607.715	-424.627	258.414	-0.819	0.498
		13:55	43.595	-21.25	60.87	-388.537	596.928				
		13:55	43.986	-20.97	62.16	-403.934	609.578				
		13:55	45.322	-20.97	62	-402.365	608.009				
		13:55	45.566	-21.05	61.83	-399.913	606.342				
		13:55	45.962	-20.86	62.45	-407.856	612.422				
		13:55	46.340	-20.13	62.65	-416.977	614.383				
		13:55	47.105	-19.92	62.43	-416.879	612.226				
		13:55	47.529	-20.5	61.47	-401.776	602.812				
		13:55	47.928	-21.42	60.74	-385.596	595.653				
		13:55	48.323	-21.49	61.57	-393.049	603.792				
		13:55	49.102	-20.04	62.46	-415.996	612.520				
		13:55	49.489	-20.02	62.46	-416.192	612.520				
		13:55	49.855	-20.65	61.49	-400.502	603.008				

U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	-26	13:56	22.127	-23.74	62.01	-375.299	608.107	-406.125	266.496	-0.783	0.514
		13:56	22.524	-24.87	62.38	-367.846	611.736				
		13:56	22.907	-24.04	63.89	-390.793	626.544				
		13:56	23.691	-23.93	62.58	-379.025	613.697				
		13:56	24.104	-22.99	63.36	-395.892	621.346				
		13:56	24.479	-23.2	63.28	-393.049	620.562				
		13:56	24.876	-23.9	61.63	-370.003	604.381				
		13:56	25.659	-24.19	62.41	-374.808	612.030				
		13:56	26.720	-22.8	63.43	-398.442	622.033				
		13:56	26.443	-22.64	61.86	-384.615	606.636				
		13:56	28.740	-22.9	62.93	-392.558	617.129				
		13:56	28.411	-23.17	62.73	-387.949	615.168				

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U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	-28	13:57	4.976	-26.6	64.02	-366.963	627.819	-390.619	275.650	-0.754	0.532
		13:57	5.746	-26.23	63.88	-369.218	626.446				
		13:57	6.160	-25.52	63.78	-375.201	625.465				
		13:57	6.504	-25.88	63.4	-367.944	621.738				
		13:57	6.948	-26.23	63.44	-364.904	622.131				
		13:57	7.709	-26.01	64.41	-376.573	631.643				
		13:57	8.113	-25.88	64.72	-380.888	634.683				
		13:57	9.284	-26.1	63.01	-361.962	617.914				
		13:57	9.680	-26.31	63.11	-360.883	618.895				
		13:57	11.263	-26.06	62.77	-360.000	615.560				
		13:57	11.649	-25.68	63.51	-370.984	622.817				
		13:57	12.700	-25.93	62.45	-358.137	612.422				
U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	-30	13:57	48.726	-27.97	63.87	-352.057	626.348	-379.312	285.848	-0.732	0.551
		13:57	49.385	-27.97	64.45	-357.745	632.035				
		13:57	49.766	-28.05	64.45	-356.960	632.035				
		13:57	50.167	-28.13	65.63	-367.748	643.607				
		13:57	51.352	-28.22	65.04	-361.079	637.821				
		13:57	51.735	-28.41	64.03	-349.311	627.917				
		13:57	52.136	-28.59	64.57	-352.841	633.212				
		13:57	53.716	-28.29	65.3	-362.942	640.371				
		13:57	54.103	-27.9	64.67	-360.589	634.193				
		13:57	54.888	-28.5	64.82	-356.176	635.664				
		13:57	55.244	-28.7	63.79	-344.114	625.563				
		13:57	55.674	-28.13	65.55	-366.963	642.823				
U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	-32	13:58	35.300	-30.18	66.01	-351.370	647.334	-373.853	300.942	-0.721	0.581
		13:58	36.514	-31.15	66.49	-346.565	652.041				
		13:58	36.943	-30.89	66.43	-348.527	651.452				
		13:58	37.343	-30.51	66.13	-349.311	648.510				
		13:58	37.724	-29.91	65.8	-351.959	645.274				
		13:58	38.507	-29.85	65.25	-347.154	639.881				
		13:58	38.926	-29.99	65.95	-352.645	646.745				
		13:58	39.265	-30.02	66.29	-355.685	650.080				
		13:58	40.490	-30.34	66.53	-354.901	652.433				

