



Rig Mass Flow Rate Calculations

Please Enter Parameters in highlighted boxes below

| Engine Data File | | |
|--------------------------------------|-------|---------|
| Ambient Conditions | | |
| Air Temperature | 5 | [C] |
| Atmospheric Pressure | 975 | [mBar] |
| Air Humidity | 95 | [%] |
| 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 | 0.51 | [Kg/s] |
| Oxygen Mass Flow rate | 0.159 | [Kg/s] |

Please do not change anything in this box

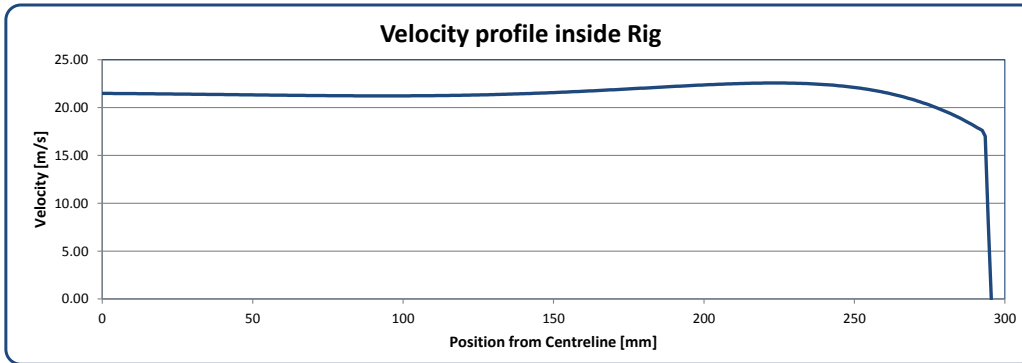
Test Date and Time = 28.04.2015 14:31:44.4

| Calculated Parameters | | |
|---|----------|---------|
| Air density | 1.217898 | [Kg/m3] |
| Liquid Butane density | 584 | [Kg/m3] |
| Butane mass Flow rate | 0.280969 | [Kg/s] |
| Air Fuel Ratio | 79.23263 | [] |
| Calculated Exhaust gas properties (Reaction Engines) | | |
| Exhaust products density | 0.389 | [Kg/m3] |
| Pitot Traverse Results | | |
| Rig Gas flow rate - Integrated | 2.263343 | [Kg/s] |
| Total Rig Mass flow | 2.932343 | [Kg/s] |
| Rig Gas Temperature as read from TC 11 | | |
| Gas Temperature | 513 | [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] |

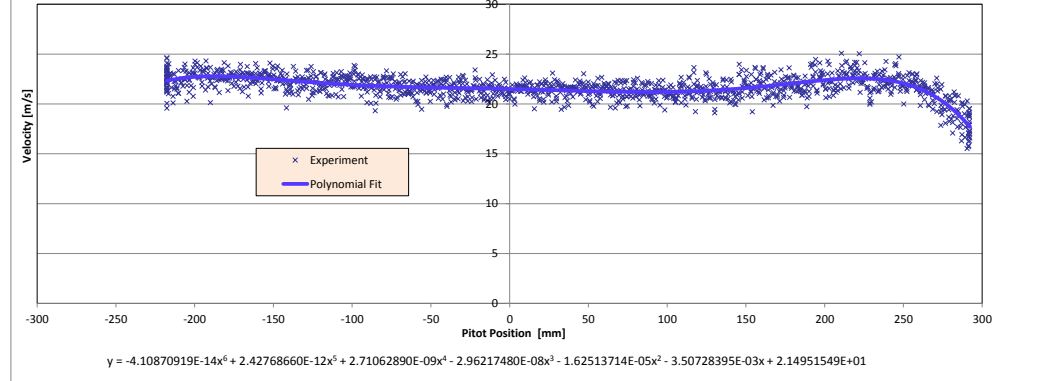
Averaged Pitot dp 0.919333593 Average Vel 21.6756167 [m/s]

Raw Data from CSV File

| Date and time [dd:mm:yyyy hh:mm:ss.ms] | Pitot Position from rig centre [mm] | TC11 - Pitot [deg C] | Pitot dP [mBar] | O2 % |
|---|---|-------------------------|--------------------|---------|
| 28.04.2015 14:31:44.4 | -217.58 | 509.9 | 1.0022 | 16.41 |
| 28.04.2015 14:31:44.5 | -217.57 | 509.9 | 1.0506 | 16.21 |
| 28.04.2015 14:31:44.6 | -217.57 | 510 | 1.0621 | 16.24 |
| 28.04.2015 14:31:44.7 | -217.6 | 510.1 | 1.0328 | 16.27 |
| 28.04.2015 14:31:44.8 | -217.56 | 510 | 1.0855 | 16.35 |
| 28.04.2015 14:31:44.9 | -217.59 | 509.9 | 1.1739 | 16.23 |
| 28.04.2015 14:31:45.0 | -217.57 | 510 | 0.9552 | 16.08 |
| 28.04.2015 14:31:45.1 | -217.57 | 510.1 | 0.9411 | 16.13 |
| 28.04.2015 14:31:45.2 | -217.6 | 509.9 | 0.989 | 16.21 |
| 28.04.2015 14:31:45.3 | -217.57 | 509.9 | 1.1002 | 16.17 |
| 28.04.2015 14:31:45.4 | -217.55 | 509.9 | 0.9154 | 16.2 |
| 28.04.2015 14:31:45.5 | -217.55 | 510 | 1.0052 | 16.23 |
| 28.04.2015 14:31:45.6 | -217.57 | 509.8 | 0.8966 | 16.47 |
| 28.04.2015 14:31:45.7 | -217.59 | 509.8 | 0.9623 | 16.24 |
| 28.04.2015 14:31:45.8 | -217.62 | 509.9 | 0.9145 | 16.39 |
| 28.04.2015 14:31:45.9 | -217.57 | 509.9 | 1.0088 | 16.19 |
| 28.04.2015 14:31:46.0 | -217.6 | 509.8 | 1.1805 | 16.23 |
| 28.04.2015 14:31:46.1 | -217.56 | 509.8 | 1.0807 | 16.34 |
| 28.04.2015 14:31:46.2 | -217.54 | 509.9 | 0.946 | 16.32 |
| 28.04.2015 14:31:46.3 | -217.09 | 509.9 | 1.0005 | 16.39 |
| 28.04.2015 14:31:46.4 | -216.65 | 509.9 | 0.8596 | 16.24 |
| 28.04.2015 14:31:46.5 | -216.62 | 509.9 | 1.0101 | 16.3 |
| 28.04.2015 14:31:46.6 | -216.03 | 510 | 1.0227 | 16.28 |
| 28.04.2015 14:31:46.7 | -213.53 | 510 | 1.0321 | 16.38 |
| 28.04.2015 14:31:46.8 | -213.69 | 510 | 0.7861 | 16.19 |
| 28.04.2015 14:31:46.9 | -213.66 | 510 | 0.8393 | 16.12 |
| 28.04.2015 14:31:47.0 | -212.03 | 510.1 | 0.9655 | 16.42 |
| 28.04.2015 14:31:47.1 | -211.16 | 510 | 0.9096 | 16.36 |
| 28.04.2015 14:31:47.2 | -211.23 | 510 | 0.8985 | 16.24 |
| 28.04.2015 14:31:47.3 | -210.22 | 510 | 1.0603 | 16.12 |
| 28.04.2015 14:31:47.4 | -208.38 | 510.1 | 0.9534 | 16.32 |
| 28.04.2015 14:31:47.5 | -208.62 | 510 | 0.9522 | 16.32 |
| 28.04.2015 14:31:47.6 | -208.53 | 510 | 0.9841 | 16.31 |
| 28.04.2015 14:31:47.7 | -206.5 | 510.1 | 1.0899 | 16.19 |
| 28.04.2015 14:31:47.8 | -206.17 | 510.2 | 1.1204 | 16.29 |
| 28.04.2015 14:31:47.9 | -206.06 | 510 | 0.9779 | 16.28 |
| 28.04.2015 14:31:48.0 | -205.43 | 510 | 1.0555 | 16.3 |
| 28.04.2015 14:31:48.1 | -203.27 | 510 | 1.0402 | 16.23 |
| 28.04.2015 14:31:48.2 | -203.46 | 510.1 | 0.8721 | 16.36 |
| 28.04.2015 14:31:48.3 | -203.56 | 510 | 0.9734 | 16.35 |
| 28.04.2015 14:31:48.4 | -200.79 | 510 | 1.0387 | 16.19 |
| 28.04.2015 14:31:48.5 | -200.82 | 510.1 | 0.911 | 16.22 |
| 28.04.2015 14:31:48.6 | -200.89 | 510.2 | 1.0845 | 16.3 |
| 28.04.2015 14:31:48.7 | -200.86 | 510.1 | 0.8386 | 16.37 |
| 28.04.2015 14:31:48.8 | -198 | 510.2 | 1.0049 | 16.3 |
| 28.04.2015 14:31:48.9 | -198.35 | 510.3 | 1.1334 | 16.26 |
| 28.04.2015 14:31:49.0 | -198.34 | 510.3 | 1.0911 | 16.4 |
| 28.04.2015 14:31:49.1 | -196.15 | 510.3 | 1.1007 | 16.29 |
| 28.04.2015 14:31:49.2 | -195.07 | 510.3 | 1.0529 | 16.27 |
| 28.04.2015 14:31:49.3 | -195.33 | 510.4 | 0.9566 | 16.33 |
| 28.04.2015 14:31:49.4 | -195.26 | 510.3 | 0.9243 | 16.41 |
| 28.04.2015 14:31:49.5 | -193.06 | 510.3 | 0.8913 | 16.28 |
| 28.04.2015 14:31:49.6 | -192.62 | 510.4 | 1.0827 | 16.18 |
| 28.04.2015 14:31:49.7 | -192.78 | 510.4 | 1.1496 | 16.23 |
| 28.04.2015 14:31:49.8 | -192.1 | 510.3 | 1.0835 | 16.27 |
| 28.04.2015 14:31:49.9 | -189.98 | 510.3 | 1.0894 | 16.31 |
| 28.04.2015 14:31:50.0 | -190.03 | 510.4 | 0.788 | 16.12 |
| 28.04.2015 14:31:50.1 | -190.17 | 510.6 | 0.9681 | 16.44 |
| 28.04.2015 14:31:50.2 | -187.15 | 510.4 | 1.0395 | 16.38 |

| Calculated Velocity [m/s] |
|---------------------------|
| 22.6995578 |
| 23.2412186 |
| 23.368073 |
| 23.043493 |
| 23.6240912 |
| 24.5672049 |
| 22.160898 |
| 21.996728 |
| 22.5495741 |
| 23.7835138 |
| 21.6943005 |
| 22.733507 |
| 21.4703718 |
| 22.2431064 |
| 21.6836332 |
| 22.7741792 |
| 24.63617 |
| 23.5718014 |
| 22.0539185 |
| 22.6802973 |
| 21.0226955 |
| 22.7888486 |
| 22.9305423 |
| 23.0356826 |
| 20.1038435 |
| 20.7729803 |
| 22.280059 |
| 21.6254634 |
| 21.4931088 |
| 23.3482631 |
| 22.1400079 |
| 22.1260702 |
| 22.4936438 |
| 23.6719221 |
| 24.0008569 |
| 22.4226749 |
| 23.2953541 |
| 23.1258989 |
| 21.1749962 |
| 22.3710242 |
| 23.1092187 |
| 21.6420993 |
| 23.6132071 |
| 20.7643158 |
| 22.7301143 |
| 24.1396963 |
| 23.6849502 |
| 23.7889175 |
| 23.2666448 |
| 22.1771322 |
| 21.7995071 |
| 21.4068197 |
| 23.5936029 |
| 24.3116019 |
| 23.6023179 |
| 23.6664917 |
| 20.1281243 |
| 22.3100379 |
| 23.1181163 |

Raw Data Plot with Polynomial fit on Calculated Velocity



| | | | | | |
|-----------------------|---------|-------|--------|-------|------------|
| 28.04.2015 14:31:50.3 | -187.13 | 510.4 | 0.9175 | 16.32 | 21.7191705 |
| 28.04.2015 14:31:50.4 | -186.92 | 510.6 | 0.9117 | 16.28 | 21.6504125 |
| 28.04.2015 14:31:50.5 | -186.92 | 510.7 | 0.998 | 16.21 | 22.6519434 |
| 28.04.2015 14:31:50.6 | -184.42 | 510.5 | 1.0268 | 16.43 | 22.9764605 |
| 28.04.2015 14:31:50.7 | -184.43 | 510.4 | 0.9796 | 16.29 | 22.4421564 |
| 28.04.2015 14:31:50.8 | -184.41 | 510.5 | 0.8702 | 16.37 | 21.1519171 |
| 28.04.2015 14:31:50.9 | -183.35 | 510.6 | 0.9856 | 16.36 | 22.5107801 |
| 28.04.2015 14:31:51.0 | -182.16 | 510.5 | 1.0357 | 16.23 | 23.0758223 |
| 28.04.2015 14:31:51.1 | -181.76 | 510.4 | 1.0628 | 16.34 | 23.3757724 |
| 28.04.2015 14:31:51.2 | -181.2 | 510.5 | 1.1331 | 16.26 | 24.1365013 |
| 28.04.2015 14:31:51.3 | -178.77 | 510.5 | 1.1039 | 16.44 | 23.8234725 |
| 28.04.2015 14:31:51.4 | -179.09 | 510.4 | 0.9683 | 16.32 | 22.3123423 |
| 28.04.2015 14:31:51.5 | -178.82 | 510.4 | 0.8858 | 16.27 | 21.3406693 |
| 28.04.2015 14:31:51.6 | -177.34 | 510.4 | 1.0437 | 16.37 | 23.1647725 |
| 28.04.2015 14:31:51.7 | -176.4 | 510.4 | 1.0383 | 16.4 | 23.1047686 |
| 28.04.2015 14:31:51.8 | -176.46 | 510.3 | 0.9472 | 16.24 | 22.0679018 |
| 28.04.2015 14:31:51.9 | -176.21 | 510.3 | 1.0049 | 16.14 | 22.7301143 |
| 28.04.2015 14:31:52.0 | -173.66 | 510.3 | 1.0509 | 16.46 | 23.2445366 |
| 28.04.2015 14:31:52.1 | -173.75 | 510.3 | 1.0026 | 16.34 | 22.7040873 |
| 28.04.2015 14:31:52.2 | -173.84 | 510.2 | 0.9992 | 16.37 | 22.6655577 |
| 28.04.2015 14:31:52.3 | -171.61 | 510.3 | 1.0206 | 16.23 | 22.9069875 |
| 28.04.2015 14:31:52.4 | -171.06 | 510.4 | 1.0683 | 16.35 | 23.4361793 |
| 28.04.2015 14:31:52.5 | -171.19 | 510.3 | 0.9032 | 16.47 | 21.5492501 |
| 28.04.2015 14:31:52.6 | -170.76 | 510.2 | 1.0298 | 16.26 | 23.0100012 |
| 28.04.2015 14:31:52.7 | -168.37 | 510.3 | 0.999 | 16.32 | 22.6632892 |
| 28.04.2015 14:31:52.8 | -168.59 | 510.3 | 0.9164 | 16.34 | 21.7061469 |
| 28.04.2015 14:31:52.9 | -168.75 | 510.2 | 1.0278 | 16.32 | 22.9876462 |
| 28.04.2015 14:31:53.0 | -166.09 | 510.2 | 0.9156 | 16.3 | 21.6966703 |
| 28.04.2015 14:31:53.1 | -165.92 | 510.3 | 0.84 | 16.25 | 20.7816411 |
| 28.04.2015 14:31:53.2 | -165.97 | 510.3 | 1.0352 | 16.27 | 23.0702515 |
| 28.04.2015 14:31:53.3 | -165.35 | 510.2 | 1.011 | 16.29 | 22.7989888 |
| 28.04.2015 14:31:53.4 | -163.09 | 510.2 | 0.9534 | 16.28 | 22.1400079 |
| 28.04.2015 14:31:53.5 | -163.18 | 510.2 | 0.967 | 16.31 | 22.2973594 |
| 28.04.2015 14:31:53.6 | -163.63 | 510.2 | 1.0379 | 16.28 | 23.1003177 |
| 28.04.2015 14:31:53.7 | -161.25 | 510.1 | 1.1259 | 16.39 | 24.0596944 |
| 28.04.2015 14:31:53.8 | -160.3 | 510.1 | 1.0854 | 16.23 | 23.623003 |
| 28.04.2015 14:31:53.9 | -160.45 | 510.1 | 0.9837 | 16.36 | 22.4890719 |
| 28.04.2015 14:31:54.0 | -160.16 | 510 | 0.9692 | 16.36 | 22.3227091 |
| 28.04.2015 14:31:54.1 | -157.79 | 510 | 1.0192 | 16.29 | 22.8912709 |
| 28.04.2015 14:31:54.2 | -157.69 | 510 | 0.8664 | 16.29 | 21.1056834 |
| 28.04.2015 14:31:54.3 | -157.82 | 510.1 | 0.9 | 16.23 | 21.5110422 |
| 28.04.2015 14:31:54.4 | -157.26 | 510 | 0.9512 | 16.54 | 22.1144487 |
| 28.04.2015 14:31:54.5 | -155.13 | 510 | 1.0563 | 16.2 | 23.3041806 |
| 28.04.2015 14:31:54.6 | -155.24 | 510 | 1.0574 | 16.32 | 23.3163116 |
| 28.04.2015 14:31:54.7 | -155.26 | 510.1 | 0.988 | 16.3 | 22.538171 |
| 28.04.2015 14:31:54.8 | -152.22 | 510 | 1.1302 | 16.57 | 24.1055946 |
| 28.04.2015 14:31:54.9 | -152.49 | 509.9 | 1.0307 | 16.35 | 23.0200538 |
| 28.04.2015 14:31:55.0 | -152.18 | 510 | 0.9887 | 16.28 | 22.5461537 |
| 28.04.2015 14:31:55.1 | -151.32 | 510.1 | 1.0087 | 16.29 | 22.7730504 |
| 28.04.2015 14:31:55.2 | -149.58 | 510 | 0.9013 | 16.06 | 21.5265723 |
| 28.04.2015 14:31:55.3 | -149.72 | 510 | 1.0197 | 16.13 | 22.8968852 |
| 28.04.2015 14:31:55.4 | -149.62 | 510.1 | 0.9841 | 16.36 | 22.4936438 |
| 28.04.2015 14:31:55.5 | -148.57 | 510.2 | 0.913 | 16.53 | 21.6658427 |
| 28.04.2015 14:31:55.6 | -147.19 | 510.1 | 0.9968 | 16.28 | 22.6383209 |
| 28.04.2015 14:31:55.7 | -147.1 | 510.2 | 0.981 | 16.35 | 22.4581874 |
| 28.04.2015 14:31:55.8 | -147.02 | 510.4 | 0.9699 | 16.14 | 22.3307689 |
| 28.04.2015 14:31:55.9 | -144.5 | 510.4 | 1.0123 | 15.95 | 22.8136522 |
| 28.04.2015 14:31:56.0 | -144.37 | 510.4 | 1.0631 | 16.3 | 23.3790713 |
| 28.04.2015 14:31:56.1 | -144.08 | 510.4 | 0.9413 | 15.99 | 21.9990652 |
| 28.04.2015 14:31:56.2 | -142.3 | 510.5 | 0.9459 | 16.48 | 22.0527528 |
| 28.04.2015 14:31:56.3 | -141.67 | 510.5 | 0.8944 | 16.41 | 21.4440145 |
| 28.04.2015 14:31:56.4 | -141.66 | 510.5 | 0.748 | 16.36 | 19.6106052 |
| 28.04.2015 14:31:56.5 | -141.44 | 510.5 | 0.88 | 16.26 | 21.2706878 |
| 28.04.2015 14:31:56.6 | -139.68 | 510.6 | 0.9343 | 16.38 | 21.9171143 |
| 28.04.2015 14:31:56.7 | -139.01 | 510.5 | 0.9361 | 16.39 | 21.9382166 |
| 28.04.2015 14:31:56.8 | -139.14 | 510.4 | 0.8968 | 16.26 | 21.4727663 |
| 28.04.2015 14:31:56.9 | -137.58 | 510.4 | 0.8555 | 16.15 | 20.9725001 |
| 28.04.2015 14:31:57.0 | -135.88 | 510.4 | 1.0548 | 16.34 | 23.2876281 |
| 28.04.2015 14:31:57.1 | -135.93 | 510.3 | 0.9879 | 16.37 | 22.5370304 |
| 28.04.2015 14:31:57.2 | -136.09 | 510.2 | 0.9909 | 16.22 | 22.571224 |
| 28.04.2015 14:31:57.3 | -134.64 | 510.3 | 0.883 | 16.27 | 21.3069138 |

