



Rig Mass Flow Rate Calculations

Please Enter Parameters in highlighted boxes below

Engine Data File		
Ambient Conditions		
Air Temperature	5	[C]
Atmospheric Pressure	985	[mBar]
Air Humidity	80	[%]
Viper Engine Parameters		
Engine Air Intake Mass Flow	18.7	[Kg/s]
Butane Flow Rate	1732	[Ltr/h]
Engine Speed	12150	[RPM]
ETC	650	[C]
Gas Delivery System Data File		
Gas Delivery System		
Mixed Gas (Fuel) Mass Flow rate	0.132	[Kg/s]
Oxygen Mass Flow rate	0.520	[Kg/s]

Please do not change anything in this box

Test Date and Time = 14.03.2016 12:28:54.1

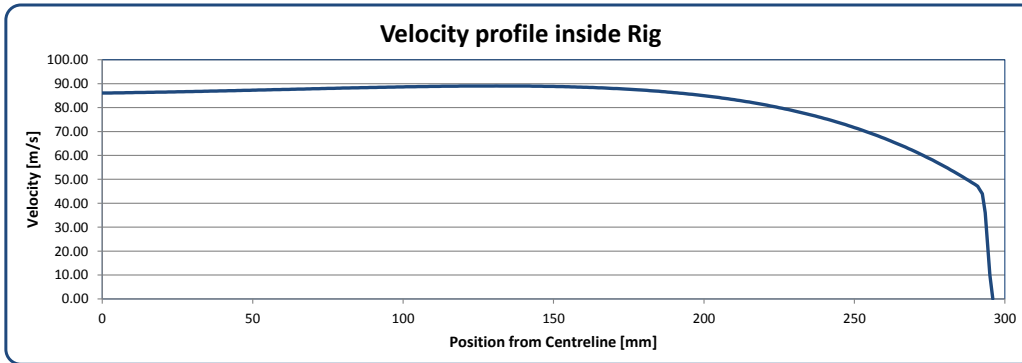
Calculated Parameters		
Air density	1.231049	[Kg/m ³]
Liquid Butane density	584	[Kg/m ³]
Butane mass Flow rate	0.280969	[Kg/s]
Air Fuel Ratio	79.23263	[]
Calculated Exhaust gas properties (Reaction Engines)		
Exhaust products density	0.41	[Kg/m ³]
Pitot Traverse Results		
Rig Gas flow rate - Integrated	9.125	[Kg/s]
Total Rig Mass flow	9.777	[Kg/s]
Rig Gas Temperature as read from TC 11		
Gas Temperature	487	[C]

Bruce Ewan to fill in

Note

Manual for viper 201 gives figures for fuel flow rate to be as follows at maximum power

Fuel Flow	2035	lb/hr	to	2920	lb/hr
	925	Kg/hr		1327.273	Kg/hr
	1156.25	ltr/hr		1659.091	ltr/hr



Data Acquisition Parameters

Sampling Rate	1000	[Hz]
No of samples recorded	100	Samples
Averaged samples sampling	10	[Hz]
Pitot Traverse speed	7	[mm/s]
Distance Travelled every 0.1	0.7	[mm]

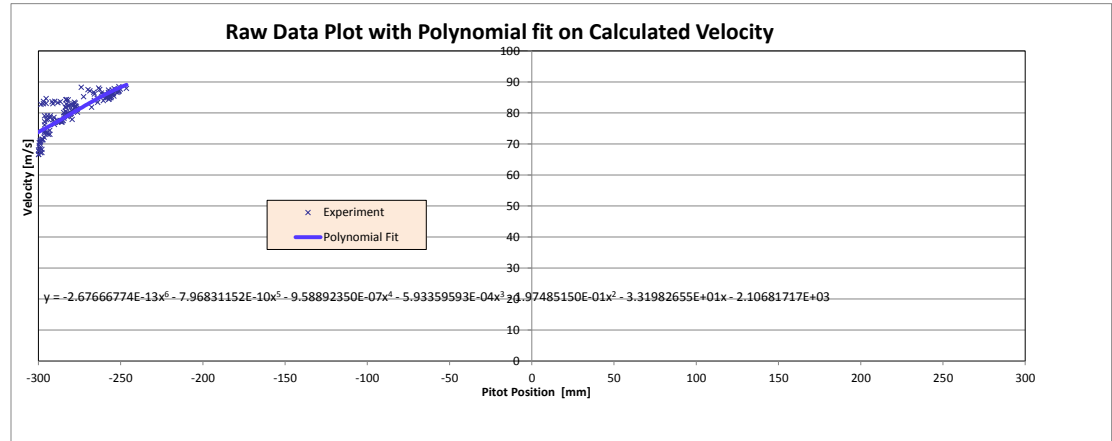
Averaged Pitot dp 13.88360081 Average Vel 81.954149 [m/s]