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13:58	40.476	-30.41	66.62	-355.097	653.316
13:58	40.881	-30.29	66.45	-354.607	651.649
13:58	42.672	-30.47	66.69	-355.195	654.002
13:58	42.710	-30.23	66.26	-353.332	649.785
13:58	42.841	-30.14	66.12	-352.841	648.412

U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	-34	13:59	25.258	-31.7	67.33	-349.409	660.278	-375.339	316.713	-0.724	0.611
		13:59	25.685	-31.46	67.88	-357.156	665.672				
		13:59	26.830	-31.53	68	-357.647	666.849				
		13:59	26.468	-31.44	67.61	-354.705	663.024				
		13:59	27.260	-31.73	68.03	-355.980	667.143				
		13:59	27.642	-32.1	68.1	-353.038	667.829				
		13:59	28.451	-31.57	68.99	-366.963	676.557				
		13:59	29.219	-32.18	67.78	-349.115	664.691				
		13:59	29.619	-32	66.91	-342.348	656.160				
		13:59	31.230	-31.87	67.62	-350.586	663.122				
		13:59	31.186	-32.12	67.86	-350.488	665.476				
		13:59	31.588	-32.07	67.37	-346.173	660.671				
		13:59	31.989	-31.99	67.23	-345.585	659.298				

U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	-36	14:00	1.883	-33.8	70.56	-360.491	691.954	-374.893	335.006	-0.723	0.646
		14:00	2.639	-33.8	70.25	-357.451	688.914				
		14:00	3.210	-33.59	69.61	-353.234	682.637				
		14:00	3.434	-33.42	68.51	-344.114	671.850				
		14:00	4.205	-33.24	69.88	-359.314	685.285				
		14:00	4.604	-33.56	69.97	-357.058	686.168				
		14:00	4.997	-33.78	69.43	-349.605	680.872				
		14:00	5.773	-33.69	69.37	-349.899	680.284				
		14:00	6.163	-33.89	69.95	-353.626	685.972				
		14:00	7.631	-33.89	69.65	-350.684	683.030				
		14:00	7.736	-34.06	69.45	-347.056	681.068				
		14:00	8.140	-33.96	69.61	-349.605	682.637				
		14:00	8.497	-33.85	70.32	-357.647	689.600				

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Messprotokoll und Auswertung für Waage KWK3

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U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	-38	14:00	46.260	-35.34	71.72	-356.764	703.329	-372.860	350.608	-0.719	0.676
		14:00	46.662	-35.45	71.81	-356.568	704.212				
		14:00	47.190	-35.58	71.02	-347.546	696.465				
		14:00	47.800	-35.74	72.01	-355.685	706.173				
		14:00	48.229	-36.04	71.71	-349.801	703.231				
		14:00	48.627	-35.68	70.75	-343.917	693.817				
		14:00	50.458	-35.72	71.34	-349.311	699.603				
		14:00	51.380	-35.25	70.66	-347.252	692.934				
		14:00	51.771	-35.07	70.34	-345.879	689.796				
		14:00	52.163	-35.04	71.76	-360.098	703.722				
		14:00	52.948	-35.59	71.01	-347.350	696.367				
		14:00	53.348	-35.63	71.13	-348.134	697.543				
		14:00	53.727	-35.35	71.09	-350.488	697.151				
		14:00	54.130	-35.25	70.14	-342.152	687.835				

U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	-40	14:01	39.362	-37.86	73.9	-353.430	724.708	-377.442	378.771	-0.728	0.731
		14:01	40.126	-37.88	74.28	-356.960	728.434				
		14:01	40.504	-37.76	73.63	-351.763	722.060				
		14:01	40.904	-37.63	74.14	-358.039	727.061				
		14:01	41.260	-37.63	74.42	-360.785	729.807				
		14:01	42.450	-37.88	74.85	-362.550	734.024				
		14:01	42.469	-38.15	74.72	-358.627	732.749				
		14:01	43.655	-37.92	73.94	-353.234	725.100				
		14:01	44.120	-37.92	73.62	-350.096	721.962				
		14:01	45.622	-38.19	74.23	-353.430	727.944				
		14:01	46.500	-38.13	73.99	-351.665	725.590				
		14:01	46.419	-37.94	74.15	-355.097	727.159				