| | | | | | |
|-----------------------|---------|-------|--------|-------|------------|
| 28.04.2015 14:31:57.4 | -133.32 | 510.3 | 0.9681 | 16.26 | 22.3100379 |
| 28.04.2015 14:31:57.5 | -133.45 | 510.1 | 0.9756 | 16.42 | 22.3962905 |
| 28.04.2015 14:31:57.6 | -133.61 | 510 | 0.8996 | 16.2 | 21.5062614 |
| 28.04.2015 14:31:57.7 | -130.84 | 510.1 | 0.9224 | 16.33 | 21.7770899 |
| 28.04.2015 14:31:57.8 | -130.82 | 510.1 | 0.9801 | 16.26 | 22.4478831 |
| 28.04.2015 14:31:57.9 | -130.86 | 510 | 0.965 | 16.37 | 22.2742892 |
| 28.04.2015 14:31:58.0 | -128.86 | 509.9 | 0.9053 | 16.24 | 21.5742873 |
| 28.04.2015 14:31:58.1 | -127.66 | 510 | 0.8145 | 16.23 | 20.4637745 |
| 28.04.2015 14:31:58.2 | -127.89 | 510 | 1.063 | 16.31 | 23.3779717 |
| 28.04.2015 14:31:58.3 | -127.87 | 509.8 | 0.9954 | 16.27 | 22.6224176 |
| 28.04.2015 14:31:58.4 | -125.05 | 509.7 | 0.9051 | 16.28 | 21.571904 |
| 28.04.2015 14:31:58.5 | -125.24 | 509.8 | 0.8679 | 16.23 | 21.1239456 |
| 28.04.2015 14:31:58.6 | -125.35 | 509.8 | 0.8468 | 16.39 | 20.8655877 |
| 28.04.2015 14:31:58.7 | -124.18 | 509.8 | 0.8675 | 16.26 | 21.1190773 |
| 28.04.2015 14:31:58.8 | -122.36 | 509.9 | 0.9514 | 16.27 | 22.1167735 |
| 28.04.2015 14:31:58.9 | -122.69 | 509.9 | 0.8835 | 16.32 | 21.3129455 |
| 28.04.2015 14:31:59.0 | -122.71 | 510 | 1.0071 | 16.33 | 22.7549819 |
| 28.04.2015 14:31:59.1 | -120.07 | 510 | 1.0403 | 16.34 | 23.1270104 |
| 28.04.2015 14:31:59.2 | -119.65 | 510 | 0.9443 | 16.27 | 22.0340937 |
| 28.04.2015 14:31:59.3 | -119.79 | 510.1 | 0.9039 | 16.39 | 21.5575991 |
| 28.04.2015 14:31:59.4 | -119.71 | 510 | 1.0426 | 16.31 | 23.1525621 |
| 28.04.2015 14:31:59.5 | -117.35 | 510 | 1.029 | 16.34 | 23.0010618 |
| 28.04.2015 14:31:59.6 | -117.08 | 510 | 0.9825 | 16.23 | 22.4753507 |
| 28.04.2015 14:31:59.7 | -117.12 | 510.1 | 0.9329 | 16.29 | 21.9006873 |
| 28.04.2015 14:31:59.8 | -116.2 | 510 | 0.8618 | 16.39 | 21.0495803 |
| 28.04.2015 14:31:59.9 | -114.44 | 509.9 | 0.9569 | 16.34 | 22.1806094 |
| 28.04.2015 14:32:00.0 | -114.54 | 510.1 | 0.8399 | 16.27 | 20.7804041 |
| 28.04.2015 14:32:00.1 | -114.23 | 510.1 | 0.9296 | 16.32 | 21.8619177 |
| 28.04.2015 14:32:00.2 | -111.45 | 509.9 | 0.9311 | 16.3 | 21.8795487 |
| 28.04.2015 14:32:00.3 | -111.76 | 509.8 | 1.0082 | 16.21 | 22.7674056 |
| 28.04.2015 14:32:00.4 | -111.53 | 509.9 | 0.9484 | 16.18 | 22.0818762 |
| 28.04.2015 14:32:00.5 | -110.22 | 509.9 | 0.854 | 16.32 | 20.9541058 |
| 28.04.2015 14:32:00.6 | -109.07 | 509.8 | 0.9455 | 16.23 | 22.0480895 |
| 28.04.2015 14:32:00.7 | -108.97 | 509.8 | 0.984 | 16.28 | 22.4925009 |
| 28.04.2015 14:32:00.8 | -108.79 | 509.9 | 0.834 | 16.25 | 20.7072879 |
| 28.04.2015 14:32:00.9 | -106.58 | 509.9 | 0.8953 | 16.38 | 21.4548009 |
| 28.04.2015 14:32:01.0 | -106.51 | 509.9 | 1.0153 | 16.25 | 22.8474318 |
| 28.04.2015 14:32:01.1 | -106.3 | 509.8 | 1.0076 | 16.27 | 22.7606299 |
| 28.04.2015 14:32:01.2 | -105.43 | 509.9 | 0.8359 | 16.28 | 20.730862 |
| 28.04.2015 14:32:01.3 | -103.37 | 509.9 | 0.9649 | 16.36 | 22.2731351 |
| 28.04.2015 14:32:01.4 | -103.66 | 509.8 | 0.9828 | 16.29 | 22.4787818 |
| 28.04.2015 14:32:01.5 | -103.29 | 509.8 | 0.9845 | 16.17 | 22.4982147 |
| 28.04.2015 14:32:01.6 | -101.39 | 509.9 | 1.0382 | 16.34 | 23.103656 |
| 28.04.2015 14:32:01.7 | -100.8 | 509.8 | 0.9157 | 16.36 | 21.6978551 |
| 28.04.2015 14:32:01.8 | -100.91 | 509.8 | 0.9853 | 16.25 | 22.5073538 |
| 28.04.2015 14:32:01.9 | -99.55 | 509.8 | 0.9168 | 16.15 | 21.7108836 |
| 28.04.2015 14:32:02.0 | -98.21 | 509.8 | 0.9162 | 16.37 | 21.7037781 |
| 28.04.2015 14:32:02.1 | -98.25 | 509.7 | 1.0647 | 16.41 | 23.3966579 |
| 28.04.2015 14:32:02.2 | -98.5 | 509.5 | 0.9657 | 16.29 | 22.2823665 |
| 28.04.2015 14:32:02.3 | -95.73 | 509.6 | 0.9864 | 16.34 | 22.5199141 |
| 28.04.2015 14:32:02.4 | -95.67 | 509.5 | 0.9889 | 16.35 | 22.548434 |
| 28.04.2015 14:32:02.5 | -95.68 | 509.4 | 0.9049 | 16.37 | 21.5695205 |
| 28.04.2015 14:32:02.6 | -94.08 | 509.3 | 0.8404 | 16.32 | 20.7865885 |
| 28.04.2015 14:32:02.7 | -93.04 | 509.4 | 0.9811 | 16.37 | 22.459332 |
| 28.04.2015 14:32:02.8 | -93.02 | 509.4 | 0.9079 | 16.31 | 21.6052455 |
| 28.04.2015 14:32:02.9 | -93.17 | 509.2 | 0.988 | 16.35 | 22.538171 |
| 28.04.2015 14:32:03.0 | -90.35 | 509.1 | 0.9897 | 16.33 | 22.5575528 |
| 28.04.2015 14:32:03.1 | -90.43 | 509.2 | 0.9771 | 16.31 | 22.4135013 |
| 28.04.2015 14:32:03.2 | -90.56 | 509.1 | 0.7888 | 16.29 | 20.138339 |
| 28.04.2015 14:32:03.3 | -90.38 | 509 | 0.8736 | 16.29 | 21.1931987 |
| 28.04.2015 14:32:03.4 | -87.63 | 508.9 | 0.9253 | 16.36 | 21.8112963 |
| 28.04.2015 14:32:03.5 | -87.77 | 509.1 | 0.9061 | 16.31 | 21.5838176 |
| 28.04.2015 14:32:03.6 | -88.14 | 509 | 0.7828 | 16.41 | 20.0616018 |
| 28.04.2015 14:32:03.7 | -85.29 | 509 | 0.7259 | 16.27 | 19.318731 |
| 28.04.2015 14:32:03.8 | -84.87 | 509 | 0.7833 | 16.27 | 20.0680078 |
| 28.04.2015 14:32:03.9 | -84.97 | 509.1 | 0.848 | 16.32 | 20.8803668 |
| 28.04.2015 14:32:04.0 | -84.34 | 509.1 | 1.0012 | 16.42 | 22.6882301 |
| 28.04.2015 14:32:04.1 | -82.32 | 509.1 | 0.8818 | 16.27 | 21.2924308 |
| 28.04.2015 14:32:04.2 | -82.25 | 509.2 | 0.8352 | 16.12 | 20.7221799 |
| 28.04.2015 14:32:04.3 | -82.32 | 509.2 | 0.8768 | 16.37 | 21.2319786 |
| 28.04.2015 14:32:04.4 | -80.47 | 509.1 | 0.9143 | 16.32 | 21.681262 |

| | | | | | |
|-----------------------|--------|-------|--------|-------|------------|
| 28.04.2015 14:32:04.5 | -79.78 | 509 | 0.8935 | 16.29 | 21.4332227 |
| 28.04.2015 14:32:04.6 | -79.72 | 509.1 | 0.94 | 16.25 | 21.9838688 |
| 28.04.2015 14:32:04.7 | -79.47 | 509.1 | 0.9964 | 16.43 | 22.6337782 |
| 28.04.2015 14:32:04.8 | -76.67 | 508.9 | 0.8904 | 16.41 | 21.396009 |
| 28.04.2015 14:32:04.9 | -77 | 508.8 | 0.864 | 16.36 | 21.0764309 |
| 28.04.2015 14:32:05.0 | -76.71 | 508.8 | 0.8333 | 16.25 | 20.698596 |
| 28.04.2015 14:32:05.1 | -75.61 | 508.8 | 0.8284 | 16.36 | 20.63765 |
| 28.04.2015 14:32:05.2 | -74.57 | 508.6 | 0.8368 | 16.27 | 20.7420192 |
| 28.04.2015 14:32:05.3 | -74.59 | 508.5 | 0.9848 | 16.28 | 22.5016423 |
| 28.04.2015 14:32:05.4 | -73.87 | 508.7 | 1.0304 | 16.24 | 23.0167034 |
| 28.04.2015 14:32:05.5 | -71.48 | 508.6 | 0.949 | 16.3 | 22.08886 |
| 28.04.2015 14:32:05.6 | -71.93 | 508.5 | 0.8163 | 16.29 | 20.4863739 |
| 28.04.2015 14:32:05.7 | -71.5 | 508.4 | 0.83 | 16.22 | 20.6575705 |
| 28.04.2015 14:32:05.8 | -69.77 | 508.5 | 0.9531 | 16.29 | 22.1365243 |
| 28.04.2015 14:32:05.9 | -69.07 | 508.5 | 0.8472 | 16.3 | 20.8705152 |
| 28.04.2015 14:32:06.0 | -69.18 | 508.3 | 1.025 | 16.26 | 22.9563126 |
| 28.04.2015 14:32:06.1 | -67.97 | 508.3 | 1.0046 | 16.32 | 22.7267212 |
| 28.04.2015 14:32:06.2 | -66.3 | 508.3 | 1.0313 | 16.33 | 23.0267532 |
| 28.04.2015 14:32:06.3 | -66.52 | 508.3 | 0.9634 | 16.35 | 22.2558158 |
| 28.04.2015 14:32:06.4 | -66.71 | 508.2 | 0.854 | 16.25 | 20.9541058 |
| 28.04.2015 14:32:06.5 | -64.2 | 508.2 | 0.8617 | 16.26 | 21.0483591 |
| 28.04.2015 14:32:06.6 | -63.89 | 508.2 | 0.8735 | 16.35 | 21.1919857 |
| 28.04.2015 14:32:06.7 | -63.89 | 508.2 | 0.9669 | 16.4 | 22.2962065 |
| 28.04.2015 14:32:06.8 | -63.45 | 508.1 | 0.8788 | 16.27 | 21.2561801 |
| 28.04.2015 14:32:06.9 | -61.07 | 508.2 | 0.9097 | 16.14 | 21.6266521 |
| 28.04.2015 14:32:07.0 | -61.33 | 508.3 | 0.8357 | 16.33 | 20.7283817 |
| 28.04.2015 14:32:07.1 | -61.31 | 508.2 | 0.9647 | 16.35 | 22.2708266 |
| 28.04.2015 14:32:07.2 | -59.55 | 508.2 | 0.7986 | 16.33 | 20.2630516 |
| 28.04.2015 14:32:07.3 | -58.22 | 508.3 | 0.7732 | 16.22 | 19.9382079 |
| 28.04.2015 14:32:07.4 | -58.35 | 508.4 | 0.7985 | 16.32 | 20.2617829 |
| 28.04.2015 14:32:07.5 | -58.27 | 508.2 | 0.931 | 16.21 | 21.8783738 |
| 28.04.2015 14:32:07.6 | -55.61 | 508.2 | 0.9297 | 16.16 | 21.8630935 |
| 28.04.2015 14:32:07.7 | -55.59 | 508.3 | 0.8946 | 16.2 | 21.446412 |
| 28.04.2015 14:32:07.8 | -55.82 | 508.3 | 0.7374 | 16.31 | 19.4711572 |
| 28.04.2015 14:32:07.9 | -53.84 | 508.1 | 0.8841 | 16.4 | 21.3201813 |
| 28.04.2015 14:32:08.0 | -53.04 | 508.1 | 0.9183 | 16.28 | 21.7286372 |
| 28.04.2015 14:32:08.1 | -53.01 | 508.2 | 0.8679 | 16.26 | 21.1239456 |
| 28.04.2015 14:32:08.2 | -52.9 | 508.2 | 0.8645 | 16.41 | 21.0825285 |
| 28.04.2015 14:32:08.3 | -50.56 | 508.1 | 0.8883 | 16.3 | 21.370763 |
| 28.04.2015 14:32:08.4 | -50.36 | 508 | 0.7974 | 16.35 | 20.2478219 |
| 28.04.2015 14:32:08.5 | -50.52 | 508.1 | 0.8665 | 16.28 | 21.1069014 |
| 28.04.2015 14:32:08.6 | -50.04 | 508.1 | 0.9179 | 16.4 | 21.7239044 |
| 28.04.2015 14:32:08.7 | -47.85 | 508 | 0.8552 | 16.24 | 20.9688225 |
| 28.04.2015 14:32:08.8 | -47.86 | 508.1 | 0.9199 | 16.23 | 21.7475584 |
| 28.04.2015 14:32:08.9 | -48.04 | 508.1 | 0.9373 | 16.39 | 21.9522735 |
| 28.04.2015 14:32:09.0 | -44.87 | 508.1 | 0.91 | 16.44 | 21.6302178 |
| 28.04.2015 14:32:09.1 | -45.21 | 508.2 | 0.8224 | 16.32 | 20.5627762 |
| 28.04.2015 14:32:09.2 | -44.84 | 508.2 | 0.9295 | 16.17 | 21.8607418 |
| 28.04.2015 14:32:09.3 | -44.08 | 508.2 | 0.8478 | 16.32 | 20.8779043 |
| 28.04.2015 14:32:09.4 | -42.28 | 508.2 | 0.9304 | 16.31 | 21.8713227 |
| 28.04.2015 14:32:09.5 | -42.51 | 508.1 | 0.816 | 16.14 | 20.4826091 |
| 28.04.2015 14:32:09.6 | -42 | 508.3 | 0.857 | 16.23 | 20.9908782 |
| 28.04.2015 14:32:09.7 | -39.74 | 508.4 | 0.916 | 16.31 | 21.7014091 |
| 28.04.2015 14:32:09.8 | -39.82 | 508.3 | 0.7593 | 16.32 | 19.7581782 |
| 28.04.2015 14:32:09.9 | -39.97 | 508.3 | 0.7734 | 16.26 | 19.9407864 |
| 28.04.2015 14:32:10.0 | -38.35 | 508.5 | 0.8841 | 16.24 | 21.3201813 |
| 28.04.2015 14:32:10.1 | -37.15 | 508.5 | 0.7927 | 16.29 | 20.1880618 |
| 28.04.2015 14:32:10.2 | -37.3 | 508.4 | 0.8359 | 16.38 | 20.730862 |
| 28.04.2015 14:32:10.3 | -36.64 | 508.3 | 0.8893 | 16.32 | 21.3827886 |
| 28.04.2015 14:32:10.4 | -34.28 | 508.4 | 0.8293 | 16.34 | 20.6488576 |
| 28.04.2015 14:32:10.5 | -34.65 | 508.5 | 0.8097 | 16.34 | 20.403387 |
| 28.04.2015 14:32:10.6 | -34.77 | 508.3 | 0.8699 | 16.25 | 21.1482708 |
| 28.04.2015 14:32:10.7 | -32.71 | 508.3 | 0.8183 | 16.27 | 20.5114552 |
| 28.04.2015 14:32:10.8 | -31.98 | 508.5 | 0.9493 | 16.24 | 22.0923512 |
| 28.04.2015 14:32:10.9 | -32.18 | 508.5 | 0.8664 | 16.4 | 21.1056834 |
| 28.04.2015 14:32:11.0 | -32.37 | 508.5 | 0.9052 | 16.29 | 21.5730957 |
| 28.04.2015 14:32:11.1 | -29.79 | 508.5 | 0.9129 | 16.31 | 21.6646562 |
| 28.04.2015 14:32:11.2 | -29.37 | 508.5 | 0.8973 | 16.35 | 21.4787514 |
| 28.04.2015 14:32:11.3 | -29.51 | 508.5 | 0.8024 | 16.45 | 20.3112035 |
| 28.04.2015 14:32:11.4 | -28.08 | 508.5 | 0.8284 | 16.25 | 20.63765 |
| 28.04.2015 14:32:11.5 | -26.27 | 508.5 | 0.8738 | 16.29 | 21.1956245 |