Raw Data from CSV File

487.29065 20.06

Date and time [dd:mm:yyy hh:mm:ss.ms]	Pitot Position from rig centre [mm]	TC11 - Pitot [deg C]	Pitot dP [mBar]	O2 %
14.03.2016 12:28:54.1	-485.48	447.1	9.4021	20.06
14.03.2016 12:28:54.2	-363.17	448.5	9.2917	20.06
14.03.2016 12:28:54.3	-320.26	448.4	9.0811	20.06
14.03.2016 12:28:54.4	-313.61	447.2	9.3292	20.06
14.03.2016 12:28:54.5	-316.87	447.7	9.4234	20.06
14.03.2016 12:28:54.6	-317.56	448.5	9.0366	20.06
14.03.2016 12:28:54.7	-312.8	448	8.8428	20.06
14.03.2016 12:28:54.8	-308.4	447.2	9.0776	20.06
14.03.2016 12:28:54.9	-304.83	448	9.0003	20.06
14.03.2016 12:28:55.0	-302.55	448.8	9.04	20.06
14.03.2016 12:28:55.1	-302.37	448	8.7605	20.06
14.03.2016 12:28:55.2	-302.2	447.4	8.7722	20.06
14.03.2016 12:28:55.3	-300.05	448.6	8.9745	20.06
14.03.2016 12:28:55.4	-297.88	449.2	9.2585	20.06
14.03.2016 12:28:55.5	-298.65	447.8	9.2431	20.06
14.03.2016 12:28:55.6	-299.85	447.4	9.0986	20.06
14.03.2016 12:28:55.7	-300.25	449	9.192	20.06
14.03.2016 12:28:55.8	-300.42	449.5	9.3722	20.06
14.03.2016 12:28:55.9	-300.28	447.9	9.5791	20.06
14.03.2016 12:28:56.0	-300.18	447.8	9.2155	20.06
14.03.2016 12:28:56.1	-300.1	449.5	9.3017	20.06
14.03.2016 12:28:56.2	-300.07	449.8	9.5705	20.06
14.03.2016 12:28:56.3	-300.15	448.2	9.451	20.06
14.03.2016 12:28:56.4	-300.19	448.4	9.5211	20.06
14.03.2016 12:28:56.5	-300	449.7	9.4843	20.06
14.03.2016 12:28:56.6	-299.92	449.5	9.0892	20.06
14.03.2016 12:28:56.7	-299.83	448.5	9.3803	20.06
14.03.2016 12:28:56.8	-297.84	449.2	9.5395	20.06
14.03.2016 12:28:56.9	-298.78	450.3	9.5929	20.06
14.03.2016 12:28:57.0	-299.27	450.1	9.703	20.06
14.03.2016 12:28:57.1	-299.54	449.9	9.9022	20.06
14.03.2016 12:28:57.2	-299.48	450.9	10.1426	20.06
14.03.2016 12:28:57.3	-299.05	451.9	10.1784	20.06
14.03.2016 12:28:57.4	-298.8	451.2	10.3533	20.06
14.03.2016 12:28:57.5	-298.75	451.1	10.2741	20.06
14.03.2016 12:28:57.6	-298.23	452.8	10.4214	20.06
14.03.2016 12:28:57.7	-297.71	453.6	10.499	20.06
14.03.2016 12:28:57.8	-297.51	452.3	10.4188	20.06
14.03.2016 12:28:57.9	-297.2	452.4	10.4362	20.06
14.03.2016 12:28:58.0	-296.54	454.4	10.6791	20.06
14.03.2016 12:28:58.1	-296.27	455.2	11.0695	20.06
14.03.2016 12:28:58.2	-296.16	454.2	11.2377	20.06
14.03.2016 12:28:58.3	-295.98	454.3	11.3255	20.06
14.03.2016 12:28:58.4	-295.05	456.3	11.1836	20.06
14.03.2016 12:28:58.5	-294.63	456.7	11.0935	20.06
14.03.2016 12:28:58.6	-294.08	455.9	10.9521	20.06
14.03.2016 12:28:58.7	-293.02	456.4	10.9464	20.06
14.03.2016 12:28:58.8	-293.12	458	11.3296	20.06
14.03.2016 12:28:58.9	-296.22	458.4	11.8812	20.06
14.03.2016 12:28:59.0	-296.21	458.1	12.1888	20.06
14.03.2016 12:28:59.1	-295.23	459.1	12.4203	20.06
14.03.2016 12:28:59.2	-293.94	460.5	12.435	20.06
14.03.2016 12:28:59.3	-291.11	460.5	12.4052	20.06
14.03.2016 12:28:59.4	-288.77	460.4	12.3299	20.06
14.03.2016 12:28:59.5	-288.27	461.7	12.3127	20.06
14.03.2016 12:28:59.6	-279.51	462.8	12.4382	20.06