U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	-50	14:02	35.161	-50.34	82.93	-319.597	813.261	-354.379	479.788	-0.684	0.926
		14:02	35.532	-50.85	85.65	-341.270	839.935				
		14:02	35.949	-50.53	83.98	-328.031	823.558				
		14:02	36.289	-50.1	83.69	-329.404	820.714				
		14:02	37.720	-50.05	84.1	-333.915	824.735				
		14:02	37.499	-50.22	83.93	-330.580	823.068				
		14:02	37.897	-50.29	83.88	-329.404	822.578				

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14:02	38.686	-50.67	84.34	-330.188	827.089
14:02	40.137	-50.72	85.77	-343.721	841.112
14:02	41.390	-51.15	85.67	-338.524	840.131
14:02	41.427	-51.21	85.09	-332.248	834.444

U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	-60	14:03	19.192	-64.79	92.49	-271.643	907.012	-293.373	560.852	-0.566	1.082

14:03	19.529	-65.84	93.68	-273.016	918.682
14:03	19.976	-65.11	92.73	-270.858	909.366
14:03	20.366	-64.14	91.09	-264.288	893.283
14:03	21.136	-65.21	93.11	-273.604	913.093
14:03	21.514	-65.48	93.23	-272.133	914.269
14:03	23.115	-64.8	92.73	-273.898	909.366
14:03	23.490	-64.93	93.76	-282.724	919.467
14:03	23.888	-65.02	93	-274.389	912.014
14:03	24.675	-65.43	92.09	-261.444	903.090
14:03	25.300	-64.74	92.05	-267.818	902.698
14:03	26.241	-64.02	91.7	-271.447	899.265
14:03	26.635	-64.76	93.54	-282.234	917.309
14:03	27.250	-65.65	94.85	-286.353	930.156

U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	-90	14:04	8.296	-99.3	100.89	-15.592	989.388	-34.684	633.639	-0.067	1.222

14:04	8.710	-97.6	100.5	-28.439	985.563
14:04	9.106	-98.9	99.45	-5.394	975.266
14:04	9.479	-98.91	100.36	-14.220	984.190
14:04	10.264	-98.36	98.89	-5.197	969.775
14:04	11.846	-99.47	100.06	-5.786	981.248
14:04	12.632	-101.28	101.12	1.569	991.643
14:04	13.500	-99.41	101.92	-24.615	999.489
14:04	13.410	-97.23	99.14	-18.731	972.226
14:04	13.772	-98.76	100.6	-18.044	986.544
14:04	14.557	-99.03	99.27	-2.354	973.501
14:04	14.982	-97.9	99.55	-16.181	976.247
14:04	15.395	-98.48	100.33	-18.142	983.896
14:04	16.166	-98.98	100.41	-14.023	984.681
14:04	17.618	-97.59	101.83	-41.580	998.606
14:04	18.517	-99.03	100.57	-15.102	986.250
14:04	18.930	-98.54	98.58	-0.392	966.735

Messprotokoll und Auswertung für Waage KWK3

14:04	19.275	-98.16	99.78	-15.887	978.503
14:04	20.600	-98.15	99.38	-12.062	974.580
14:04	20.499	-98.45	100.9	-24.026	989.486
14:04	20.893	-98.69	100.79	-20.594	988.407
14:04	21.686	-100.61	100.74	-1.275	987.917
14:04	22.250	-99.13	99.97	-8.238	980.366

U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W			
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]			
0	-90	14:05	20.240	2.2	-2.2	0.000	-21.575	0.000	-21.575	
		14:05	20.990	2.2	-2.2	0.000	-21.575			
		14:05	21.415	2.2	-2.2	0.000	-21.575			
		14:05	21.817	2.2	-2.2	0.000	-21.575			
		14:05	22.598	2.2	-2.2	0.000	-21.575			
		14:05	22.956	2.2	-2.2	0.000	-21.575			
		14:05	23.384	2.2	-2.2	0.000	-21.575			
		14:05	24.950	2.2	-2.2	0.000	-21.575			
		14:05	25.346	2.2	-2.2	0.000	-21.575			
		14:05	26.138	2.2	-2.2	0.000	-21.575			
		14:05	26.536	2.2	-2.2	0.000	-21.575			
		14:05	26.919	2.2	-2.2	0.000	-21.575			
		14:05	27.702	2.2	-2.2	0.000	-21.575			