| | | | | | |
|-----------------------|--------|-------|--------|-------|------------|
| 28.04.2015 14:32:11.6 | -26.58 | 508.6 | 0.8352 | 16.44 | 20.7221799 |
| 28.04.2015 14:32:11.7 | -26.6 | 508.6 | 0.8007 | 16.4 | 20.289676 |
| 28.04.2015 14:32:11.8 | -24.11 | 508.6 | 0.7971 | 16.33 | 20.2440127 |
| 28.04.2015 14:32:11.9 | -23.82 | 508.6 | 0.8296 | 16.18 | 20.6525922 |
| 28.04.2015 14:32:12.0 | -23.97 | 508.7 | 0.8946 | 16.48 | 21.446412 |
| 28.04.2015 14:32:12.1 | -23.13 | 508.6 | 0.9264 | 16.33 | 21.8242572 |
| 28.04.2015 14:32:12.2 | -21.24 | 508.6 | 0.9104 | 16.39 | 21.6349712 |
| 28.04.2015 14:32:12.3 | -21.28 | 508.8 | 0.816 | 16.25 | 20.4826091 |
| 28.04.2015 14:32:12.4 | -21.01 | 508.8 | 0.9189 | 16.38 | 21.7357346 |
| 28.04.2015 14:32:12.5 | -18.19 | 508.7 | 0.9307 | 16.46 | 21.8748485 |
| 28.04.2015 14:32:12.6 | -18.43 | 508.7 | 0.864 | 16.33 | 21.0764309 |
| 28.04.2015 14:32:12.7 | -18.28 | 508.9 | 0.9025 | 16.35 | 21.5408979 |
| 28.04.2015 14:32:12.8 | -18.08 | 508.9 | 0.8274 | 16.29 | 20.6251899 |
| 28.04.2015 14:32:12.9 | -16.23 | 508.8 | 0.8793 | 16.41 | 21.2622262 |
| 28.04.2015 14:32:13.0 | -16.09 | 508.7 | 0.847 | 16.51 | 20.8680516 |
| 28.04.2015 14:32:13.1 | -16 | 508.9 | 0.8202 | 16.34 | 20.535254 |
| 28.04.2015 14:32:13.2 | -13.43 | 508.9 | 0.9346 | 16.43 | 21.9206327 |
| 28.04.2015 14:32:13.3 | -13.31 | 508.7 | 0.9181 | 16.31 | 21.7262709 |
| 28.04.2015 14:32:13.4 | -13.09 | 508.8 | 0.7901 | 16.39 | 20.1549269 |
| 28.04.2015 14:32:13.5 | -12.38 | 508.8 | 0.8212 | 16.35 | 20.5477687 |
| 28.04.2015 14:32:13.6 | -10.53 | 508.7 | 0.8945 | 16.45 | 21.4452133 |
| 28.04.2015 14:32:13.7 | -10.94 | 508.6 | 1.0228 | 16.24 | 22.9316633 |
| 28.04.2015 14:32:13.8 | -10.48 | 508.6 | 0.823 | 16.23 | 20.5702758 |
| 28.04.2015 14:32:13.9 | -8.73 | 508.6 | 0.8937 | 16.23 | 21.4356213 |
| 28.04.2015 14:32:14.0 | -8.02 | 508.5 | 0.9204 | 16.31 | 21.7534679 |
| 28.04.2015 14:32:14.1 | -8.12 | 508.4 | 0.8682 | 16.17 | 21.1275962 |
| 28.04.2015 14:32:14.2 | -7.55 | 508.4 | 0.8407 | 16.32 | 20.7902983 |
| 28.04.2015 14:32:14.3 | -5.02 | 508.4 | 0.8697 | 16.35 | 21.1458395 |
| 28.04.2015 14:32:14.4 | -5.11 | 508.2 | 0.8545 | 16.42 | 20.960239 |
| 28.04.2015 14:32:14.5 | -5.21 | 508.2 | 0.9059 | 16.3 | 21.5814354 |
| 28.04.2015 14:32:14.6 | -3.58 | 508.3 | 0.9003 | 16.2 | 21.5146271 |
| 28.04.2015 14:32:14.7 | -2.39 | 508.4 | 0.8126 | 16.37 | 20.4398924 |
| 28.04.2015 14:32:14.8 | -2.48 | 508.2 | 0.9567 | 16.3 | 22.1782913 |
| 28.04.2015 14:32:14.9 | -2.52 | 508.2 | 0.8378 | 16.29 | 20.7544092 |
| 28.04.2015 14:32:15.0 | 0.24 | 508.3 | 0.89 | 16.29 | 21.3912026 |
| 28.04.2015 14:32:15.1 | 0.03 | 508.4 | 0.8564 | 16.35 | 20.9835289 |
| 28.04.2015 14:32:15.2 | -0.05 | 508.2 | 0.8621 | 16.39 | 21.0532438 |
| 28.04.2015 14:32:15.3 | 1.14 | 508.2 | 0.8825 | 16.29 | 21.3008804 |
| 28.04.2015 14:32:15.4 | 3.38 | 508.4 | 0.7765 | 16.31 | 19.9807105 |
| 28.04.2015 14:32:15.5 | 2.99 | 508.5 | 0.8103 | 16.33 | 20.4109452 |
| 28.04.2015 14:32:15.6 | 2.86 | 508.5 | 0.8188 | 16.39 | 20.5177207 |
| 28.04.2015 14:32:15.7 | 5.02 | 508.5 | 0.8988 | 16.33 | 21.4966967 |
| 28.04.2015 14:32:15.8 | 5.48 | 508.5 | 0.9161 | 16.29 | 21.7025936 |
| 28.04.2015 14:32:15.9 | 5.11 | 508.5 | 0.9303 | 16.46 | 21.8701473 |
| 28.04.2015 14:32:16.0 | 6.73 | 508.4 | 0.932 | 16.27 | 21.8901206 |
| 28.04.2015 14:32:16.1 | 8.46 | 508.4 | 0.9756 | 16.33 | 22.3962905 |
| 28.04.2015 14:32:16.2 | 8.2 | 508.5 | 0.9099 | 16.24 | 21.6290293 |
| 28.04.2015 14:32:16.3 | 8.18 | 508.5 | 0.9212 | 16.72 | 21.7629198 |
| 28.04.2015 14:32:16.4 | 10.59 | 508.5 | 0.9273 | 16.29 | 21.8348557 |
| 28.04.2015 14:32:16.5 | 11.05 | 508.5 | 0.8796 | 16.33 | 21.265853 |
| 28.04.2015 14:32:16.6 | 10.78 | 508.6 | 0.906 | 16.42 | 21.5826265 |
| 28.04.2015 14:32:16.7 | 11.6 | 508.5 | 0.8564 | 16.45 | 20.9835289 |
| 28.04.2015 14:32:16.8 | 13.63 | 508.5 | 0.877 | 16.24 | 21.2344 |
| 28.04.2015 14:32:16.9 | 13.45 | 508.6 | 0.8891 | 16.12 | 21.3803841 |
| 28.04.2015 14:32:17.0 | 13.35 | 508.7 | 0.9583 | 16.37 | 22.1968293 |
| 28.04.2015 14:32:17.1 | 15.67 | 508.6 | 0.7405 | 16.32 | 19.5120423 |
| 28.04.2015 14:32:17.2 | 16.36 | 508.6 | 0.8793 | 16.29 | 21.2622262 |
| 28.04.2015 14:32:17.3 | 16.46 | 508.8 | 0.8721 | 16.22 | 21.1749962 |
| 28.04.2015 14:32:17.4 | 16.79 | 508.9 | 0.8947 | 16.39 | 21.4476106 |
| 28.04.2015 14:32:17.5 | 19.06 | 508.7 | 0.8026 | 16.32 | 20.3137346 |
| 28.04.2015 14:32:17.6 | 18.96 | 508.7 | 0.818 | 16.26 | 20.507695 |
| 28.04.2015 14:32:17.7 | 19.03 | 509 | 0.9601 | 16.27 | 22.2176659 |
| 28.04.2015 14:32:17.8 | 20.41 | 509 | 0.9406 | 16.06 | 21.9908838 |
| 28.04.2015 14:32:17.9 | 21.5 | 508.9 | 0.8147 | 16.34 | 20.4662868 |
| 28.04.2015 14:32:18.0 | 21.7 | 508.9 | 0.7925 | 16.43 | 20.1855149 |
| 28.04.2015 14:32:18.1 | 21.79 | 508.9 | 0.9245 | 16.35 | 21.8018654 |
| 28.04.2015 14:32:18.2 | 24.36 | 508.9 | 0.8967 | 16.24 | 21.4715691 |
| 28.04.2015 14:32:18.3 | 24.43 | 508.9 | 0.8612 | 16.39 | 21.0422515 |
| 28.04.2015 14:32:18.4 | 24.64 | 508.9 | 0.8482 | 16.3 | 20.882829 |
| 28.04.2015 14:32:18.5 | 25.32 | 508.9 | 0.8982 | 16.34 | 21.4895204 |
| 28.04.2015 14:32:18.6 | 26.79 | 508.9 | 0.7927 | 16.44 | 20.1880618 |

| | | | | | |
|-----------------------|-------|-------|--------|-------|------------|
| 28.04.2015 14:32:18.7 | 26.62 | 508.9 | 0.8786 | 16.26 | 21.2537612 |
| 28.04.2015 14:32:18.8 | 27.24 | 508.9 | 1.0377 | 16.31 | 23.0980919 |
| 28.04.2015 14:32:18.9 | 29.73 | 508.9 | 0.7985 | 16.34 | 20.2617829 |
| 28.04.2015 14:32:19.0 | 29.71 | 508.8 | 0.819 | 16.45 | 20.5202264 |
| 28.04.2015 14:32:19.1 | 29.65 | 508.7 | 0.8396 | 16.28 | 20.7766925 |
| 28.04.2015 14:32:19.2 | 31.17 | 508.7 | 0.9312 | 16.26 | 21.8807236 |
| 28.04.2015 14:32:19.3 | 32.35 | 508.7 | 0.9089 | 16.39 | 21.6171407 |
| 28.04.2015 14:32:19.4 | 32.26 | 508.6 | 0.8713 | 16.37 | 21.1652818 |
| 28.04.2015 14:32:19.5 | 32.82 | 508.5 | 0.7358 | 16.17 | 19.4500216 |
| 28.04.2015 14:32:19.6 | 35.15 | 508.6 | 0.8289 | 16.22 | 20.6438772 |
| 28.04.2015 14:32:19.7 | 34.83 | 508.6 | 0.9244 | 16.27 | 21.8006863 |
| 28.04.2015 14:32:19.8 | 34.81 | 508.5 | 0.7518 | 16.41 | 19.6603551 |
| 28.04.2015 14:32:19.9 | 36.62 | 508.4 | 0.8014 | 16.15 | 20.298543 |
| 28.04.2015 14:32:20.0 | 37.61 | 508.6 | 0.8729 | 16.38 | 21.1847061 |
| 28.04.2015 14:32:20.1 | 37.49 | 508.6 | 0.7663 | 16.35 | 19.8490447 |
| 28.04.2015 14:32:20.2 | 37.53 | 508.5 | 0.8919 | 16.33 | 21.4140237 |
| 28.04.2015 14:32:20.3 | 40.26 | 508.4 | 0.9143 | 16.3 | 21.681262 |
| 28.04.2015 14:32:20.4 | 40.13 | 508.6 | 0.8343 | 16.29 | 20.7110119 |
| 28.04.2015 14:32:20.5 | 39.91 | 508.5 | 0.911 | 16.32 | 21.6420993 |
| 28.04.2015 14:32:20.6 | 41.24 | 508.4 | 0.9201 | 16.28 | 21.7499224 |
| 28.04.2015 14:32:20.7 | 43.36 | 508.4 | 0.8743 | 16.31 | 21.2016879 |
| 28.04.2015 14:32:20.8 | 43.06 | 508.5 | 0.874 | 16.29 | 21.1980501 |
| 28.04.2015 14:32:20.9 | 42.96 | 508.5 | 0.897 | 16.38 | 21.4751605 |
| 28.04.2015 14:32:21.0 | 45.04 | 508.5 | 0.8561 | 16.28 | 20.9798532 |
| 28.04.2015 14:32:21.1 | 45.35 | 508.5 | 0.864 | 16.24 | 21.0764309 |
| 28.04.2015 14:32:21.2 | 45.14 | 508.6 | 0.9501 | 16.34 | 22.1016581 |
| 28.04.2015 14:32:21.3 | 47.14 | 508.6 | 0.891 | 16.33 | 21.4032167 |
| 28.04.2015 14:32:21.4 | 48.05 | 508.6 | 0.895 | 16.13 | 21.4512061 |
| 28.04.2015 14:32:21.5 | 48.38 | 508.7 | 0.9155 | 16.14 | 21.6954854 |
| 28.04.2015 14:32:21.6 | 48.36 | 508.8 | 0.8119 | 16.24 | 20.4310868 |
| 28.04.2015 14:32:21.7 | 50.95 | 508.7 | 0.7942 | 16.28 | 20.2071534 |
| 28.04.2015 14:32:21.8 | 50.74 | 508.6 | 0.8605 | 16.12 | 21.033698 |
| 28.04.2015 14:32:21.9 | 50.82 | 508.7 | 0.8039 | 16.16 | 20.3301794 |
| 28.04.2015 14:32:22.0 | 52.83 | 508.7 | 0.8752 | 16.3 | 21.2125975 |
| 28.04.2015 14:32:22.1 | 53.39 | 508.6 | 0.7607 | 16.42 | 19.7763849 |
| 28.04.2015 14:32:22.2 | 53.29 | 508.5 | 0.945 | 16.25 | 22.042259 |
| 28.04.2015 14:32:22.3 | 53.97 | 508.7 | 0.9237 | 16.26 | 21.7924305 |
| 28.04.2015 14:32:22.4 | 56.13 | 508.6 | 0.9901 | 16.33 | 22.5621108 |
| 28.04.2015 14:32:22.5 | 55.86 | 508.4 | 0.7971 | 16.3 | 20.2440127 |
| 28.04.2015 14:32:22.6 | 56 | 508.3 | 0.9293 | 16.35 | 21.8583898 |
| 28.04.2015 14:32:22.7 | 57.62 | 508.3 | 0.8504 | 16.24 | 20.9098936 |
| 28.04.2015 14:32:22.8 | 58.5 | 508.3 | 1.0001 | 16.42 | 22.6757631 |
| 28.04.2015 14:32:22.9 | 58.29 | 508.1 | 0.9019 | 16.37 | 21.5337363 |
| 28.04.2015 14:32:23.0 | 58.83 | 508.1 | 0.9165 | 16.31 | 21.7073312 |
| 28.04.2015 14:32:23.1 | 61.72 | 508.2 | 0.8842 | 16.28 | 21.321387 |
| 28.04.2015 14:32:23.2 | 61.42 | 508.2 | 0.9293 | 16.35 | 21.8583898 |
| 28.04.2015 14:32:23.3 | 61.43 | 508.1 | 0.9259 | 16.34 | 21.8183668 |
| 28.04.2015 14:32:23.4 | 62.69 | 508.1 | 0.9017 | 16.23 | 21.5313486 |
| 28.04.2015 14:32:23.5 | 64.15 | 508.2 | 0.8514 | 16.29 | 20.9221841 |
| 28.04.2015 14:32:23.6 | 64.04 | 508.2 | 0.7521 | 16.31 | 19.6642774 |
| 28.04.2015 14:32:23.7 | 64.33 | 508.2 | 0.9133 | 16.19 | 21.669402 |
| 28.04.2015 14:32:23.8 | 67.07 | 508.2 | 0.7463 | 16.29 | 19.5883077 |
| 28.04.2015 14:32:23.9 | 66.67 | 508.2 | 0.9573 | 16.3 | 22.1852449 |
| 28.04.2015 14:32:24.0 | 66.71 | 508.1 | 0.8536 | 16.38 | 20.9491979 |
| 28.04.2015 14:32:24.1 | 68.06 | 508.1 | 0.7845 | 16.34 | 20.0833738 |
| 28.04.2015 14:32:24.2 | 69.47 | 508.2 | 0.8486 | 16.21 | 20.8877524 |
| 28.04.2015 14:32:24.3 | 69.2 | 508.2 | 0.8027 | 16.43 | 20.3150001 |
| 28.04.2015 14:32:24.4 | 70 | 508 | 0.7874 | 16.35 | 20.1204599 |
| 28.04.2015 14:32:24.5 | 71.89 | 508 | 0.8416 | 16.38 | 20.8014237 |
| 28.04.2015 14:32:24.6 | 71.9 | 508.1 | 0.8375 | 16.29 | 20.750693 |
| 28.04.2015 14:32:24.7 | 71.84 | 508.1 | 0.8175 | 16.34 | 20.5014264 |
| 28.04.2015 14:32:24.8 | 73.79 | 508 | 0.7584 | 16.32 | 19.746465 |
| 28.04.2015 14:32:24.9 | 74.37 | 508 | 0.8338 | 16.27 | 20.7048049 |
| 28.04.2015 14:32:25.0 | 74.52 | 508.2 | 0.8374 | 16.27 | 20.7494541 |
| 28.04.2015 14:32:25.1 | 74.69 | 508.3 | 0.7625 | 16.25 | 19.7997689 |
| 28.04.2015 14:32:25.2 | 77.02 | 508.2 | 0.902 | 16.32 | 21.5349301 |
| 28.04.2015 14:32:25.3 | 76.99 | 508.2 | 0.8389 | 16.21 | 20.7680296 |
| 28.04.2015 14:32:25.4 | 77.14 | 508.4 | 0.8672 | 16.33 | 21.1154252 |
| 28.04.2015 14:32:25.5 | 78.57 | 508.4 | 0.9545 | 16.36 | 22.1527764 |
| 28.04.2015 14:32:25.6 | 79.89 | 508.4 | 0.9511 | 16.24 | 22.1132863 |
| 28.04.2015 14:32:25.7 | 80.13 | 508.5 | 0.8354 | 16.29 | 20.7246609 |