Calculated Velocity [m/s]
67.7228931
67.3241159
66.5567794
67.4598345
67.7995611
66.3935054
65.6777053
66.5439521
66.26002
66.4059944
65.3713594
65.4149979
66.1649823
67.203731
67.1478166
66.6208786
66.9619477
67.6151231
68.3573822
67.0474895
67.3603343
68.3266901
67.8987769
68.1501212
68.0182902
66.5864558
67.6443353
68.2159412
68.4066036
68.7980431
69.500658
70.3392476
70.4632753
71.0660977
70.7937575
71.2994373
71.5644005
71.2905426
71.3500474
72.1755989
73.4830327
74.0392118
74.3278827
73.8607787
73.5626496
73.0923238
73.073301
74.3413354
76.129543
77.1087291
77.8375419
77.8835904
77.7902119
77.5537579
77.4996459
77.893611



14.03.2016 12:28:59.7	-286.8	462.3	12.346	20.06	77.604375
14.03.2016 12:28:59.8	-292.96	462.4	12.6308	20.06	78.4943683
14.03.2016 12:28:59.9	-296.25	464.1	12.8039	20.06	79.0304048
14.03.2016 12:29:00.0	-294.58	465.1	12.8141	20.06	79.0618776
14.03.2016 12:29:00.1	-292.72	464.2	12.8054	20.06	79.0350339
14.03.2016 12:29:00.2	-290.57	464.5	12.6521	20.06	78.5605251
14.03.2016 12:29:00.3	-289.7	466.4	12.143	20.06	76.9637228
14.03.2016 12:29:00.4	-290.29	467.4	11.9335	20.06	76.2969168
14.03.2016 12:29:00.5	-290.38	466.2	12.1112	20.06	76.8628808
14.03.2016 12:29:00.6	-288.15	466.7	12.1777	20.06	77.0736107
14.03.2016 12:29:00.7	-287.38	468.6	12.2562	20.06	77.3216279
14.03.2016 12:29:00.8	-286.73	469.1	12.2219	20.06	77.2133566
14.03.2016 12:29:00.9	-285.91	468.2	12.1646	20.06	77.0321441
14.03.2016 12:29:01.0	-285.68	469	12.1805	20.06	77.0824709
14.03.2016 12:29:01.1	-285.57	470.6	12.3091	20.06	77.4883154
14.03.2016 12:29:01.2	-284.9	470.9	12.3255	20.06	77.5399189
14.03.2016 12:29:01.3	-284.39	470.5	12.5524	20.06	78.2503799
14.03.2016 12:29:01.4	-284.22	471.6	12.7229	20.06	78.7800272
14.03.2016 12:29:01.5	-284.13	472.9	12.836	20.06	79.1294093
14.03.2016 12:29:01.6	-283.52	472.7	13.2956	20.06	80.5335864
14.03.2016 12:29:01.7	-283.04	472.4	13.185	20.06	80.1979259
14.03.2016 12:29:01.8	-282.96	473.8	12.9294	20.06	79.4167765
14.03.2016 12:29:01.9	-282.4	474.9	12.7246	20.06	78.7852902
14.03.2016 12:29:02.0	-281.72	474	12.8122	20.06	79.056016
14.03.2016 12:29:02.1	-281.55	474.1	12.9957	20.06	79.6201347
14.03.2016 12:29:02.2	-281.38	476	12.9465	20.06	79.4692762
14.03.2016 12:29:02.3	-280.65	476.7	12.9559	20.06	79.4981209
14.03.2016 12:29:02.4	-280.26	475.7	13.0601	20.06	79.8171691
14.03.2016 12:29:02.5	-280.12	475.9	13.0986	20.06	79.9347295