U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W			
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]			
0	0	14:06	11.323	0.75	-0.89	1.373	-8.728	1.373	-8.728	
		14:06	11.722	0.75	-0.89	1.373	-8.728			
		14:06	12.800	0.75	-0.89	1.373	-8.728			
		14:06	13.690	0.75	-0.89	1.373	-8.728			
		14:06	14.750	0.75	-0.89	1.373	-8.728			
		14:06	14.482	0.75	-0.89	1.373	-8.728			
		14:06	14.832	0.75	-0.89	1.373	-8.728			
		14:06	15.616	0.75	-0.89	1.373	-8.728			
		14:06	16.410	0.75	-0.89	1.373	-8.728			
		14:06	16.448	0.75	-0.89	1.373	-8.728			
		14:06	16.838	0.75	-0.89	1.373	-8.728			
		14:06	17.584	0.75	-0.89	1.373	-8.728			
		14:06	18.100	0.75	-0.89	1.373	-8.728			
		14:06	18.411	0.75	-0.89	1.373	-8.728			

Messprotokoll und Auswertung für Waage KWK3

Luftwiderstand des Supports											
U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
0	0	14:41	35.452	0	-0.06	0.588	-0.588	0.588	-0.588		
		14:41	35.839	0	-0.06	0.588	-0.588				
		14:41	36.609	0	-0.06	0.588	-0.588				
		14:41	37.180	0	-0.06	0.588	-0.588				
		14:41	37.402	0	-0.06	0.588	-0.588				
		14:41	38.177	0	-0.06	0.588	-0.588				
		14:41	38.577	0	-0.06	0.588	-0.588				
		14:41	40.240	0	-0.06	0.588	-0.588				
		14:41	40.155	0	-0.06	0.588	-0.588				
		14:41	40.928	0	-0.06	0.588	-0.588				
		14:41	41.328	0	-0.06	0.588	-0.588				
		14:41	41.685	0	-0.06	0.588	-0.588				
U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W				
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]				
12	0	14:42	33.645	-37.64	35.49	21.084	348.036	21.935	348.546		
		14:42	35.232	-37.64	35.73	18.731	350.390				
		14:42	35.601	-37.95	35.9	20.104	352.057				
		14:42	36.150	-37.57	36	15.396	353.038				
		14:42	36.788	-37.1	34.93	21.280	342.545				
		14:42	37.144	-37.3	35.03	22.261	343.525				
		14:42	37.973	-37.25	34.96	22.457	342.839				
		14:42	38.756	-37.74	35.4	22.947	347.154				
		14:42	39.112	-37.84	35.35	24.418	346.663				
		14:42	39.545	-37.77	35.38	23.438	346.958				
		14:42	41.126	-38.12	36.16	19.221	354.607				
		14:42	41.512	-38.31	36.02	22.457	353.234				
		14:42	41.907	-38.39	35.9	24.418	352.057				
		14:42	42.294	-38.03	35.2	27.753	345.192				
		14:42	43.790	-37.88	35.15	26.772	344.702				
		14:42	43.473	-37.76	35.36	23.536	346.761				
		14:42	43.876	-37.8	35.64	21.182	349.507				
		14:42	44.648	-37.61	35.43	21.378	347.448				
		14:42	45.590	-37.68	35.87	17.750	351.763				
		14:42	45.399	-37.49	35.51	19.417	348.232				
		14:42	45.847	-37.63	35.47	21.182	347.840				

ANIPROP GbR
Messprotokoll und Auswertung für Waage KWK3

Messung vom 13.01.2018

14:42	47.365	-37.92	35.64	22.359	349.507		
14:42	48.149	-38.26	35.79	24.222	350.978		
14:42	48.579	-38.2	36.16	20.005	354.607		
14:42	48.977	-37.59	35.08	24.615	344.016		
U0	alfa_S	Uhrzeit	Messzeit	Waage A	Waage B	F_A	F_W
[m/s]	[deg]	hh:mm	[s]	-(A+W) [g]	W [g]	[mN]	[mN]
0	0	14:43	31.320	-0.26	0.14	1.177	1.373
		14:43	31.416	-0.26	0.14	1.177	1.373
		14:43	31.817	-0.26	0.14	1.177	1.373
		14:43	32.173	-0.26	0.14	1.177	1.373
		14:43	32.982	-0.26	0.14	1.177	1.373
		14:43	33.393	-0.26	0.14	1.177	1.373
		14:43	34.566	-0.26	0.14	1.177	1.373
		14:43	34.947	-0.26	0.14	1.177	1.373
		14:43	36.492	-0.26	0.14	1.177	1.373
		14:43	36.910	-0.26	0.14	1.177	1.373
		14:43	37.309	-0.26	0.14	1.177	1.373

1.177	1.373		
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