| | | | | | |
|-----------------------|--------|-------|--------|-------|------------|
| 28.04.2015 14:32:25.8 | 80.16 | 508.5 | 0.8554 | 16.26 | 20.9712743 |
| 28.04.2015 14:32:25.9 | 82.39 | 508.6 | 0.8108 | 16.41 | 20.4172416 |
| 28.04.2015 14:32:26.0 | 82.51 | 508.6 | 0.8474 | 16.21 | 20.8729786 |
| 28.04.2015 14:32:26.1 | 82.71 | 508.7 | 0.764 | 16.18 | 19.8192345 |
| 28.04.2015 14:32:26.2 | 84.38 | 508.7 | 0.9433 | 16.3 | 22.0224237 |
| 28.04.2015 14:32:26.3 | 85.12 | 508.7 | 0.847 | 16.41 | 20.8680516 |
| 28.04.2015 14:32:26.4 | 85.05 | 508.7 | 0.8615 | 16.22 | 21.0459163 |
| 28.04.2015 14:32:26.5 | 85.6 | 508.7 | 0.9303 | 16.28 | 21.8701473 |
| 28.04.2015 14:32:26.6 | 87.88 | 508.8 | 0.8397 | 16.28 | 20.7779298 |
| 28.04.2015 14:32:26.7 | 87.8 | 508.6 | 0.8844 | 16.33 | 21.3237982 |
| 28.04.2015 14:32:26.8 | 87.74 | 508.5 | 0.9632 | 16.28 | 22.2535055 |
| 28.04.2015 14:32:26.9 | 90.03 | 508.6 | 0.9452 | 16.23 | 22.0445914 |
| 28.04.2015 14:32:27.0 | 90.29 | 508.6 | 0.8195 | 16.34 | 20.5264892 |
| 28.04.2015 14:32:27.1 | 90.36 | 508.4 | 0.8802 | 16.34 | 21.2731048 |
| 28.04.2015 14:32:27.2 | 90.7 | 508.3 | 0.8111 | 16.28 | 20.4210185 |
| 28.04.2015 14:32:27.3 | 93.2 | 508.3 | 0.8859 | 16.21 | 21.3418738 |
| 28.04.2015 14:32:27.4 | 92.98 | 508.3 | 0.8872 | 16.34 | 21.357527 |
| 28.04.2015 14:32:27.5 | 92.84 | 508.1 | 0.8162 | 16.29 | 20.4851191 |
| 28.04.2015 14:32:27.6 | 94.69 | 508.1 | 0.971 | 16.36 | 22.3434284 |
| 28.04.2015 14:32:27.7 | 95.73 | 508.2 | 0.8744 | 16.24 | 21.2029003 |
| 28.04.2015 14:32:27.8 | 95.41 | 508.2 | 0.8717 | 16.35 | 21.1701395 |
| 28.04.2015 14:32:27.9 | 95.47 | 508.2 | 0.7684 | 16.29 | 19.8762237 |
| 28.04.2015 14:32:28.0 | 98.77 | 508.2 | 0.862 | 16.32 | 21.0520227 |
| 28.04.2015 14:32:28.1 | 98.55 | 508.3 | 0.732 | 16.33 | 19.3997323 |
| 28.04.2015 14:32:28.2 | 98.32 | 508.3 | 0.8372 | 16.28 | 20.7469761 |
| 28.04.2015 14:32:28.3 | 99.54 | 508.3 | 0.826 | 16.3 | 20.6077331 |
| 28.04.2015 14:32:28.4 | 101.42 | 508.3 | 0.8637 | 16.17 | 21.0727715 |
| 28.04.2015 14:32:28.5 | 101.16 | 508.3 | 0.9175 | 16.45 | 21.7191705 |
| 28.04.2015 14:32:28.6 | 101.56 | 508.4 | 0.8546 | 16.42 | 20.9614654 |
| 28.04.2015 14:32:28.7 | 103.76 | 508.3 | 0.8395 | 16.31 | 20.7754552 |
| 28.04.2015 14:32:28.8 | 103.77 | 508.5 | 0.9121 | 16.06 | 21.6551614 |
| 28.04.2015 14:32:28.9 | 103.62 | 508.5 | 0.8302 | 16.38 | 20.6600592 |
| 28.04.2015 14:32:29.0 | 105.28 | 508.5 | 0.8669 | 16.51 | 21.1117726 |
| 28.04.2015 14:32:29.1 | 106.17 | 508.5 | 0.822 | 16.22 | 20.5577749 |
| 28.04.2015 14:32:29.2 | 106.38 | 508.7 | 0.8685 | 16.44 | 21.1312461 |
| 28.04.2015 14:32:29.3 | 107.07 | 508.7 | 0.8443 | 16.29 | 20.8347643 |
| 28.04.2015 14:32:29.4 | 109.04 | 508.7 | 0.7871 | 16.42 | 20.1166265 |
| 28.04.2015 14:32:29.5 | 108.77 | 508.6 | 0.9269 | 16.21 | 21.8301459 |
| 28.04.2015 14:32:29.6 | 108.88 | 508.7 | 0.9238 | 16.29 | 21.7936101 |
| 28.04.2015 14:32:29.7 | 110.89 | 508.8 | 0.8836 | 16.22 | 21.3141516 |
| 28.04.2015 14:32:29.8 | 111.29 | 508.6 | 0.8418 | 16.31 | 20.8038952 |
| 28.04.2015 14:32:29.9 | 111.34 | 508.6 | 0.8156 | 16.33 | 20.4775882 |
| 28.04.2015 14:32:30.0 | 111.98 | 508.7 | 0.7699 | 16.32 | 19.8956145 |
| 28.04.2015 14:32:30.1 | 114.11 | 508.7 | 0.9053 | 16.61 | 21.5742873 |
| 28.04.2015 14:32:30.2 | 113.77 | 508.6 | 1.0028 | 16.13 | 22.7063517 |
| 28.04.2015 14:32:30.3 | 114.18 | 508.7 | 0.9947 | 16.28 | 22.6144618 |
| 28.04.2015 14:32:30.4 | 117.04 | 508.7 | 0.9409 | 16.32 | 21.9943905 |
| 28.04.2015 14:32:30.5 | 116.72 | 508.8 | 0.8778 | 16 | 21.2440828 |
| 28.04.2015 14:32:30.6 | 116.9 | 508.7 | 1.0428 | 16.37 | 23.1547826 |
| 28.04.2015 14:32:30.7 | 117.08 | 508.7 | 1.0873 | 16.19 | 23.6436701 |
| 28.04.2015 14:32:30.8 | 119.27 | 508.7 | 0.9712 | 16.43 | 22.3457293 |
| 28.04.2015 14:32:30.9 | 119.06 | 508.7 | 0.9162 | 16.35 | 21.7037781 |
| 28.04.2015 14:32:31.0 | 119.1 | 508.7 | 0.9307 | 16.31 | 21.8748485 |
| 28.04.2015 14:32:31.1 | 121.64 | 508.8 | 0.883 | 16.31 | 21.3069138 |
| 28.04.2015 14:32:31.2 | 122.09 | 508.8 | 0.9041 | 16.31 | 21.5599839 |
| 28.04.2015 14:32:31.3 | 122.18 | 508.7 | 0.8766 | 16.48 | 21.2295569 |
| 28.04.2015 14:32:31.4 | 122.42 | 508.6 | 0.8314 | 16.27 | 20.6749852 |
| 28.04.2015 14:32:31.5 | 125.02 | 508.6 | 1.0275 | 16.32 | 22.984291 |
| 28.04.2015 14:32:31.6 | 124.62 | 508.7 | 1.0399 | 16.32 | 23.1225638 |
| 28.04.2015 14:32:31.7 | 124.7 | 508.5 | 0.9214 | 16.43 | 21.7652821 |
| 28.04.2015 14:32:31.8 | 126.16 | 508.5 | 0.8581 | 16.31 | 21.0043452 |
| 28.04.2015 14:32:31.9 | 127.55 | 508.5 | 0.8782 | 16.31 | 21.2489225 |
| 28.04.2015 14:32:32.0 | 127.35 | 508.5 | 0.8227 | 16.32 | 20.5665263 |
| 28.04.2015 14:32:32.1 | 127.33 | 508.3 | 0.8291 | 16.41 | 20.6463676 |
| 28.04.2015 14:32:32.2 | 130.3 | 508.3 | 0.7358 | 16.33 | 19.4500216 |
| 28.04.2015 14:32:32.3 | 130.29 | 508.4 | 0.8139 | 16.2 | 20.4562358 |
| 28.04.2015 14:32:32.4 | 130.25 | 508.4 | 0.7101 | 16.34 | 19.1073278 |
| 28.04.2015 14:32:32.5 | 130.88 | 508.2 | 0.859 | 16.35 | 21.0153573 |
| 28.04.2015 14:32:32.6 | 133.26 | 508.2 | 0.882 | 16.37 | 21.2948453 |
| 28.04.2015 14:32:32.7 | 133.05 | 508.3 | 0.8815 | 16.27 | 21.2888085 |
| 28.04.2015 14:32:32.8 | 133.05 | 508.3 | 0.8756 | 16.43 | 21.2174444 |

| | | | | | |
|-----------------------|--------|-------|--------|-------|------------|
| 28.04.2015 14:32:32.9 | 135.49 | 508.2 | 0.9193 | 16.3 | 21.7404649 |
| 28.04.2015 14:32:33.0 | 135.55 | 508.1 | 0.9845 | 16.25 | 22.4982147 |
| 28.04.2015 14:32:33.1 | 135.49 | 508.1 | 0.9735 | 16.3 | 22.3721733 |
| 28.04.2015 14:32:33.2 | 137.62 | 508 | 0.9769 | 16.34 | 22.4112073 |
| 28.04.2015 14:32:33.3 | 137.86 | 507.9 | 0.9147 | 16.28 | 21.6860042 |
| 28.04.2015 14:32:33.4 | 138.28 | 507.9 | 0.8858 | 16.2 | 21.3406693 |
| 28.04.2015 14:32:33.5 | 138.6 | 507.9 | 0.8192 | 16.27 | 20.5227318 |
| 28.04.2015 14:32:33.6 | 140.86 | 507.9 | 0.9599 | 16.47 | 22.2153517 |
| 28.04.2015 14:32:33.7 | 140.51 | 507.9 | 0.9828 | 16.25 | 22.4787818 |
| 28.04.2015 14:32:33.8 | 140.7 | 508 | 0.8867 | 16.22 | 21.3515079 |
| 28.04.2015 14:32:33.9 | 142.33 | 508 | 0.881 | 16.36 | 21.28277 |
| 28.04.2015 14:32:34.0 | 143.3 | 508 | 0.8362 | 16.38 | 20.7345817 |
| 28.04.2015 14:32:34.1 | 143.06 | 507.9 | 0.7773 | 16.2 | 19.9910005 |
| 28.04.2015 14:32:34.2 | 143.57 | 508.1 | 0.7734 | 16.18 | 19.9407864 |
| 28.04.2015 14:32:34.3 | 145.92 | 508.1 | 0.8621 | 16.32 | 21.0532438 |
| 28.04.2015 14:32:34.4 | 145.79 | 508 | 1.025 | 16.35 | 22.9563126 |
| 28.04.2015 14:32:34.5 | 145.79 | 508.1 | 1.119 | 16.23 | 23.985857 |
| 28.04.2015 14:32:34.6 | 147.25 | 508.2 | 1.0678 | 16.19 | 23.4306942 |
| 28.04.2015 14:32:34.7 | 148.9 | 508.2 | 0.9752 | 16.25 | 22.3916988 |
| 28.04.2015 14:32:34.8 | 148.52 | 508.1 | 0.9138 | 16.31 | 21.6753328 |
| 28.04.2015 14:32:34.9 | 148.89 | 508 | 0.9626 | 16.28 | 22.2465733 |
| 28.04.2015 14:32:35.0 | 151.42 | 508.1 | 0.9141 | 16.24 | 21.6788905 |
| 28.04.2015 14:32:35.1 | 151.29 | 508.1 | 0.9248 | 16.3 | 21.8054025 |
| 28.04.2015 14:32:35.2 | 151.21 | 508 | 0.8452 | 16.25 | 20.845866 |
| 28.04.2015 14:32:35.3 | 153.12 | 507.9 | 0.883 | 16.3 | 21.3069138 |
| 28.04.2015 14:32:35.4 | 154.06 | 507.9 | 0.718 | 16.32 | 19.2133201 |
| 28.04.2015 14:32:35.5 | 153.84 | 507.8 | 0.8364 | 16.35 | 20.7370612 |
| 28.04.2015 14:32:35.6 | 153.92 | 507.8 | 0.9143 | 16.39 | 21.681262 |
| 28.04.2015 14:32:35.7 | 156.95 | 507.7 | 0.8827 | 16.27 | 21.303294 |
| 28.04.2015 14:32:35.8 | 156.5 | 507.8 | 0.9828 | 16.36 | 22.4787818 |
| 28.04.2015 14:32:35.9 | 156.56 | 507.7 | 0.9813 | 16.43 | 22.4616211 |
| 28.04.2015 14:32:36.0 | 158.58 | 507.7 | 0.97 | 16.25 | 22.33192 |
| 28.04.2015 14:32:36.1 | 159.23 | 507.8 | 0.9415 | 16.2 | 22.0014022 |
| 28.04.2015 14:32:36.2 | 159.03 | 507.8 | 1.0233 | 16.3 | 22.9372678 |
| 28.04.2015 14:32:36.3 | 159.54 | 507.8 | 1.0394 | 16.46 | 23.1170043 |
| 28.04.2015 14:32:36.4 | 161.82 | 507.7 | 0.9126 | 16.25 | 21.6610961 |
| 28.04.2015 14:32:36.5 | 161.86 | 507.8 | 0.9051 | 16.25 | 21.571904 |
| 28.04.2015 14:32:36.6 | 161.67 | 507.8 | 0.8099 | 16.31 | 20.4059067 |
| 28.04.2015 14:32:36.7 | 163.21 | 507.7 | 0.8258 | 16.37 | 20.6052381 |
| 28.04.2015 14:32:36.8 | 164.36 | 507.6 | 0.8442 | 16.27 | 20.8335304 |
| 28.04.2015 14:32:36.9 | 164.35 | 507.7 | 0.8918 | 16.18 | 21.4128232 |
| 28.04.2015 14:32:37.0 | 164.28 | 507.7 | 0.8263 | 16.33 | 20.6114751 |
| 28.04.2015 14:32:37.1 | 167.25 | 507.5 | 0.7673 | 16.35 | 19.8619917 |
| 28.04.2015 14:32:37.2 | 167.31 | 507.4 | 0.8541 | 16.33 | 20.9553326 |
| 28.04.2015 14:32:37.3 | 167.46 | 507.5 | 0.8681 | 16.29 | 21.1263794 |
| 28.04.2015 14:32:37.4 | 168.09 | 507.5 | 0.9614 | 16.24 | 22.2327025 |
| 28.04.2015 14:32:37.5 | 169.81 | 507.4 | 0.9467 | 16.32 | 22.0620765 |
| 28.04.2015 14:32:37.6 | 169.94 | 507.3 | 0.9138 | 16.25 | 21.6753328 |
| 28.04.2015 14:32:37.7 | 169.97 | 507.4 | 0.834 | 16.31 | 20.7072879 |
| 28.04.2015 14:32:37.8 | 171.93 | 507.5 | 0.951 | 16.37 | 22.1121237 |
| 28.04.2015 14:32:37.9 | 172.32 | 507.4 | 1.0665 | 16.27 | 23.4164269 |
| 28.04.2015 14:32:38.0 | 172.6 | 507.4 | 0.984 | 16.24 | 22.4925009 |
| 28.04.2015 14:32:38.1 | 173.95 | 507.5 | 0.829 | 16.28 | 20.6451224 |
| 28.04.2015 14:32:38.2 | 174.89 | 507.4 | 0.921 | 16.44 | 21.7605572 |
| 28.04.2015 14:32:38.3 | 174.81 | 507.5 | 0.9067 | 16.32 | 21.5909626 |
| 28.04.2015 14:32:38.4 | 175.15 | 507.5 | 1.0066 | 16.29 | 22.7493326 |
| 28.04.2015 14:32:38.5 | 176.72 | 507.6 | 0.9937 | 16.38 | 22.6030914 |
| 28.04.2015 14:32:38.6 | 177.7 | 507.6 | 0.9941 | 16.35 | 22.6076403 |
| 28.04.2015 14:32:38.7 | 177.49 | 507.5 | 1.0858 | 16.29 | 23.6273555 |
| 28.04.2015 14:32:38.8 | 178.8 | 507.7 | 0.9176 | 16.16 | 21.720354 |
| 28.04.2015 14:32:38.9 | 180.68 | 507.7 | 0.882 | 16.32 | 21.2948453 |
| 28.04.2015 14:32:39.0 | 180.56 | 507.6 | 1.0102 | 16.39 | 22.7899766 |
| 28.04.2015 14:32:39.1 | 180.31 | 507.5 | 1.0184 | 16.26 | 22.8822851 |
| 28.04.2015 14:32:39.2 | 182.83 | 507.6 | 0.9316 | 16.25 | 21.8854226 |
| 28.04.2015 14:32:39.3 | 183.18 | 507.5 | 0.9968 | 16.32 | 22.6383209 |
| 28.04.2015 14:32:39.4 | 183.21 | 507.3 | 0.9189 | 16.3 | 21.7357346 |
| 28.04.2015 14:32:39.5 | 183.56 | 507.3 | 0.8874 | 16.26 | 21.3599341 |
| 28.04.2015 14:32:39.6 | 185.97 | 507.4 | 0.8703 | 16.16 | 21.1531325 |
| 28.04.2015 14:32:39.7 | 185.69 | 507.4 | 0.8487 | 16.32 | 20.8889831 |
| 28.04.2015 14:32:39.8 | 185.63 | 507.2 | 0.8471 | 16.33 | 20.8692835 |
| 28.04.2015 14:32:39.9 | 187.54 | 507.2 | 0.8706 | 16.2 | 21.156778 |