14.03.2016 12:29:02.6	-279.98	477.9	13.3586	20.06	80.7241615
14.03.2016 12:29:02.7	-279.34	478.6	13.3308	20.06	80.640122
14.03.2016 12:29:02.8	-278.98	477.7	13.444	20.06	80.9817805
14.03.2016 12:29:02.9	-278.88	478.4	13.8743	20.06	82.2675587
14.03.2016 12:29:03.0	-278.16	480.5	14.2775	20.06	83.4543836
14.03.2016 12:29:03.1	-277.61	480.9	14.1785	20.07	83.1645445
14.03.2016 12:29:03.2	-277.41	480.2	13.8777	20.06	82.2776383
14.03.2016 12:29:03.3	-277.53	480.9	13.78	20.07	81.9875065
14.03.2016 12:29:03.4	-276.95	482.3	13.767	20.07	81.948824
14.03.2016 12:29:03.5	-276.69	482.3	13.6017	20.06	81.4553596
14.03.2016 12:29:03.6	-276.46	482	13.4922	20.06	81.1268203
14.03.2016 12:29:03.7	-267.63	482.8	13.736	20.07	81.8565074
14.03.2016 12:29:03.8	-276.28	483.8	13.1962	20.07	80.2319807
14.03.2016 12:29:03.9	-283.1	483.1	12.9213	20.07	79.3918961
14.03.2016 12:29:04.0	-284.61	483	13.1655	20.07	80.1385995
14.03.2016 12:29:04.1	-283.66	484.5	13.7511	20.06	81.9014875
14.03.2016 12:29:04.2	-283.02	485.6	14.0637	20.06	82.8271783
14.03.2016 12:29:04.3	-278.52	484.7	14.07	20.06	82.8457279
14.03.2016 12:29:04.4	-279.98	484.9	13.999	20.06	82.6364356
14.03.2016 12:29:04.5	-282.03	486.6	13.8506	20.06	82.1972642
14.03.2016 12:29:04.6	-283.22	487.4	13.7145	20.06	81.7924202
14.03.2016 12:29:04.7	-281.09	486.4	13.9279	20.06	82.4263159
14.03.2016 12:29:04.8	-281.86	486.7	14.5432	20.06	84.2273347
14.03.2016 12:29:04.9	-283.25	488.7	14.5451	20.06	84.2328364
14.03.2016 12:29:05.0	-291.71	489.3	14.3227	20.06	83.58638
14.03.2016 12:29:05.1	-291.23	488.4	14.1067	20.06	82.9537044
14.03.2016 12:29:05.2	-296.94	488.8	14.1005	20.06	82.935473
14.03.2016 12:29:05.3	-295.28	490.4	14.1398	20.06	83.0509688
14.03.2016 12:29:05.4	-290.02	490.7	14.3758	20.06	83.7411808
14.03.2016 12:29:05.5	-286.59	489.9	14.323	20.06	83.5872554
14.03.2016 12:29:05.6	-288.11	490.6	14.2321	20.06	83.3215927
14.03.2016 12:29:05.7	-309.98	491.8	14.211	20.06	83.259805
14.03.2016 12:29:05.8	-315.49	491.7	14.3495	20.06	83.664545
14.03.2016 12:29:05.9	-311.28	491.3	13.9979	20.06	82.6331889
14.03.2016 12:29:06.0	-298.42	492.3	14.0434	20.06	82.767379
14.03.2016 12:29:06.1	-296.89	493.2	14.3703	20.06	83.7251601
14.03.2016 12:29:06.2	-295.33	492.5	14.6747	20.06	84.6072706
14.03.2016 12:29:06.3	-282.96	492.3	14.5779	20.06	84.3277578
14.03.2016 12:29:06.4	-272.56	493.6	14.8881	20.06	85.2202312

14.03.2016 12:29:06.5	-268.73	494.5	15.5495	20.06	87.0926056
14.03.2016 12:29:06.6	-265.95	493.4	15.1958	20.06	86.0963725
14.03.2016 12:29:06.7	-266.28	493.4	15.3806	20.06	86.6183105
14.03.2016 12:29:06.8	-255.55	495.1	15.1942	20.06	86.0918398
14.03.2016 12:29:06.9	-259.51	495.8	14.9984	20.06	85.53533
14.03.2016 12:29:07.0	-264.3	494.4	14.7156	20.06	84.7250935
14.03.2016 12:29:07.1	-266.08	494.5	14.4729	20.06	84.0235159
14.03.2016 12:29:07.2	-263.93	496.1	14.268	20.06	83.4266145
14.03.2016 12:29:07.3	-260.47	496.5	14.4562	20.06	83.9750253
14.03.2016 12:29:07.4	-254.16	495.4	14.9667	20.06	85.4448902
14.03.2016 12:29:07.5	-257.13	495.8	15.0126	20.06	85.5758115
14.03.2016 12:29:07.6	-259.55	497.3	15.1242	20.06	85.8932974
14.03.2016 12:29:07.7	-260.01	497.4	15.1504	20.06	85.9676627
14.03.2016 12:29:07.8	-259.57	496.8	15.1362	20.06	85.9273658
14.03.2016 12:29:07.9	-259.43	497.5	15.0506	20.06	85.6840481
14.03.2016 12:29:08.0	-259.29	498.6	14.7873	20.06	84.9312491
14.03.2016 12:29:08.1	-258.63	498.2	14.8926	20.06	85.2331093
14.03.2016 12:29:08.2	-258.43	497.9	14.9099	20.06	85.2826005
14.03.2016 12:29:08.3	-258.4	499	15.0836	20.06	85.7779322
14.03.2016 12:29:08.4	-258.06	499.8	14.7864	20.06	84.9286645
14.03.2016 12:29:08.5	-257.22	498.8	14.5833	20.06	84.3433748
14.03.2016 12:29:08.6	-256.95	498.6	14.6442	20.06	84.5193007
14.03.2016 12:29:08.7	-256.82	500	14.7791	20.06	84.9076974
14.03.2016 12:29:08.8	-256.49	500.6	14.7864	20.06	84.9286645
14.03.2016 12:29:08.9	-255.89	499.4	14.7791	20.06	84.9076974
14.03.2016 12:29:09.0	-255.66	499.4	14.9147	20.06	85.2963271
14.03.2016 12:29:09.1	-255.16	501.3	15.2195	20.06	86.1634861
14.03.2016 12:29:09.2	-254.47	501.7	15.2246	20.06	86.1779215
14.03.2016 12:29:09.3	-254.36	500.5	15.3189	20.06	86.4443992
14.03.2016 12:29:09.4	-253.11	500.7	15.4577	20.06	86.8351396
14.03.2016 12:29:09.5	-257.46	502.5	15.3792	20.06	86.6143682
14.03.2016 12:29:09.6	-262.66	502.9	15.7088	20.06	87.5375877
14.03.2016 12:29:09.7	-257.31	501.9	15.6357	20.06	87.3336747
14.03.2016 12:29:09.8	-261.77	502.3	15.3014	20.06	86.3950089