| | | | | | |
|-----------------------|--------|-------|--------|-------|------------|
| 28.04.2015 14:32:40.0 | 188.95 | 507.4 | 0.8257 | 16.52 | 20.6039904 |
| 28.04.2015 14:32:40.1 | 188.71 | 507.5 | 0.7572 | 16.3 | 19.7308366 |
| 28.04.2015 14:32:40.2 | 188.66 | 507.5 | 0.9437 | 16.45 | 22.0270925 |
| 28.04.2015 14:32:40.3 | 191.55 | 507.5 | 1.09 | 16.32 | 23.6730081 |
| 28.04.2015 14:32:40.4 | 191.36 | 507.7 | 0.9645 | 16.3 | 22.2685179 |
| 28.04.2015 14:32:40.5 | 191.07 | 507.7 | 1.1167 | 16.46 | 23.961194 |
| 28.04.2015 14:32:40.6 | 192.22 | 507.7 | 1.1245 | 16.31 | 24.0447312 |
| 28.04.2015 14:32:40.7 | 194.26 | 507.8 | 1.1645 | 16.34 | 24.4686463 |
| 28.04.2015 14:32:40.8 | 193.95 | 507.8 | 1.1134 | 16.3 | 23.9257635 |
| 28.04.2015 14:32:40.9 | 194.23 | 507.7 | 1.0467 | 16.48 | 23.1980409 |
| 28.04.2015 14:32:41.0 | 196.98 | 507.7 | 1.1308 | 16.31 | 24.1119923 |
| 28.04.2015 14:32:41.1 | 196.92 | 507.7 | 0.9965 | 16.23 | 22.634914 |
| 28.04.2015 14:32:41.2 | 196.73 | 507.7 | 1.003 | 16.44 | 22.7086159 |
| 28.04.2015 14:32:41.3 | 197.31 | 507.6 | 0.9876 | 16.24 | 22.5336081 |
| 28.04.2015 14:32:41.4 | 199.1 | 507.5 | 0.9336 | 16.41 | 21.9089023 |
| 28.04.2015 14:32:41.5 | 199.15 | 507.6 | 1.0241 | 16.3 | 22.946232 |
| 28.04.2015 14:32:41.6 | 199.13 | 507.7 | 0.945 | 16.37 | 22.042259 |
| 28.04.2015 14:32:41.7 | 202.14 | 507.5 | 0.9493 | 16.34 | 22.0923512 |
| 28.04.2015 14:32:41.8 | 201.97 | 507.5 | 1.0307 | 16.29 | 23.0200538 |
| 28.04.2015 14:32:41.9 | 202.08 | 507.7 | 1.1482 | 16.25 | 24.2967938 |
| 28.04.2015 14:32:42.0 | 202.88 | 507.8 | 1.1156 | 16.17 | 23.9493897 |
| 28.04.2015 14:32:42.1 | 204.69 | 507.6 | 1.0387 | 16.31 | 23.1092187 |
| 28.04.2015 14:32:42.2 | 204.58 | 507.6 | 0.9605 | 16.26 | 22.2222936 |
| 28.04.2015 14:32:42.3 | 204.71 | 507.8 | 0.9867 | 16.33 | 22.5233384 |
| 28.04.2015 14:32:42.4 | 206.7 | 507.7 | 0.9322 | 16.34 | 21.8924692 |
| 28.04.2015 14:32:42.5 | 206.99 | 507.7 | 0.9003 | 16.41 | 21.5146271 |
| 28.04.2015 14:32:42.6 | 207.31 | 507.7 | 0.8713 | 16.32 | 21.1652818 |
| 28.04.2015 14:32:42.7 | 208.89 | 507.7 | 1.0088 | 16.33 | 22.7741792 |
| 28.04.2015 14:32:42.8 | 210.08 | 507.8 | 0.9887 | 16.42 | 22.5461537 |
| 28.04.2015 14:32:42.9 | 209.94 | 507.8 | 0.9427 | 16.27 | 22.0154188 |
| 28.04.2015 14:32:43.0 | 210.31 | 507.8 | 0.9011 | 16.33 | 21.5241838 |
| 28.04.2015 14:32:43.1 | 212.49 | 507.9 | 1.0383 | 16.31 | 23.1047686 |
| 28.04.2015 14:32:43.2 | 212.14 | 507.9 | 0.9095 | 16.43 | 21.6242747 |
| 28.04.2015 14:32:43.3 | 212.23 | 507.9 | 1.0362 | 16.24 | 23.0813917 |
| 28.04.2015 14:32:43.4 | 213.48 | 508 | 1.0249 | 16.29 | 22.9551927 |
| 28.04.2015 14:32:43.5 | 215.45 | 508.1 | 0.9331 | 16.32 | 21.9030347 |
| 28.04.2015 14:32:43.6 | 215.26 | 508.1 | 0.9819 | 16.45 | 22.4684869 |
| 28.04.2015 14:32:43.7 | 215.43 | 508.1 | 0.9064 | 16.21 | 21.5873904 |
| 28.04.2015 14:32:43.8 | 218.13 | 508.3 | 1.0195 | 16.28 | 22.8946396 |
| 28.04.2015 14:32:43.9 | 217.84 | 508.3 | 0.9516 | 16.3 | 22.1190981 |
| 28.04.2015 14:32:44.0 | 217.84 | 508.2 | 1.0129 | 16.46 | 22.8204121 |
| 28.04.2015 14:32:44.1 | 219.02 | 508.2 | 1.1057 | 16.28 | 23.8428876 |
| 28.04.2015 14:32:44.2 | 220.69 | 508.2 | 1.0851 | 16.3 | 23.6197382 |
| 28.04.2015 14:32:44.3 | 220.41 | 508.3 | 0.9628 | 16.38 | 22.2488843 |
| 28.04.2015 14:32:44.4 | 220.41 | 508.1 | 1.1358 | 16.33 | 24.1652409 |
| 28.04.2015 14:32:44.5 | 223 | 508.2 | 0.9887 | 16.3 | 22.5461537 |
| 28.04.2015 14:32:44.6 | 223.15 | 508.3 | 0.9453 | 16.4 | 22.0457575 |
| 28.04.2015 14:32:44.7 | 223 | 508.3 | 0.9809 | 16.38 | 22.4570427 |
| 28.04.2015 14:32:44.8 | 223.54 | 508.1 | 0.9691 | 16.35 | 22.3215575 |
| 28.04.2015 14:32:44.9 | 225.98 | 508.1 | 0.9843 | 16.36 | 22.4959294 |
| 28.04.2015 14:32:45.0 | 225.75 | 508.2 | 1.0333 | 16.34 | 23.0490703 |
| 28.04.2015 14:32:45.1 | 225.57 | 508.2 | 1.1327 | 16.35 | 24.1322406 |
| 28.04.2015 14:32:45.2 | 227.73 | 508.1 | 0.9095 | 16.33 | 21.6242747 |
| 28.04.2015 14:32:45.3 | 228.82 | 508.1 | 0.8667 | 16.26 | 21.1093371 |
| 28.04.2015 14:32:45.4 | 228.82 | 508.2 | 0.7751 | 16.36 | 19.9626901 |
| 28.04.2015 14:32:45.5 | 228.77 | 508.1 | 0.7858 | 16.42 | 20.100007 |
| 28.04.2015 14:32:45.6 | 231.24 | 508.1 | 0.8898 | 16.29 | 21.3887989 |
| 28.04.2015 14:32:45.7 | 231.32 | 508.1 | 0.9066 | 16.38 | 21.5897719 |
| 28.04.2015 14:32:45.8 | 231.13 | 508.1 | 1.0136 | 16.35 | 22.8282962 |
| 28.04.2015 14:32:45.9 | 233.55 | 508.1 | 1.0532 | 16.49 | 23.2699592 |
| 28.04.2015 14:32:46.0 | 233.73 | 508.1 | 0.9738 | 16.28 | 22.3756202 |
| 28.04.2015 14:32:46.1 | 233.94 | 508.2 | 0.8756 | 16.39 | 21.2174444 |
| 28.04.2015 14:32:46.2 | 234.4 | 508.2 | 0.8801 | 16.3 | 21.2718963 |
| 28.04.2015 14:32:46.3 | 236.67 | 508.1 | 0.9974 | 16.64 | 22.6451332 |
| 28.04.2015 14:32:46.4 | 236.23 | 508.1 | 0.9112 | 16.28 | 21.6444748 |
| 28.04.2015 14:32:46.5 | 236.42 | 508.3 | 1.0568 | 16.35 | 23.3096955 |
| 28.04.2015 14:32:46.6 | 238.2 | 508.3 | 1.0665 | 16.44 | 23.4164269 |
| 28.04.2015 14:32:46.7 | 238.96 | 508.2 | 1.1454 | 16.38 | 24.2671507 |
| 28.04.2015 14:32:46.8 | 238.93 | 508.2 | 0.9208 | 16.34 | 21.7581944 |
| 28.04.2015 14:32:46.9 | 239.48 | 508.4 | 0.9492 | 16.25 | 22.0911875 |
| 28.04.2015 14:32:47.0 | 242.08 | 508.4 | 0.9502 | 16.42 | 22.1028212 |

| | | | | | |
|-----------------------|--------|-------|--------|-------|------------|
| 28.04.2015 14:32:47.1 | 241.75 | 508.2 | 0.997 | 16.31 | 22.6405919 |
| 28.04.2015 14:32:47.2 | 242.01 | 508.2 | 0.8545 | 16.42 | 20.960239 |
| 28.04.2015 14:32:47.3 | 243.37 | 508.3 | 0.9801 | 16.31 | 22.4478831 |
| 28.04.2015 14:32:47.4 | 244.53 | 508.3 | 0.9123 | 16.32 | 21.6575355 |
| 28.04.2015 14:32:47.5 | 244.27 | 508.3 | 1.0017 | 16.35 | 22.6938946 |
| 28.04.2015 14:32:47.6 | 244.73 | 508.3 | 0.9792 | 16.18 | 22.4375741 |
| 28.04.2015 14:32:47.7 | 247.24 | 508.3 | 1.1878 | 16.44 | 24.7122255 |
| 28.04.2015 14:32:47.8 | 246.98 | 508.4 | 1.0188 | 16.46 | 22.8867784 |
| 28.04.2015 14:32:47.9 | 247.01 | 508.4 | 1.0337 | 16.39 | 23.0535311 |
| 28.04.2015 14:32:48.0 | 249.04 | 508.5 | 0.9245 | 16.26 | 21.8018654 |
| 28.04.2015 14:32:48.1 | 249.69 | 508.6 | 0.9269 | 16.39 | 21.8301459 |
| 28.04.2015 14:32:48.2 | 249.65 | 508.6 | 0.9425 | 16.46 | 22.0130833 |
| 28.04.2015 14:32:48.3 | 249.67 | 508.6 | 0.9805 | 16.28 | 22.4524634 |
| 28.04.2015 14:32:48.4 | 252.55 | 508.7 | 1.0155 | 16.07 | 22.849682 |
| 28.04.2015 14:32:48.5 | 252.25 | 508.9 | 0.8966 | 16.33 | 21.4703718 |
| 28.04.2015 14:32:48.6 | 252.28 | 508.8 | 0.8783 | 16.36 | 21.2501323 |
| 28.04.2015 14:32:48.7 | 253.61 | 508.9 | 1.0415 | 16.23 | 23.1403453 |
| 28.04.2015 14:32:48.8 | 255.44 | 509 | 1.0279 | 16.23 | 22.9887644 |
| 28.04.2015 14:32:48.9 | 255.22 | 509 | 0.9646 | 16.44 | 22.2696723 |
| 28.04.2015 14:32:49.0 | 255.15 | 508.9 | 0.9473 | 16.37 | 22.0690666 |
| 28.04.2015 14:32:49.1 | 257.55 | 508.8 | 1.0086 | 16.33 | 22.7719216 |
| 28.04.2015 14:32:49.2 | 257.91 | 509 | 0.9779 | 16.28 | 22.4226749 |
| 28.04.2015 14:32:49.3 | 257.76 | 509.1 | 0.9683 | 16.25 | 22.3123423 |
| 28.04.2015 14:32:49.4 | 258.33 | 509 | 0.889 | 16.36 | 21.3791817 |
| 28.04.2015 14:32:49.5 | 260.71 | 509 | 0.8747 | 16.3 | 21.2065373 |
| 28.04.2015 14:32:49.6 | 260.56 | 509.3 | 0.9155 | 16.27 | 21.6954854 |
| 28.04.2015 14:32:49.7 | 260.39 | 509.4 | 0.9293 | 16.28 | 21.8583898 |
| 28.04.2015 14:32:49.8 | 263.37 | 509.4 | 0.9002 | 16.35 | 21.5134322 |
| 28.04.2015 14:32:49.9 | 263.46 | 509.4 | 0.9009 | 16.27 | 21.521795 |
| 28.04.2015 14:32:50.0 | 263.47 | 509.6 | 0.9507 | 16.34 | 22.1086357 |
| 28.04.2015 14:32:50.1 | 263.51 | 509.7 | 0.9171 | 16.36 | 21.7144355 |
| 28.04.2015 14:32:50.2 | 265.94 | 509.6 | 0.7715 | 16.26 | 19.9162772 |
| 28.04.2015 14:32:50.3 | 266.13 | 509.7 | 0.8682 | 16.24 | 21.1275962 |
| 28.04.2015 14:32:50.4 | 265.95 | 509.8 | 0.8984 | 16.33 | 21.4919127 |
| 28.04.2015 14:32:50.5 | 268.27 | 509.8 | 0.8927 | 16.42 | 21.4236253 |
| 28.04.2015 14:32:50.6 | 268.48 | 509.8 | 0.8532 | 16.21 | 20.9442889 |
| 28.04.2015 14:32:50.7 | 268.63 | 509.9 | 0.8065 | 16.26 | 20.3630292 |
| 28.04.2015 14:32:50.8 | 269.99 | 510 | 0.9426 | 16.31 | 22.0142511 |
| 28.04.2015 14:32:50.9 | 271.2 | 510 | 0.9928 | 16.39 | 22.5928533 |
| 28.04.2015 14:32:51.0 | 271.04 | 510.1 | 0.8232 | 16.37 | 20.5727751 |
| 28.04.2015 14:32:51.1 | 271.29 | 510.3 | 0.7198 | 16.22 | 19.2373886 |
| 28.04.2015 14:32:51.2 | 273.94 | 510.4 | 0.7676 | 16.41 | 19.8658742 |
| 28.04.2015 14:32:51.3 | 273.72 | 510.3 | 0.6201 | 16.35 | 17.8554608 |
| 28.04.2015 14:32:51.4 | 273.7 | 510.4 | 0.7168 | 16.21 | 19.1972577 |
| 28.04.2015 14:32:51.5 | 275.8 | 510.6 | 0.7933 | 16.4 | 20.1957006 |
| 28.04.2015 14:32:51.6 | 276.27 | 510.7 | 0.737 | 16.38 | 19.4658755 |
| 28.04.2015 14:32:51.7 | 276.13 | 510.6 | 0.7314 | 16.43 | 19.39178 |
| 28.04.2015 14:32:51.8 | 276.75 | 510.6 | 0.6344 | 16.29 | 18.0601679 |
| 28.04.2015 14:32:51.9 | 279.24 | 510.8 | 0.6482 | 16.35 | 18.2555411 |
| 28.04.2015 14:32:52.0 | 278.78 | 510.8 | 0.7337 | 16.31 | 19.4222463 |
| 28.04.2015 14:32:52.1 | 278.81 | 510.7 | 0.6796 | 16.38 | 18.6924782 |
| 28.04.2015 14:32:52.2 | 280.5 | 510.7 | 0.6637 | 16.29 | 18.4725183 |
| 28.04.2015 14:32:52.3 | 281.64 | 510.7 | 0.6883 | 16.38 | 18.811745 |
| 28.04.2015 14:32:52.4 | 281.3 | 510.8 | 0.6401 | 16.36 | 18.1411206 |
| 28.04.2015 14:32:52.5 | 281.26 | 510.8 | 0.5679 | 16.33 | 17.0874057 |
| 28.04.2015 14:32:52.6 | 284.38 | 510.9 | 0.6094 | 16.27 | 17.70074 |
| 28.04.2015 14:32:52.7 | 284.17 | 511 | 0.6684 | 16.33 | 18.5378096 |
| 28.04.2015 14:32:52.8 | 284.09 | 511.1 | 0.7343 | 16.44 | 19.4301861 |
| 28.04.2015 14:32:52.9 | 286.21 | 511.1 | 0.6066 | 16.28 | 17.6600285 |
| 28.04.2015 14:32:53.0 | 287.19 | 511.2 | 0.5565 | 16.31 | 16.9150304 |
| 28.04.2015 14:32:53.1 | 286.93 | 511.3 | 0.5171 | 16.31 | 16.3052502 |
| 28.04.2015 14:32:53.2 | 286.96 | 511.3 | 0.6332 | 16.42 | 18.043079 |
| 28.04.2015 14:32:53.3 | 288.71 | 511.4 | 0.7034 | 16.21 | 19.0169725 |
| 28.04.2015 14:32:53.4 | 289.48 | 511.5 | 0.6063 | 16.24 | 17.655661 |
| 28.04.2015 14:32:53.5 | 289.26 | 511.6 | 0.5391 | 16.29 | 16.6484905 |
| 28.04.2015 14:32:53.6 | 290.44 | 511.6 | 0.4693 | 16.27 | 15.5333624 |
| 28.04.2015 14:32:53.7 | 291.39 | 511.7 | 0.5125 | 16.21 | 16.2325643 |
| 28.04.2015 14:32:53.8 | 291.35 | 511.8 | 0.5442 | 16.2 | 16.7270543 |
| 28.04.2015 14:32:53.9 | 291.3 | 511.9 | 0.4804 | 16.36 | 15.7159883 |
| 28.04.2015 14:32:54.0 | 291.51 | 511.8 | 0.4871 | 16.3 | 15.825202 |
| 28.04.2015 14:32:54.1 | 291.45 | 511.8 | 0.5656 | 16.22 | 17.0527685 |

| | | | | | |
|-----------------------|--------|-------|--------|-------|------------|
| 28.04.2015 14:32:54.2 | 291.68 | 512.1 | 0.548 | 16.23 | 16.7853529 |
| 28.04.2015 14:32:54.3 | 291.65 | 512.2 | 0.5701 | 16.32 | 17.1204714 |
| 28.04.2015 14:32:54.4 | 291.7 | 512.1 | 0.6204 | 16.16 | 17.8597795 |
| 28.04.2015 14:32:54.5 | 291.78 | 512.2 | 0.7419 | 16.22 | 19.5304785 |
| 28.04.2015 14:32:54.6 | 291.86 | 512.4 | 0.7146 | 16.18 | 19.167775 |
| 28.04.2015 14:32:54.7 | 291.77 | 512.5 | 0.6983 | 16.3 | 18.9479059 |
| 28.04.2015 14:32:54.8 | 291.65 | 512.6 | 0.7103 | 16.28 | 19.1100184 |
| 28.04.2015 14:32:54.9 | 292.02 | 512.7 | 0.6473 | 16.29 | 18.2428632 |
| 28.04.2015 14:32:55.0 | 292.08 | 512.8 | 0.5836 | 16.35 | 17.3219922 |
| 28.04.2015 14:32:55.1 | 291.69 | 512.9 | 0.6902 | 16.29 | 18.8376913 |
| 28.04.2015 14:32:55.2 | 291.76 | 513 | 0.6296 | 16.33 | 17.9917147 |
| 28.04.2015 14:32:55.3 | 291.96 | 513.1 | 0.741 | 16.2 | 19.5186286 |
| 28.04.2015 14:32:55.4 | 291.87 | 513.2 | 0.681 | 16.49 | 18.7117219 |
| 28.04.2015 14:32:55.5 | 291.71 | 513.2 | 0.6854 | 16.17 | 18.7720736 |
| 28.04.2015 14:32:55.6 | 291.76 | 513.1 | 0.5634 | 16.37 | 17.0195714 |
| 28.04.2015 14:32:55.7 | 292.2 | 513.2 | 0.5353 | 16.13 | 16.5897109 |
| 28.04.2015 14:32:55.8 | 291.92 | 513.2 | 0.5176 | 16.67 | 16.3131313 |
| 28.04.2015 14:32:55.9 | 291.95 | 513.1 | 0.5784 | 16.51 | 17.2446482 |
| 28.04.2015 14:32:56.0 | 291.38 | 513.1 | 0.6179 | 16.32 | 17.8237587 |
| 28.04.2015 14:32:56.1 | 290.49 | 513.1 | 0.6902 | 16.32 | 18.8376913 |
| 28.04.2015 14:32:56.2 | 290.49 | 513.1 | 0.6183 | 16.32 | 17.8295269 |
| 28.04.2015 14:32:56.3 | 290.52 | 513 | 0.801 | 16.46 | 20.2934766 |
| 28.04.2015 14:32:56.4 | 289.14 | 512.9 | 0.7727 | 16.23 | 19.9317602 |
| 28.04.2015 14:32:56.5 | 287.54 | 513 | 0.7607 | 16.31 | 19.7763849 |
| 28.04.2015 14:32:56.6 | 287.57 | 513.1 | 0.7873 | 16.32 | 20.1191822 |
| 28.04.2015 14:32:56.7 | 287.01 | 512.8 | 0.7838 | 16.38 | 20.0744117 |
| 28.04.2015 14:32:56.8 | 284.78 | 512.9 | 0.7235 | 16.35 | 19.2867684 |
| 28.04.2015 14:32:56.9 | 285.11 | 513 | 0.6943 | 16.29 | 18.8935592 |
| 28.04.2015 14:32:57.0 | 284.92 | 512.9 | 0.8421 | 16.42 | 20.8076019 |
| 28.04.2015 14:32:57.1 | 283.23 | 512.9 | 0.8477 | 16.33 | 20.876673 |
| 28.04.2015 14:32:57.2 | 282.46 | 512.8 | 0.79 | 16.32 | 20.1536514 |
| 28.04.2015 14:32:57.3 | 282.56 | 512.8 | 0.8442 | 16.26 | 20.8335304 |
| 28.04.2015 14:32:57.4 | 282.22 | 512.8 | 0.8743 | 16.35 | 21.2016879 |
| 28.04.2015 14:32:57.5 | 279.37 | 512.9 | 0.8428 | 16.36 | 20.8162484 |
| 28.04.2015 14:32:57.6 | 280 | 512.8 | 0.812 | 16.26 | 20.4323449 |
| 28.04.2015 14:32:57.7 | 279.86 | 512.9 | 0.8042 | 16.41 | 20.3339725 |
| 28.04.2015 14:32:57.8 | 278.52 | 512.9 | 0.8052 | 16.44 | 20.3466109 |
| 28.04.2015 14:32:57.9 | 276.59 | 512.8 | 0.8418 | 16.24 | 20.8038952 |
| 28.04.2015 14:32:58.0 | 277.06 | 512.9 | 0.8405 | 16.2 | 20.7878252 |
| 28.04.2015 14:32:58.1 | 276.78 | 512.8 | 0.78 | 16.31 | 20.0256904 |
| 28.04.2015 14:32:58.2 | 274.55 | 512.7 | 0.6971 | 16.34 | 18.9316183 |
| 28.04.2015 14:32:58.3 | 274.12 | 512.7 | 0.7389 | 16.21 | 19.490951 |
| 28.04.2015 14:32:58.4 | 274.41 | 512.8 | 0.9372 | 16.16 | 21.9511025 |
| 28.04.2015 14:32:58.5 | 273.73 | 512.8 | 0.8967 | 16.28 | 21.4715691 |
| 28.04.2015 14:32:58.6 | 271.56 | 512.7 | 0.9428 | 16.32 | 22.0165864 |
| 28.04.2015 14:32:58.7 | 271.68 | 512.7 | 0.8824 | 16.22 | 21.2996735 |
| 28.04.2015 14:32:58.8 | 271.75 | 512.8 | 0.9078 | 16.18 | 21.6040556 |
| 28.04.2015 14:32:58.9 | 269.62 | 512.9 | 0.7811 | 16.26 | 20.0398061 |
| 28.04.2015 14:32:59.0 | 268.59 | 512.8 | 0.8764 | 16.42 | 21.227135 |
| 28.04.2015 14:32:59.1 | 268.67 | 512.8 | 0.849 | 16.21 | 20.8926747 |
| 28.04.2015 14:32:59.2 | 268.73 | 512.9 | 0.7372 | 16.27 | 19.4685165 |
| 28.04.2015 14:32:59.3 | 265.92 | 513 | 0.8763 | 16.23 | 21.2259239 |
| 28.04.2015 14:32:59.4 | 265.9 | 512.9 | 0.9114 | 16.31 | 21.6468501 |
| 28.04.2015 14:32:59.5 | 266.26 | 512.9 | 0.7653 | 16.25 | 19.8360893 |
| 28.04.2015 14:32:59.6 | 264.11 | 513.1 | 0.8616 | 16.22 | 21.0471377 |
| 28.04.2015 14:32:59.7 | 263.42 | 513.1 | 0.8123 | 16.29 | 20.436119 |
| 28.04.2015 14:32:59.8 | 263.4 | 513 | 0.9262 | 16.22 | 21.8219012 |
| 28.04.2015 14:32:59.9 | 262.22 | 513 | 0.9562 | 16.23 | 22.1724951 |
| 28.04.2015 14:33:00.0 | 260.92 | 513.1 | 0.9701 | 16.16 | 22.3330711 |
| 28.04.2015 14:33:00.1 | 260.89 | 513.1 | 0.8527 | 16.3 | 20.9381511 |
| 28.04.2015 14:33:00.2 | 260.78 | 513.1 | 0.766 | 16.31 | 19.845159 |
| 28.04.2015 14:33:00.3 | 258.58 | 513.2 | 1.0309 | 16.03 | 23.0222872 |
| 28.04.2015 14:33:00.4 | 258.42 | 513.3 | 0.892 | 16.35 | 21.4152241 |
| 28.04.2015 14:33:00.5 | 258.36 | 513.3 | 1.0224 | 16.34 | 22.9271788 |
| 28.04.2015 14:33:00.6 | 257.38 | 513.4 | 0.9442 | 16.17 | 22.032927 |
| 28.04.2015 14:33:00.7 | 255.69 | 513.5 | 0.9239 | 16.18 | 21.7947896 |
| 28.04.2015 14:33:00.8 | 255.73 | 513.5 | 0.9559 | 16.26 | 22.1690166 |
| 28.04.2015 14:33:00.9 | 255.78 | 513.5 | 1.0309 | 16.37 | 23.0222872 |
| 28.04.2015 14:33:01.0 | 253.64 | 513.5 | 0.9702 | 16.12 | 22.3342222 |
| 28.04.2015 14:33:01.1 | 253.26 | 513.6 | 0.9293 | 16.22 | 21.8583898 |
| 28.04.2015 14:33:01.2 | 253.11 | 513.7 | 0.9296 | 16.24 | 21.8619177 |

| | | | | | |
|-----------------------|--------|-------|--------|-------|------------|
| 28.04.2015 14:33:01.3 | 251.67 | 513.6 | 0.8896 | 16.28 | 21.386395 |
| 28.04.2015 14:33:01.4 | 249.93 | 513.5 | 1.0109 | 16.22 | 22.7978712 |
| 28.04.2015 14:33:01.5 | 250.36 | 513.5 | 0.9313 | 16.12 | 21.8818985 |
| 28.04.2015 14:33:01.6 | 250.23 | 513.5 | 0.7781 | 16.09 | 20.0012853 |
| 28.04.2015 14:33:01.7 | 247.95 | 513.4 | 0.907 | 16.13 | 21.5945342 |
| 28.04.2015 14:33:01.8 | 248.11 | 513.3 | 0.8798 | 16.12 | 21.2682705 |
| 28.04.2015 14:33:01.9 | 248.14 | 513.4 | 0.938 | 16.13 | 21.9604693 |
| 28.04.2015 14:33:02.0 | 247.05 | 513.5 | 1.0022 | 16.24 | 22.6995578 |
| 28.04.2015 14:33:02.1 | 244.57 | 513.4 | 1.1137 | 16.13 | 23.9289866 |
| 28.04.2015 14:33:02.2 | 245.31 | 513.4 | 1.1051 | 16.11 | 23.8364177 |
| 28.04.2015 14:33:02.3 | 245.08 | 513.5 | 1.1248 | 16.14 | 24.0479384 |
| 28.04.2015 14:33:02.4 | 242.23 | 513.6 | 0.9595 | 16.34 | 22.2107225 |
| 28.04.2015 14:33:02.5 | 242.47 | 513.5 | 0.8745 | 16.21 | 21.2041127 |
| 28.04.2015 14:33:02.6 | 242.61 | 513.6 | 0.9249 | 16.07 | 21.8065814 |
| 28.04.2015 14:33:02.7 | 240.28 | 513.6 | 0.8967 | 16.2 | 21.4715691 |
| 28.04.2015 14:33:02.8 | 239.77 | 513.6 | 0.9531 | 16.17 | 22.1365243 |
| 28.04.2015 14:33:02.9 | 239.78 | 513.6 | 0.9407 | 16.14 | 21.9920528 |
| 28.04.2015 14:33:03.0 | 240.01 | 513.6 | 0.9926 | 16.02 | 22.5905775 |
| 28.04.2015 14:33:03.1 | 237.45 | 513.7 | 0.9218 | 16.3 | 21.770006 |
| 28.04.2015 14:33:03.2 | 237.32 | 513.6 | 1.0182 | 16.23 | 22.8800381 |
| 28.04.2015 14:33:03.3 | 237.19 | 513.6 | 0.9683 | 16.15 | 22.3123423 |
| 28.04.2015 14:33:03.4 | 235.8 | 513.7 | 0.9714 | 16.11 | 22.3480301 |
| 28.04.2015 14:33:03.5 | 234.64 | 513.8 | 1.02 | 16.18 | 22.9002531 |
| 28.04.2015 14:33:03.6 | 234.71 | 513.6 | 0.8934 | 16.22 | 21.4320232 |
| 28.04.2015 14:33:03.7 | 234.63 | 513.6 | 0.9373 | 16.16 | 21.9522735 |
| 28.04.2015 14:33:03.8 | 232.06 | 513.8 | 1.0357 | 16.12 | 23.0758223 |
| 28.04.2015 14:33:03.9 | 232.12 | 513.8 | 0.994 | 16.13 | 22.6065031 |
| 28.04.2015 14:33:04.0 | 232.02 | 513.7 | 1.0185 | 16.23 | 22.8834085 |
| 28.04.2015 14:33:04.1 | 230.07 | 513.6 | 0.9876 | 16.15 | 22.5336081 |
| 28.04.2015 14:33:04.2 | 229.72 | 513.7 | 0.7944 | 16.12 | 20.2096976 |
| 28.04.2015 14:33:04.3 | 229.43 | 513.7 | 0.8756 | 16.27 | 21.2174444 |
| 28.04.2015 14:33:04.4 | 228.76 | 513.6 | 0.8235 | 16.15 | 20.5765234 |
| 28.04.2015 14:33:04.5 | 226.91 | 513.6 | 0.9052 | 16.24 | 21.5730957 |
| 28.04.2015 14:33:04.6 | 227.15 | 513.7 | 0.9199 | 16.19 | 21.7475584 |
| 28.04.2015 14:33:04.7 | 226.9 | 513.7 | 1.0091 | 16.31 | 22.7775653 |
| 28.04.2015 14:33:04.8 | 224.35 | 513.7 | 0.9481 | 16.21 | 22.0783834 |
| 28.04.2015 14:33:04.9 | 224.52 | 513.7 | 1.0255 | 16.18 | 22.961911 |
| 28.04.2015 14:33:05.0 | 224.3 | 513.7 | 0.9817 | 16.25 | 22.4661985 |
| 28.04.2015 14:33:05.1 | 222.54 | 513.8 | 0.8712 | 16.25 | 21.1640671 |
| 28.04.2015 14:33:05.2 | 221.62 | 513.8 | 1.0604 | 16.06 | 23.3493641 |
| 28.04.2015 14:33:05.3 | 222 | 513.9 | 1.2195 | 16.02 | 25.0398141 |
| 28.04.2015 14:33:05.4 | 221.56 | 514 | 1.0322 | 16.18 | 23.0367985 |
| 28.04.2015 14:33:05.5 | 219.09 | 514.1 | 1.1369 | 16.15 | 24.1769399 |
| 28.04.2015 14:33:05.6 | 219.13 | 514.1 | 1.0566 | 16.04 | 23.3074897 |
| 28.04.2015 14:33:05.7 | 219.28 | 514.2 | 1.0301 | 15.97 | 23.0133526 |
| 28.04.2015 14:33:05.8 | 218 | 514.2 | 1.0223 | 16.13 | 22.9260575 |
| 28.04.2015 14:33:05.9 | 216.41 | 514.1 | 1.0949 | 16.23 | 23.7261584 |
| 28.04.2015 14:33:06.0 | 216.58 | 514.1 | 1.0949 | 16.15 | 23.7261584 |
| 28.04.2015 14:33:06.1 | 216.66 | 514.2 | 1.0715 | 16.08 | 23.4712535 |
| 28.04.2015 14:33:06.2 | 214.18 | 514.2 | 1.0251 | 16.2 | 22.9574324 |
| 28.04.2015 14:33:06.3 | 213.97 | 514.1 | 1.1472 | 16.15 | 24.2862111 |
| 28.04.2015 14:33:06.4 | 213.95 | 514.2 | 1.0322 | 16.12 | 23.0367985 |
| 28.04.2015 14:33:06.5 | 213.41 | 514.3 | 1.134 | 16.26 | 24.146085 |
| 28.04.2015 14:33:06.6 | 210.72 | 514.4 | 1.2235 | 16.19 | 25.0808461 |
| 28.04.2015 14:33:06.7 | 210.95 | 514.4 | 1.1067 | 16.21 | 23.853667 |
| 28.04.2015 14:33:06.8 | 211.16 | 514.4 | 1.0528 | 16.15 | 23.2655399 |
| 28.04.2015 14:33:06.9 | 209.27 | 514.5 | 1.0138 | 16.27 | 22.8305482 |
| 28.04.2015 14:33:07.0 | 208.29 | 514.6 | 1.057 | 16.18 | 23.311901 |
| 28.04.2015 14:33:07.1 | 208.3 | 514.5 | 0.9243 | 16.25 | 21.7995071 |
| 28.04.2015 14:33:07.2 | 208.36 | 514.5 | 0.8859 | 16.28 | 21.3418738 |
| 28.04.2015 14:33:07.3 | 205.75 | 514.5 | 0.8858 | 16.09 | 21.3406693 |
| 28.04.2015 14:33:07.4 | 205.79 | 514.5 | 0.8927 | 16.78 | 21.4236253 |
| 28.04.2015 14:33:07.5 | 205.61 | 514.4 | 0.8468 | 16.23 | 20.8655877 |
| 28.04.2015 14:33:07.6 | 203.5 | 514.4 | 0.9612 | 16.24 | 22.2303898 |
| 28.04.2015 14:33:07.7 | 202.94 | 514.4 | 0.9031 | 16.34 | 21.5480571 |
| 28.04.2015 14:33:07.8 | 202.99 | 514.4 | 0.8369 | 16.28 | 20.7432586 |
| 28.04.2015 14:33:07.9 | 202.88 | 514.4 | 0.9641 | 16.25 | 22.2638998 |
| 28.04.2015 14:33:08.0 | 200.78 | 514.5 | 0.8285 | 16.21 | 20.6388956 |
| 28.04.2015 14:33:08.1 | 200.69 | 514.5 | 0.9027 | 16.35 | 21.5432846 |
| 28.04.2015 14:33:08.2 | 200.67 | 514.4 | 0.8962 | 16.35 | 21.4655819 |
| 28.04.2015 14:33:08.3 | 198.63 | 514.3 | 1.046 | 16.27 | 23.1902825 |

| | | | | | |
|-----------------------|--------|-------|--------|-------|------------|
| 28.04.2015 14:33:08.4 | 197.87 | 514.4 | 1.0305 | 16.15 | 23.0178203 |
| 28.04.2015 14:33:08.5 | 197.76 | 514.4 | 0.9899 | 16.19 | 22.5598319 |
| 28.04.2015 14:33:08.6 | 197.44 | 514.3 | 1.058 | 16.17 | 23.3229258 |
| 28.04.2015 14:33:08.7 | 195.02 | 514.2 | 0.8891 | 16.23 | 21.3803841 |
| 28.04.2015 14:33:08.8 | 195.3 | 514.4 | 0.8645 | 16.21 | 21.0825285 |
| 28.04.2015 14:33:08.9 | 195.08 | 514.4 | 0.8831 | 16.22 | 21.3081203 |
| 28.04.2015 14:33:09.0 | 192.81 | 514.4 | 0.9243 | 16.15 | 21.7995071 |
| 28.04.2015 14:33:09.1 | 192.69 | 514.4 | 1.009 | 16.15 | 22.7764367 |
| 28.04.2015 14:33:09.2 | 192.7 | 514.6 | 1.0003 | 16.17 | 22.6780303 |
| 28.04.2015 14:33:09.3 | 191.03 | 514.6 | 0.9457 | 16.23 | 22.0504213 |
| 28.04.2015 14:33:09.4 | 189.61 | 514.6 | 0.9243 | 16.29 | 21.7995071 |
| 28.04.2015 14:33:09.5 | 190.17 | 514.6 | 0.8794 | 16.22 | 21.2634352 |
| 28.04.2015 14:33:09.6 | 190.11 | 514.7 | 0.8388 | 16.25 | 20.7667918 |
| 28.04.2015 14:33:09.7 | 187.34 | 514.7 | 0.9361 | 16.2 | 21.9382166 |
| 28.04.2015 14:33:09.8 | 187.35 | 514.7 | 0.8845 | 16.09 | 21.3250037 |
| 28.04.2015 14:33:09.9 | 187.59 | 514.6 | 1.0107 | 16.03 | 22.7956159 |
| 28.04.2015 14:33:10.0 | 186.42 | 514.7 | 0.9649 | 16.26 | 22.2731351 |
| 28.04.2015 14:33:10.1 | 184.58 | 514.7 | 0.8874 | 16.31 | 21.3599341 |
| 28.04.2015 14:33:10.2 | 184.72 | 514.6 | 0.8843 | 16.25 | 21.3225926 |
| 28.04.2015 14:33:10.3 | 184.94 | 514.8 | 0.904 | 16.16 | 21.5587915 |
| 28.04.2015 14:33:10.4 | 182.7 | 514.9 | 0.9175 | 16.39 | 21.7191705 |
| 28.04.2015 14:33:10.5 | 182.2 | 514.9 | 0.8801 | 16.31 | 21.2718963 |
| 28.04.2015 14:33:10.6 | 182.11 | 515 | 0.9499 | 16.23 | 22.0993317 |
| 28.04.2015 14:33:10.7 | 181.82 | 515.1 | 0.9951 | 16.25 | 22.6190083 |
| 28.04.2015 14:33:10.8 | 179.05 | 515.3 | 0.9055 | 16.22 | 21.5766703 |
| 28.04.2015 14:33:10.9 | 179.23 | 515.3 | 0.953 | 16.42 | 22.135363 |
| 28.04.2015 14:33:11.0 | 179.21 | 515.4 | 0.9225 | 16.17 | 21.7782703 |
| 28.04.2015 14:33:11.1 | 177.75 | 515.6 | 0.8301 | 16.09 | 20.6588149 |
| 28.04.2015 14:33:11.2 | 176.57 | 515.7 | 0.9963 | 16.11 | 22.6326424 |
| 28.04.2015 14:33:11.3 | 176.44 | 515.6 | 0.9508 | 16.43 | 22.1097985 |
| 28.04.2015 14:33:11.4 | 176.06 | 515.6 | 0.9288 | 16.24 | 21.8525086 |
| 28.04.2015 14:33:11.5 | 174.17 | 515.8 | 0.8472 | 16.22 | 20.8705152 |
| 28.04.2015 14:33:11.6 | 174.04 | 515.9 | 0.8858 | 16.4 | 21.3406693 |
| 28.04.2015 14:33:11.7 | 174.01 | 515.9 | 0.9657 | 16.36 | 22.2823665 |
| 28.04.2015 14:33:11.8 | 172.18 | 516 | 0.8954 | 16.35 | 21.4559991 |
| 28.04.2015 14:33:11.9 | 171.49 | 516.1 | 0.8007 | 16.33 | 20.289676 |
| 28.04.2015 14:33:12.0 | 171.39 | 516.2 | 0.8766 | 16.42 | 21.2295569 |
| 28.04.2015 14:33:12.1 | 170.1 | 516.3 | 0.8487 | 16.24 | 20.8889831 |
| 28.04.2015 14:33:12.2 | 168.99 | 516.4 | 0.8373 | 16.18 | 20.7482151 |
| 28.04.2015 14:33:12.3 | 169.05 | 516.5 | 0.9261 | 16.21 | 21.8207232 |
| 28.04.2015 14:33:12.4 | 168.28 | 516.7 | 1.0433 | 16.36 | 23.1603331 |
| 28.04.2015 14:33:12.5 | 165.98 | 516.8 | 1.0198 | 16.26 | 22.8980079 |
| 28.04.2015 14:33:12.6 | 166.52 | 516.9 | 0.9104 | 16.13 | 21.6349712 |
| 28.04.2015 14:33:12.7 | 166.24 | 517 | 0.9257 | 16.38 | 21.8160103 |
| 28.04.2015 14:33:12.8 | 164.59 | 517.1 | 0.996 | 16.2 | 22.6292347 |
| 28.04.2015 14:33:12.9 | 163.68 | 517.2 | 1.0115 | 16.32 | 22.8046358 |
| 28.04.2015 14:33:13.0 | 163.86 | 517.4 | 1.0262 | 16.22 | 22.9697465 |
| 28.04.2015 14:33:13.1 | 162.8 | 517.6 | 0.9817 | 16.38 | 22.4661985 |
| 28.04.2015 14:33:13.2 | 160.97 | 517.5 | 1.0882 | 16.31 | 23.6534535 |
| 28.04.2015 14:33:13.3 | 160.98 | 517.5 | 1.0762 | 16.26 | 23.5226741 |
| 28.04.2015 14:33:13.4 | 161.23 | 517.7 | 0.9617 | 16.21 | 22.236171 |
| 28.04.2015 14:33:13.5 | 159.09 | 517.7 | 0.9538 | 16.28 | 22.1446518 |
| 28.04.2015 14:33:13.6 | 158.58 | 517.7 | 0.9006 | 16.3 | 21.5182113 |
| 28.04.2015 14:33:13.7 | 158.54 | 517.8 | 0.8626 | 16.25 | 21.0593481 |
| 28.04.2015 14:33:13.8 | 158.2 | 517.9 | 0.8763 | 16.21 | 21.2259239 |
| 28.04.2015 14:33:13.9 | 155.77 | 518.1 | 0.9207 | 16.23 | 21.7570129 |
| 28.04.2015 14:33:14.0 | 155.85 | 518 | 1.0898 | 16.32 | 23.6708361 |
| 28.04.2015 14:33:14.1 | 156.07 | 518 | 1.0783 | 16.22 | 23.5456129 |
| 28.04.2015 14:33:14.2 | 154.6 | 518.2 | 0.8995 | 16.25 | 21.5050661 |
| 28.04.2015 14:33:14.3 | 153.28 | 518.2 | 0.8735 | 16.32 | 21.1919857 |
| 28.04.2015 14:33:14.4 | 153.29 | 518.2 | 0.951 | 16.31 | 22.1121237 |
| 28.04.2015 14:33:14.5 | 153.5 | 518.2 | 1.0245 | 16.24 | 22.9507128 |
| 28.04.2015 14:33:14.6 | 150.37 | 518.3 | 1.0617 | 16.24 | 23.3636723 |
| 28.04.2015 14:33:14.7 | 150.3 | 518.3 | 0.9278 | 16.39 | 21.8407416 |
| 28.04.2015 14:33:14.8 | 150.34 | 518.4 | 1.0081 | 16.22 | 22.7662764 |
| 28.04.2015 14:33:14.9 | 149.53 | 518.4 | 0.9534 | 16.26 | 22.1400079 |
| 28.04.2015 14:33:15.0 | 147.71 | 518.4 | 0.8245 | 16.27 | 20.589013 |
| 28.04.2015 14:33:15.1 | 147.8 | 518.4 | 0.8743 | 16.58 | 21.2016879 |
| 28.04.2015 14:33:15.2 | 147.65 | 518.4 | 0.9217 | 16.29 | 21.7688251 |
| 28.04.2015 14:33:15.3 | 145.71 | 518.4 | 1.0252 | 16.26 | 22.9585521 |
| 28.04.2015 14:33:15.4 | 145.21 | 518.4 | 0.866 | 16.37 | 21.1008108 |