14.03.2016 12:29:09.9	-269.85	503.6	15.6875	20.06	87.4782203
14.03.2016 12:29:10.0	-273.98	503.5	15.9785	20.06	88.285844
14.03.2016 12:29:10.1	-263.4	502.8	15.8827	20.06	88.0207847
14.03.2016 12:29:10.2	-255.19	503.6	15.6549	20.06	87.3872793
14.03.2016 12:29:10.3	-252.23	504.6	15.3795	20.06	86.615213
14.03.2016 12:29:10.4	-251.44	504.1	15.4465	20.06	86.8036753
14.03.2016 12:29:10.5	-251.05	503.8	15.5107	20.06	86.9838785
14.03.2016 12:29:10.6	-251.14	505	15.5456	20.06	87.081683
14.03.2016 12:29:10.7	-251.08	505.9	16.042	20.06	88.461098
14.03.2016 12:29:10.8	-246.44	505	15.8439	20.06	87.9132055
14.03.2016 12:29:10.9	-251.06	504.7	15.6304	20.06	87.3188718
14.03.2016 12:29:11.0	-252.94	506.4	15.6141	20.06	87.2733301
14.03.2016 12:29:11.1	-253.93	507	15.8207	20.06	87.8488169
14.03.2016 12:29:11.2	-250.24	505.6	15.7544	20.06	87.6645491
14.03.2016 12:29:11.3	-359.44	505.6	15.5196	20.06	87.0088305
14.03.2016 12:29:11.4	-551.83	507.3	15.436	20.06	86.7741672
14.03.2016 12:29:11.5	-636.49	507.7	15.5523	20.06	87.1004466
14.03.2016 12:29:11.6	-665.73	506.5	15.8403	20.06	87.9032173
14.03.2016 12:29:11.7	-681.86	506.7	15.8275	20.06	87.8676943
14.03.2016 12:29:11.8	-693.49	508.4	15.719	20.06	87.566003
14.03.2016 12:29:11.9	-699.02	508.6	15.7598	20.06	87.6795718
14.03.2016 12:29:12.0	-694.4	507.7	15.7776	20.06	87.729073
14.03.2016 12:29:12.1	-697.21	508.3	15.6106	20.06	87.2635481
14.03.2016 12:29:12.2	-708.33	509.8	15.551	20.06	87.0968062
14.03.2016 12:29:12.3	-712.88	509.6	15.5976	20.06	87.2272054
14.03.2016 12:29:12.4	-714.97	509	16.1758	20.06	88.8292415
14.03.2016 12:29:12.5	-713.8	509.8	16.4652	20.06	89.6203374
14.03.2016 12:29:12.6	-711.44	510.7	16.2666	20.06	89.0782063
14.03.2016 12:29:12.7	-712.5	510.3	16.3304	20.06	89.2527242
14.03.2016 12:29:12.8	-717.38	509.7	16.63	20.06	90.0677252
14.03.2016 12:29:12.9	-720.89	510.9	17.1063	20.06	91.348435
14.03.2016 12:29:13.0	-720.85	511.7	16.7273	20.06	90.3308283
14.03.2016 12:29:13.1	-718.41	510.7	16.5046	20.06	89.7275007
14.03.2016 12:29:13.2	-716.4	510.4	16.763	20.06	90.4271705