| | | | | | |
|-----------------------|--------|-------|--------|-------|------------|
| 28.04.2015 14:33:15.5 | 145.29 | 518.3 | 0.8102 | 16.39 | 20.4096857 |
| 28.04.2015 14:33:15.6 | 144.53 | 518.3 | 0.8488 | 16.33 | 20.8902137 |
| 28.04.2015 14:33:15.7 | 142.1 | 518.5 | 0.8817 | 16.12 | 21.2912234 |
| 28.04.2015 14:33:15.8 | 142.33 | 518.6 | 0.8585 | 16.38 | 21.0092402 |
| 28.04.2015 14:33:15.9 | 142.36 | 518.6 | 0.8051 | 16.28 | 20.3453474 |
| 28.04.2015 14:33:16.0 | 140.42 | 518.6 | 0.7963 | 16.27 | 20.2338513 |
| 28.04.2015 14:33:16.1 | 139.85 | 518.8 | 0.891 | 16.35 | 21.4032167 |
| 28.04.2015 14:33:16.2 | 139.73 | 518.8 | 0.7859 | 16.27 | 20.1012859 |
| 28.04.2015 14:33:16.3 | 138.67 | 518.8 | 0.8545 | 16.37 | 20.960239 |
| 28.04.2015 14:33:16.4 | 137 | 518.8 | 0.8252 | 16.25 | 20.5977511 |
| 28.04.2015 14:33:16.5 | 137.22 | 518.9 | 0.8217 | 16.33 | 20.5540231 |
| 28.04.2015 14:33:16.6 | 137.04 | 518.9 | 0.8765 | 16.36 | 21.228346 |
| 28.04.2015 14:33:16.7 | 134.78 | 518.9 | 0.8839 | 16.34 | 21.3177696 |
| 28.04.2015 14:33:16.8 | 134.73 | 519 | 0.8246 | 16.3 | 20.5902615 |
| 28.04.2015 14:33:16.9 | 134.75 | 519.1 | 0.8311 | 16.28 | 20.6712547 |
| 28.04.2015 14:33:17.0 | 132.89 | 519.2 | 0.8297 | 16.32 | 20.6538369 |
| 28.04.2015 14:33:17.1 | 131.71 | 519.2 | 0.8437 | 16.24 | 20.8273599 |
| 28.04.2015 14:33:17.2 | 132.08 | 519.3 | 0.8835 | 16.13 | 21.3129455 |
| 28.04.2015 14:33:17.3 | 131.29 | 519.5 | 0.9345 | 16.25 | 21.91946 |
| 28.04.2015 14:33:17.4 | 129.11 | 519.5 | 0.9521 | 16.29 | 22.1249083 |
| 28.04.2015 14:33:17.5 | 129.28 | 519.6 | 0.909 | 16.23 | 21.6183298 |
| 28.04.2015 14:33:17.6 | 129.52 | 519.7 | 0.9343 | 16.11 | 21.9171143 |
| 28.04.2015 14:33:17.7 | 127.51 | 519.8 | 0.938 | 16.35 | 21.9604693 |
| 28.04.2015 14:33:17.8 | 126.71 | 519.8 | 0.986 | 16.21 | 22.5153475 |
| 28.04.2015 14:33:17.9 | 126.57 | 519.8 | 0.8709 | 16.3 | 21.1604229 |
| 28.04.2015 14:33:18.0 | 126.61 | 519.9 | 0.8259 | 16.21 | 20.6064856 |
| 28.04.2015 14:33:18.1 | 124.06 | 520 | 0.815 | 16.19 | 20.4700546 |
| 28.04.2015 14:33:18.2 | 124.22 | 519.8 | 0.8025 | 16.45 | 20.3124691 |
| 28.04.2015 14:33:18.3 | 124.14 | 519.8 | 0.8941 | 16.06 | 21.4404178 |
| 28.04.2015 14:33:18.4 | 122.95 | 519.9 | 0.8527 | 16.13 | 20.9381511 |
| 28.04.2015 14:33:18.5 | 121.47 | 520 | 0.8949 | 15.97 | 21.4500076 |
| 28.04.2015 14:33:18.6 | 121.43 | 519.8 | 0.9194 | 16.47 | 21.7416473 |
| 28.04.2015 14:33:18.7 | 121.57 | 519.9 | 0.8707 | 16.01 | 21.157993 |
| 28.04.2015 14:33:18.8 | 118.94 | 520 | 0.8658 | 16.34 | 21.0983741 |
| 28.04.2015 14:33:18.9 | 118.67 | 520 | 0.9175 | 16.21 | 21.7191705 |
| 28.04.2015 14:33:19.0 | 118.54 | 520 | 0.8144 | 16.31 | 20.4625182 |
| 28.04.2015 14:33:19.1 | 118.02 | 520 | 0.719 | 16.43 | 19.2266952 |
| 28.04.2015 14:33:19.2 | 115.92 | 520.1 | 0.8215 | 16.17 | 20.5515216 |
| 28.04.2015 14:33:19.3 | 115.9 | 520.1 | 0.8914 | 16.28 | 21.4080205 |
| 28.04.2015 14:33:19.4 | 115.84 | 520.2 | 0.8345 | 16.18 | 20.7134942 |
| 28.04.2015 14:33:19.5 | 114.36 | 520.2 | 0.8624 | 16.17 | 21.0569066 |
| 28.04.2015 14:33:19.6 | 113.46 | 520.3 | 0.8674 | 16.15 | 21.11786 |
| 28.04.2015 14:33:19.7 | 113.47 | 520.3 | 0.8606 | 16.32 | 21.0349202 |
| 28.04.2015 14:33:19.8 | 113.07 | 520.3 | 0.9165 | 16.17 | 21.7073312 |
| 28.04.2015 14:33:19.9 | 110.46 | 520.4 | 0.8726 | 16.08 | 21.1810654 |
| 28.04.2015 14:33:20.0 | 110.46 | 520.4 | 0.9542 | 16.43 | 22.1492948 |
| 28.04.2015 14:33:20.1 | 110.52 | 520.3 | 0.928 | 16.19 | 21.8430955 |
| 28.04.2015 14:33:20.2 | 108.96 | 520.4 | 0.9993 | 16.19 | 22.6666919 |
| 28.04.2015 14:33:20.3 | 107.93 | 520.5 | 0.9494 | 16.1 | 22.0935147 |
| 28.04.2015 14:33:20.4 | 107.96 | 520.5 | 0.9424 | 16.29 | 22.0119154 |
| 28.04.2015 14:33:20.5 | 107.95 | 520.5 | 0.9016 | 16.21 | 21.5301546 |
| 28.04.2015 14:33:20.6 | 105.28 | 520.5 | 0.7899 | 16.12 | 20.1523758 |
| 28.04.2015 14:33:20.7 | 105.41 | 520.6 | 0.8224 | 16.07 | 20.5627762 |
| 28.04.2015 14:33:20.8 | 105.25 | 520.7 | 0.7959 | 16.12 | 20.2287687 |
| 28.04.2015 14:33:20.9 | 104.22 | 520.6 | 0.82 | 16.15 | 20.5327502 |
| 28.04.2015 14:33:21.0 | 102.16 | 520.7 | 0.8702 | 16.11 | 21.1519171 |
| 28.04.2015 14:33:21.1 | 102.51 | 520.8 | 0.8679 | 16.15 | 21.1239456 |
| 28.04.2015 14:33:21.2 | 102.36 | 520.9 | 0.9331 | 16.14 | 21.9030347 |
| 28.04.2015 14:33:21.3 | 100.36 | 520.8 | 0.8838 | 16.21 | 21.3165637 |
| 28.04.2015 14:33:21.4 | 100.25 | 520.8 | 0.8304 | 16.12 | 20.6625476 |
| 28.04.2015 14:33:21.5 | 100.25 | 521 | 0.8515 | 16.15 | 20.9234128 |
| 28.04.2015 14:33:21.6 | 98.5 | 521 | 0.8912 | 16.2 | 21.4056188 |
| 28.04.2015 14:33:21.7 | 96.92 | 521 | 0.89 | 16.15 | 21.3912026 |
| 28.04.2015 14:33:21.8 | 97.37 | 521 | 0.974 | 16.05 | 22.3779179 |
| 28.04.2015 14:33:21.9 | 97.21 | 521.1 | 0.9128 | 16.13 | 21.6634695 |
| 28.04.2015 14:33:22.0 | 94.6 | 521.1 | 0.8902 | 16.11 | 21.3936059 |
| 28.04.2015 14:33:22.1 | 94.37 | 521.2 | 0.8751 | 15.97 | 21.2113856 |
| 28.04.2015 14:33:22.2 | 94.8 | 521.2 | 0.9338 | 15.93 | 21.9112489 |
| 28.04.2015 14:33:22.3 | 92.8 | 521.3 | 0.9314 | 16.18 | 21.8830732 |
| 28.04.2015 14:33:22.4 | 91.99 | 521.2 | 0.8601 | 16.22 | 21.0288087 |
| 28.04.2015 14:33:22.5 | 91.95 | 521.2 | 0.7848 | 16.14 | 20.0872134 |

| | | | | | |
|-----------------------|-------|-------|--------|-------|------------|
| 28.04.2015 14:33:22.6 | 91.88 | 521.2 | 0.8943 | 16.06 | 21.4428157 |
| 28.04.2015 14:33:22.7 | 89.29 | 521.3 | 0.8375 | 16.25 | 20.750693 |
| 28.04.2015 14:33:22.8 | 89.46 | 521.2 | 0.8677 | 16.21 | 21.1215116 |
| 28.04.2015 14:33:22.9 | 89.37 | 521.2 | 0.8511 | 16.14 | 20.9184977 |
| 28.04.2015 14:33:23.0 | 88.28 | 521.3 | 0.9461 | 16.07 | 22.0550841 |
| 28.04.2015 14:33:23.1 | 86.69 | 521.3 | 0.9299 | 16.18 | 21.865445 |
| 28.04.2015 14:33:23.2 | 86.8 | 521.2 | 0.8732 | 16.24 | 21.1883462 |
| 28.04.2015 14:33:23.3 | 86.89 | 521.2 | 0.8679 | 16.15 | 21.1239456 |
| 28.04.2015 14:33:23.4 | 84.15 | 521.3 | 0.8903 | 16.06 | 21.3948075 |
| 28.04.2015 14:33:23.5 | 83.91 | 521.3 | 0.9535 | 16.08 | 22.1411689 |
| 28.04.2015 14:33:23.6 | 83.76 | 521.2 | 0.8747 | 16.16 | 21.2065373 |
| 28.04.2015 14:33:23.7 | 83.26 | 521.1 | 0.8617 | 16.11 | 21.0483591 |
| 28.04.2015 14:33:23.8 | 81.15 | 521.2 | 0.8721 | 16.12 | 21.1749962 |
| 28.04.2015 14:33:23.9 | 81.24 | 521.2 | 0.9909 | 16.16 | 22.571224 |
| 28.04.2015 14:33:24.0 | 81.06 | 521.2 | 0.8982 | 16.09 | 21.4895204 |
| 28.04.2015 14:33:24.1 | 79.61 | 521.3 | 0.8851 | 15.99 | 21.3322354 |
| 28.04.2015 14:33:24.2 | 78.75 | 521.4 | 0.9779 | 16.11 | 22.4226749 |
| 28.04.2015 14:33:24.3 | 78.66 | 521.4 | 0.9215 | 16.25 | 21.7664632 |
| 28.04.2015 14:33:24.4 | 78.29 | 521.4 | 0.8241 | 16.09 | 20.5840181 |
| 28.04.2015 14:33:24.5 | 75.73 | 521.4 | 0.8943 | 16.01 | 21.4428157 |
| 28.04.2015 14:33:24.6 | 75.7 | 521.4 | 0.8492 | 16.28 | 20.8951354 |
| 28.04.2015 14:33:24.7 | 75.74 | 521.4 | 0.8928 | 15.9 | 21.4248252 |
| 28.04.2015 14:33:24.8 | 74.33 | 521.4 | 0.9701 | 16.41 | 22.3330711 |
| 28.04.2015 14:33:24.9 | 73.12 | 521.4 | 0.9509 | 16.1 | 22.1109611 |
| 28.04.2015 14:33:25.0 | 73.11 | 521.5 | 0.9698 | 16.33 | 22.3296177 |
| 28.04.2015 14:33:25.1 | 72.59 | 521.4 | 0.9017 | 16.32 | 21.5313486 |
| 28.04.2015 14:33:25.2 | 70.23 | 521.3 | 0.8891 | 16.08 | 21.3803841 |
| 28.04.2015 14:33:25.3 | 70.67 | 521.4 | 0.9737 | 16.06 | 22.3744713 |
| 28.04.2015 14:33:25.4 | 70.62 | 521.5 | 0.9493 | 16.2 | 22.0923512 |
| 28.04.2015 14:33:25.5 | 68.76 | 521.4 | 0.9728 | 16.44 | 22.3641285 |
| 28.04.2015 14:33:25.6 | 67.93 | 521.4 | 0.9495 | 16.11 | 22.0946783 |
| 28.04.2015 14:33:25.7 | 68.07 | 521.5 | 0.886 | 16.27 | 21.3430783 |
| 28.04.2015 14:33:25.8 | 66.92 | 521.5 | 0.9099 | 15.95 | 21.6290293 |
| 28.04.2015 14:33:25.9 | 65.03 | 521.5 | 0.9029 | 16.3 | 21.545671 |
| 28.04.2015 14:33:26.0 | 65.48 | 521.5 | 0.8448 | 16.02 | 20.8409326 |
| 28.04.2015 14:33:26.1 | 65.49 | 521.6 | 0.8423 | 16.26 | 20.8100727 |
| 28.04.2015 14:33:26.2 | 63.1 | 521.5 | 0.9421 | 16.45 | 22.0084116 |
| 28.04.2015 14:33:26.3 | 62.58 | 521.4 | 0.9463 | 16.28 | 22.0574151 |
| 28.04.2015 14:33:26.4 | 63.02 | 521.4 | 0.8787 | 16.17 | 21.2549707 |
| 28.04.2015 14:33:26.5 | 61.52 | 521.4 | 0.9176 | 16.26 | 21.720354 |
| 28.04.2015 14:33:26.6 | 60.04 | 521.4 | 0.9464 | 16.63 | 22.0585806 |
| 28.04.2015 14:33:26.7 | 60.17 | 521.3 | 0.9333 | 16.1 | 21.9053819 |
| 28.04.2015 14:33:26.8 | 60.35 | 521.2 | 0.9009 | 16.2 | 21.521795 |
| 28.04.2015 14:33:26.9 | 57.56 | 521.2 | 0.8219 | 16.24 | 20.5565244 |
| 28.04.2015 14:33:27.0 | 57.63 | 521.1 | 0.8653 | 16.25 | 21.092281 |
| 28.04.2015 14:33:27.1 | 57.57 | 521 | 0.8889 | 16.13 | 21.3779792 |
| 28.04.2015 14:33:27.2 | 55.83 | 521 | 0.8655 | 16.16 | 21.0947185 |
| 28.04.2015 14:33:27.3 | 54.97 | 521 | 0.9216 | 16.27 | 21.7676442 |
| 28.04.2015 14:33:27.4 | 55.06 | 520.8 | 0.8429 | 16.26 | 20.8174833 |
| 28.04.2015 14:33:27.5 | 54.7 | 520.8 | 0.9262 | 16.16 | 21.8219012 |
| 28.04.2015 14:33:27.6 | 52.44 | 520.8 | 0.9159 | 15.98 | 21.7002245 |
| 28.04.2015 14:33:27.7 | 52.42 | 520.8 | 0.9158 | 16.12 | 21.6990398 |
| 28.04.2015 14:33:27.8 | 52.48 | 520.7 | 0.7699 | 16.08 | 19.8956145 |
| 28.04.2015 14:33:27.9 | 51.07 | 520.6 | 0.9039 | 16 | 21.5575991 |
| 28.04.2015 14:33:28.0 | 49.88 | 520.7 | 0.8519 | 16.1 | 20.9283267 |
| 28.04.2015 14:33:28.1 | 49.88 | 520.7 | 0.9581 | 16.13 | 22.1945129 |
| 28.04.2015 14:33:28.2 | 49.81 | 520.6 | 0.9302 | 16.12 | 21.8689718 |
| 28.04.2015 14:33:28.3 | 46.99 | 520.6 | 0.9234 | 16.03 | 21.7888913 |
| 28.04.2015 14:33:28.4 | 47.04 | 520.7 | 1.0315 | 16.02 | 23.0289859 |
| 28.04.2015 14:33:28.5 | 46.8 | 520.7 | 0.9501 | 16.08 | 22.1016581 |
| 28.04.2015 14:33:28.6 | 45.92 | 520.5 | 0.8918 | 16.01 | 21.4128232 |
| 28.04.2015 14:33:28.7 | 44.3 | 520.5 | 0.9408 | 16.04 | 21.9932217 |
| 28.04.2015 14:33:28.8 | 44.63 | 520.5 | 0.9662 | 16 | 22.2881342 |
| 28.04.2015 14:33:28.9 | 44.15 | 520.5 | 0.9348 | 16.04 | 21.9229781 |
| 28.04.2015 14:33:29.0 | 42.01 | 520.5 | 0.9006 | 16.02 | 21.5182113 |
| 28.04.2015 14:33:29.1 | 41.89 | 520.5 | 0.8986 | 16.08 | 21.4943049 |
| 28.04.2015 14:33:29.2 | 41.75 | 520.5 | 0.9751 | 16.14 | 22.3905507 |
| 28.04.2015 14:33:29.3 | 41.3 | 520.5 | 0.9088 | 16.28 | 21.6159515 |
| 28.04.2015 14:33:29.4 | 38.55 | 520.4 | 0.9099 | 16.08 | 21.6290293 |
| 28.04.2015 14:33:29.5 | 38.9 | 520.4 | 0.9136 | 16.09 | 21.6729607 |
| 28.04.2015 14:33:29.6 | 38.72 | 520.4 | 0.8616 | 16.19 | 21.0471377 |