14.03.2016 12:29:13.3	-712.56	511.9	16.5818	20.06	89.9371054
14.03.2016 12:29:13.4	-713.92	512.5	16.0696	20.06	88.5371632
14.03.2016 12:29:13.5	-715.62	511.2	16.1904	20.06	88.8693203
14.03.2016 12:29:13.6	-714.49	511.1	16.4741	20.06	89.6445556
14.03.2016 12:29:13.7	-709.3	512.7	16.56	20.06	89.877966
14.03.2016 12:29:13.8	-706.09	513	16.3411	20.06	89.2819595
14.03.2016 12:29:13.9	-705.74	511.6	16.2018	20.06	88.9006022
14.03.2016 12:29:14.0	-703.96	511.9	16.0305	20.06	88.4293848
14.03.2016 12:29:14.1	-704.31	513.4	16.1013	20.06	88.6244474
14.03.2016 12:29:14.2	-705.79	513.4	16.4087	20.06	89.4664401
14.03.2016 12:29:14.3	-706.57	512.5	16.4054	20.06	89.4574432
14.03.2016 12:29:14.4	-704.68	513	16.0876	20.06	88.5867358
14.03.2016 12:29:14.5	-702.5	514	16.0787	20.06	88.5622284
14.03.2016 12:29:14.6	-703.76	513.8	16.3845	20.06	89.400442
14.03.2016 12:29:14.7	-702.66	513.1	16.4199	20.06	89.4969682
14.03.2016 12:29:14.8	-700.07	514	16.2247	20.06	88.9634071
14.03.2016 12:29:14.9	-700.12	514.8	16.1435	20.06	88.7405096
14.03.2016 12:29:15.0	-703.81	514.1	16.2853	20.06	89.1293935
14.03.2016 12:29:15.1	-708.43	513.8	16.2419	20.06	89.0105502
14.03.2016 12:29:15.2	-709.54	515.1	16.069	20.06	88.5355103
14.03.2016 12:29:15.3	-706.68	515.7	16.1807	20.06	88.8426946
14.03.2016 12:29:15.4	-704	514.5	16.13	20.06	88.7033972
14.03.2016 12:29:15.5	-703.11	514.2	16.3692	20.06	89.3586907
14.03.2016 12:29:15.6	-704.39	515.7	16.6194	20.06	90.0390159
14.03.2016 12:29:15.7	-705.19	516.2	17.1032	20.06	91.3401576
14.03.2016 12:29:15.8	-709.17	514.7	16.78	20.06	90.4730117
14.03.2016 12:29:15.9	-714.34	514.7	16.0683	20.06	88.5335819
14.03.2016 12:29:16.0	-713.04	516.3	16.0099	20.06	88.3725484
14.03.2016 12:29:16.1	-706.89	516.5	16.3652	20.06	89.3477722
14.03.2016 12:29:16.2	-703.48	515.3	16.447	20.06	89.5707923
14.03.2016 12:29:16.3	-700.26	515.4	16.3658	20.06	89.34941
14.03.2016 12:29:16.4	-698.05	516.6	16.4038	20.06	89.4530808
14.03.2016 12:29:16.5	-697.54	516.4	16.233	20.06	88.9861595
14.03.2016 12:29:16.6	-700.87	515.6	16.1407	20.06	88.7328135
14.03.2016 12:29:16.7	-710.93	516.1	15.9516	20.06	88.2114975
14.03.2016 12:29:16.8	-716.34	517.1	15.9987	20.06	88.3416318
14.03.2016 12:29:16.9	-717.11	516.5	16.1609	20.06	88.7883205
14.03.2016 12:29:17.0	-709.95	516	16.3202	20.06	89.2248462
14.03.2016 12:29:17.1	-699.04	516.7	16.3893	20.06	89.4135364
14.03.2016 12:29:17.2	-697.3	517.4	16.283	20.06	89.1230993
14.03.2016 12:29:17.3	-701.95	516.6	16.328	20.06	89.2461655
14.03.2016 12:29:17.4	-704.75	515.9	17.1992	20.06	91.5961443
14.03.2016 12:29:17.5	-703.77	517	17.9128	20.06	93.477009
14.03.2016 12:29:17.6	-704.48	517.5	17.0935	20.06	91.3142524
14.03.2016 12:29:17.7	-704.15	516.1	16.3729	20.06	89.3687892
14.03.2016 12:29:17.8	-702.76	515.6	16.2477	20.06	89.0264417
14.03.2016 12:29:17.9	-703.11	517	16.4236	20.06	89.5070511
14.03.2016 12:29:18.0	-704.01	517.2	16.618	20.06	90.0352235
14.03.2016 12:29:18.1	-703.64	515.5	16.4205	20.06	89.4986033
14.03.2016 12:29:18.2	-701.79	515.1	16.0667	20.06	88.5291739
14.03.2016 12:29:18.3	-701.02	516.2	15.9113	20.06	88.0999986
14.03.2016 12:29:18.4	-701.36	516.1	16.4642	20.06	89.6176159
14.03.2016 12:29:18.5	-702.04	514.4	16.763	20.06	90.4271705
14.03.2016 12:29:18.6	-701.89	514	16.4595	20.06	89.6048235