| | | | | | |
|-----------------------|--------|-------|--------|-------|------------|
| 28.04.2015 14:33:29.7 | 37.24 | 520.3 | 0.913 | 16.34 | 21.6658427 |
| 28.04.2015 14:33:29.8 | 36.02 | 520.3 | 0.8404 | 16.11 | 20.7865885 |
| 28.04.2015 14:33:29.9 | 36.24 | 520.3 | 0.9144 | 16.1 | 21.6824476 |
| 28.04.2015 14:33:30.0 | 36.17 | 520.2 | 0.8859 | 16.21 | 21.3418738 |
| 28.04.2015 14:33:30.1 | 33.53 | 520 | 0.9187 | 16.2 | 21.7333691 |
| 28.04.2015 14:33:30.2 | 33.6 | 520 | 0.9069 | 16.17 | 21.5933437 |
| 28.04.2015 14:33:30.3 | 33.77 | 520.1 | 0.9439 | 16.12 | 22.0294265 |
| 28.04.2015 14:33:30.4 | 32.49 | 520.1 | 0.8969 | 16.17 | 21.4739634 |
| 28.04.2015 14:33:30.5 | 30.24 | 519.9 | 0.9697 | 16.14 | 22.3284664 |
| 28.04.2015 14:33:30.6 | 30.74 | 519.8 | 0.956 | 16.13 | 22.1701761 |
| 28.04.2015 14:33:30.7 | 30.73 | 519.9 | 0.9326 | 16.18 | 21.8971656 |
| 28.04.2015 14:33:30.8 | 28.46 | 519.8 | 0.9789 | 16.17 | 22.4341367 |
| 28.04.2015 14:33:30.9 | 27.92 | 519.7 | 0.9382 | 16.15 | 21.9628104 |
| 28.04.2015 14:33:31.0 | 28.18 | 519.6 | 0.9076 | 16.1 | 21.6016756 |
| 28.04.2015 14:33:31.1 | 26.73 | 519.7 | 0.9191 | 16.14 | 21.7380999 |
| 28.04.2015 14:33:31.2 | 25.27 | 519.6 | 0.9131 | 16.18 | 21.6670292 |
| 28.04.2015 14:33:31.3 | 25.35 | 519.5 | 0.8905 | 16.16 | 21.3972105 |
| 28.04.2015 14:33:31.4 | 25.62 | 519.5 | 0.9454 | 16.04 | 22.0469236 |
| 28.04.2015 14:33:31.5 | 22.9 | 519.5 | 0.9434 | 16.18 | 22.023591 |
| 28.04.2015 14:33:31.6 | 22.88 | 519.5 | 0.9548 | 16.18 | 22.1562574 |
| 28.04.2015 14:33:31.7 | 22.69 | 519.5 | 0.9765 | 16.15 | 22.4066186 |
| 28.04.2015 14:33:31.8 | 21.27 | 519.5 | 0.8739 | 16.03 | 21.1968373 |
| 28.04.2015 14:33:31.9 | 20.19 | 519.4 | 0.8797 | 16.25 | 21.2670618 |
| 28.04.2015 14:33:32.0 | 20.34 | 519.3 | 0.9451 | 16.18 | 22.0434252 |
| 28.04.2015 14:33:32.1 | 19.96 | 519.3 | 0.8823 | 16.03 | 21.2984666 |
| 28.04.2015 14:33:32.2 | 17.67 | 519.2 | 0.9274 | 15.98 | 21.836033 |
| 28.04.2015 14:33:32.3 | 17.72 | 519.1 | 0.9335 | 16.31 | 21.9077289 |
| 28.04.2015 14:33:32.4 | 17.74 | 519 | 0.8425 | 16.25 | 20.8125432 |
| 28.04.2015 14:33:32.5 | 15.34 | 518.8 | 0.8676 | 16.2 | 21.1202945 |
| 28.04.2015 14:33:32.6 | 15.24 | 518.8 | 0.8348 | 16.31 | 20.7172171 |
| 28.04.2015 14:33:32.7 | 15.07 | 518.7 | 0.8857 | 16.17 | 21.3394646 |
| 28.04.2015 14:33:32.8 | 14.38 | 518.5 | 0.9288 | 16.33 | 21.8525086 |
| 28.04.2015 14:33:32.9 | 12.37 | 518.5 | 0.949 | 16.17 | 22.08886 |
| 28.04.2015 14:33:33.0 | 12.68 | 518.6 | 0.9038 | 16.19 | 21.5564065 |
| 28.04.2015 14:33:33.1 | 12.51 | 518.6 | 0.8946 | 16.18 | 21.446412 |
| 28.04.2015 14:33:33.2 | 9.64 | 518.4 | 0.9946 | 16.08 | 22.613325 |
| 28.04.2015 14:33:33.3 | 10.06 | 518.4 | 0.9554 | 16.06 | 22.1632179 |
| 28.04.2015 14:33:33.4 | 10.12 | 518.4 | 0.9176 | 16.15 | 21.720354 |
| 28.04.2015 14:33:33.5 | 8.98 | 518.4 | 0.9231 | 16.1 | 21.7853516 |
| 28.04.2015 14:33:33.6 | 7.02 | 518.3 | 0.88 | 16.22 | 21.2706878 |
| 28.04.2015 14:33:33.7 | 7.49 | 518.3 | 0.8801 | 16.09 | 21.2718963 |
| 28.04.2015 14:33:33.8 | 7.48 | 518.3 | 0.9215 | 16.17 | 21.7664632 |
| 28.04.2015 14:33:33.9 | 5.09 | 518.3 | 0.8807 | 16.26 | 21.279146 |
| 28.04.2015 14:33:34.0 | 4.63 | 518.3 | 0.9124 | 16.23 | 21.6587224 |
| 28.04.2015 14:33:34.1 | 4.93 | 518.2 | 0.9207 | 16.12 | 21.7570129 |
| 28.04.2015 14:33:34.2 | 4.22 | 518.2 | 0.9414 | 16.24 | 22.0002337 |
| 28.04.2015 14:33:34.3 | 1.44 | 518.2 | 0.8852 | 16.25 | 21.3334404 |
| 28.04.2015 14:33:34.4 | 1.77 | 518.2 | 0.9327 | 16.15 | 21.8983396 |
| 28.04.2015 14:33:34.5 | 2 | 518.2 | 0.8878 | 16.18 | 21.3647477 |
| 28.04.2015 14:33:34.6 | 0.08 | 518.2 | 0.8187 | 16.2 | 20.5164678 |
| 28.04.2015 14:33:34.7 | -0.75 | 518.1 | 0.8556 | 16.27 | 20.9737258 |
| 28.04.2015 14:33:34.8 | -0.91 | 518.1 | 0.8863 | 16.14 | 21.3466914 |
| 28.04.2015 14:33:34.9 | -0.76 | 518.2 | 0.9059 | 16.15 | 21.5814354 |
| 28.04.2015 14:33:35.0 | -3.43 | 518.1 | 0.8531 | 16.14 | 20.9430615 |
| 28.04.2015 14:33:35.1 | -3.28 | 518 | 0.9823 | 16.18 | 22.473063 |
| 28.04.2015 14:33:35.2 | -3.4 | 518 | 0.9079 | 16.11 | 21.6052455 |
| 28.04.2015 14:33:35.3 | -4.59 | 518.1 | 0.8961 | 16.13 | 21.4643843 |
| 28.04.2015 14:33:35.4 | -6.53 | 518.1 | 0.9398 | 16.24 | 21.98153 |
| 28.04.2015 14:33:35.5 | -6.38 | 518 | 0.9197 | 16.35 | 21.7451942 |
| 28.04.2015 14:33:35.6 | -6.31 | 518 | 0.8906 | 16.31 | 21.3984119 |
| 28.04.2015 14:33:35.7 | -8.46 | 518 | 0.8928 | 16.07 | 21.4248252 |
| 28.04.2015 14:33:35.8 | -8.97 | 518 | 0.9057 | 16.29 | 21.579053 |
| 28.04.2015 14:33:35.9 | -9.2 | 517.9 | 0.9738 | 16.17 | 22.3756202 |
| 28.04.2015 14:33:36.0 | -10.38 | 517.9 | 0.8601 | 16.43 | 21.0288087 |
| 28.04.2015 14:33:36.1 | -11.44 | 517.9 | 0.9477 | 16.25 | 22.0737255 |
| 28.04.2015 14:33:36.2 | -11.47 | 517.8 | 0.9269 | 16.05 | 21.8301459 |
| 28.04.2015 14:33:36.3 | -11.63 | 517.8 | 0.9113 | 16.29 | 21.6456625 |
| 28.04.2015 14:33:36.4 | -14.05 | 517.7 | 0.9778 | 15.86 | 22.4215284 |
| 28.04.2015 14:33:36.5 | -13.98 | 517.7 | 0.8471 | 16.2 | 20.8692835 |
| 28.04.2015 14:33:36.6 | -14.18 | 517.6 | 0.8064 | 16.11 | 20.3617667 |
| 28.04.2015 14:33:36.7 | -16.21 | 517.6 | 0.8089 | 16.53 | 20.393305 |

| | | | | | |
|-----------------------|--------|-------|--------|-------|------------|
| 28.04.2015 14:33:36.8 | -16.51 | 517.6 | 0.9319 | 16.24 | 21.8889462 |
| 28.04.2015 14:33:36.9 | -16.69 | 517.5 | 0.9432 | 16.04 | 22.0212564 |
| 28.04.2015 14:33:37.0 | -17.02 | 517.5 | 0.8982 | 16.22 | 21.4895204 |
| 28.04.2015 14:33:37.1 | -19.54 | 517.5 | 0.9131 | 16.21 | 21.6670292 |
| 28.04.2015 14:33:37.2 | -19.1 | 517.5 | 0.9819 | 16.32 | 22.4684869 |
| 28.04.2015 14:33:37.3 | -19.25 | 517.5 | 0.8822 | 16.24 | 21.2972596 |
| 28.04.2015 14:33:37.4 | -21.61 | 517.5 | 0.9742 | 16.41 | 22.3802153 |
| 28.04.2015 14:33:37.5 | -21.88 | 517.4 | 1.0653 | 16.28 | 23.4032494 |
| 28.04.2015 14:33:37.6 | -21.8 | 517.4 | 0.9949 | 16.23 | 22.6167352 |
| 28.04.2015 14:33:37.7 | -22.52 | 517.4 | 0.925 | 16.38 | 21.8077602 |
| 28.04.2015 14:33:37.8 | -24.58 | 517.2 | 0.9039 | 16.27 | 21.5575991 |
| 28.04.2015 14:33:37.9 | -24.47 | 517.2 | 0.8906 | 16.31 | 21.3984119 |
| 28.04.2015 14:33:38.0 | -24.3 | 517.2 | 0.8804 | 16.26 | 21.2755215 |
| 28.04.2015 14:33:38.1 | -27.14 | 517.3 | 0.8806 | 16.34 | 21.2779379 |
| 28.04.2015 14:33:38.2 | -27.13 | 517.2 | 0.9407 | 16.26 | 21.9920528 |
| 28.04.2015 14:33:38.3 | -26.9 | 517.1 | 0.8989 | 16.2 | 21.4978925 |
| 28.04.2015 14:33:38.4 | -28 | 517.2 | 0.9746 | 16.31 | 22.3848094 |
| 28.04.2015 14:33:38.5 | -29.8 | 517.2 | 0.9457 | 16.17 | 22.0504213 |
| 28.04.2015 14:33:38.6 | -29.74 | 517.2 | 1.0172 | 16.36 | 22.8687998 |
| 28.04.2015 14:33:38.7 | -29.44 | 517.2 | 1.0078 | 16.21 | 22.7628887 |
| 28.04.2015 14:33:38.8 | -30.76 | 517.2 | 0.975 | 16.26 | 22.3894026 |
| 28.04.2015 14:33:38.9 | -32.45 | 517.2 | 1.0021 | 16.45 | 22.6984253 |
| 28.04.2015 14:33:39.0 | -32.4 | 517.2 | 0.9678 | 16.29 | 22.3065808 |
| 28.04.2015 14:33:39.1 | -32.74 | 517.3 | 0.8812 | 16.22 | 21.2851856 |
| 28.04.2015 14:33:39.2 | -35.36 | 517.3 | 0.9541 | 16.33 | 22.1481341 |
| 28.04.2015 14:33:39.3 | -35.12 | 517.4 | 0.9415 | 16.42 | 22.0014022 |
| 28.04.2015 14:33:39.4 | -35.22 | 517.4 | 0.9125 | 16.21 | 21.6599093 |
| 28.04.2015 14:33:39.5 | -36.85 | 517.5 | 0.9349 | 16.27 | 21.9241506 |
| 28.04.2015 14:33:39.6 | -37.81 | 517.5 | 0.9236 | 16.28 | 21.7912508 |
| 28.04.2015 14:33:39.7 | -37.74 | 517.4 | 0.849 | 16.42 | 20.8926747 |
| 28.04.2015 14:33:39.8 | -38.1 | 517.4 | 0.9986 | 16.28 | 22.6587516 |
| 28.04.2015 14:33:39.9 | -40.38 | 517.5 | 0.9542 | 16.32 | 22.1492948 |
| 28.04.2015 14:33:40.0 | -40.24 | 517.5 | 1.0007 | 16.39 | 22.6825641 |
| 28.04.2015 14:33:40.1 | -40.28 | 517.4 | 0.9766 | 16.28 | 22.4077658 |
| 28.04.2015 14:33:40.2 | -41.85 | 517.4 | 0.9789 | 16.29 | 22.4341367 |
| 28.04.2015 14:33:40.3 | -43.34 | 517.5 | 0.9432 | 16.28 | 22.0212564 |
| 28.04.2015 14:33:40.4 | -43.25 | 517.4 | 0.9792 | 16.27 | 22.4375741 |
| 28.04.2015 14:33:40.5 | -43.54 | 517.3 | 0.984 | 16.28 | 22.4925009 |
| 28.04.2015 14:33:40.6 | -45.63 | 517.3 | 0.9033 | 16.2 | 21.550443 |
| 28.04.2015 14:33:40.7 | -45.69 | 517.3 | 0.9701 | 16.32 | 22.3330711 |
| 28.04.2015 14:33:40.8 | -45.97 | 517.3 | 0.9617 | 16.24 | 22.236171 |
| 28.04.2015 14:33:40.9 | -47.67 | 517.2 | 0.8955 | 16.28 | 21.4332227 |
| 28.04.2015 14:33:41.0 | -48.36 | 517.2 | 0.9728 | 16.12 | 22.3641285 |
| 28.04.2015 14:33:41.1 | -48.4 | 517.3 | 0.9411 | 16.22 | 21.996728 |
| 28.04.2015 14:33:41.2 | -48.65 | 517.3 | 0.9281 | 16.32 | 21.8442724 |
| 28.04.2015 14:33:41.3 | -51.32 | 517.3 | 0.9699 | 16.31 | 22.3307689 |
| 28.04.2015 14:33:41.4 | -50.85 | 517.3 | 0.8787 | 16.16 | 21.2549707 |
| 28.04.2015 14:33:41.5 | -51.08 | 517.3 | 0.9336 | 16.32 | 21.9089023 |
| 28.04.2015 14:33:41.6 | -53.14 | 517.3 | 1.0026 | 16.39 | 22.7040873 |
| 28.04.2015 14:33:41.7 | -53.76 | 517.3 | 0.9309 | 16.26 | 21.8771988 |
| 28.04.2015 14:33:41.8 | -53.57 | 517.3 | 0.962 | 16.18 | 22.239639 |
| 28.04.2015 14:33:41.9 | -53.68 | 517.4 | 0.9071 | 16.39 | 21.5957246 |
| 28.04.2015 14:33:42.0 | -55.92 | 517.3 | 0.9721 | 16.42 | 22.3560807 |
| 28.04.2015 14:33:42.1 | -56.43 | 517.3 | 0.8802 | 16.24 | 21.2731048 |
| 28.04.2015 14:33:42.2 | -56.14 | 517.3 | 0.9056 | 16.4 | 21.5778616 |
| 28.04.2015 14:33:42.3 | -56.85 | 517.4 | 0.9281 | 16.39 | 21.8442724 |
| 28.04.2015 14:33:42.4 | -59.02 | 517.2 | 0.9399 | 16.51 | 21.9826994 |
| 28.04.2015 14:33:42.5 | -58.88 | 517.2 | 0.9083 | 16.3 | 21.6100043 |
| 28.04.2015 14:33:42.6 | -58.8 | 517.3 | 0.868 | 16.29 | 21.1251626 |
| 28.04.2015 14:33:42.7 | -61.89 | 517.3 | 0.8633 | 16.36 | 21.0678912 |
| 28.04.2015 14:33:42.8 | -61.89 | 517.2 | 0.9065 | 16.31 | 21.5885812 |
| 28.04.2015 14:33:42.9 | -61.68 | 517.1 | 0.9523 | 16.26 | 22.127232 |
| 28.04.2015 14:33:43.0 | -62.71 | 517.2 | 0.8696 | 16.21 | 21.1446238 |
| 28.04.2015 14:33:43.1 | -64.55 | 517.2 | 0.8974 | 16.32 | 21.4799482 |
| 28.04.2015 14:33:43.2 | -64.55 | 517.1 | 0.8675 | 16.3 | 21.1190773 |
| 28.04.2015 14:33:43.3 | -64.21 | 517.1 | 0.8564 | 16.24 | 20.9835289 |
| 28.04.2015 14:33:43.4 | -66.41 | 517.1 | 0.8736 | 16.28 | 21.1931987 |
| 28.04.2015 14:33:43.5 | -67.11 | 517.1 | 0.9566 | 16.36 | 22.1771322 |
| 28.04.2015 14:33:43.6 | -66.95 | 517 | 0.9118 | 16.25 | 21.6515998 |
| 28.04.2015 14:33:43.7 | -67.44 | 517 | 0.8593 | 16.2 | 21.0190268 |
| 28.04.2015 14:33:43.8 | -70.11 | 517 | 0.8842 | 16.34 | 21.321387 |

| | | | | | |
|-----------------------|---------|-------|--------|-------|------------|
| 28.04.2015 14:33:43.9 | -69.85 | 517 | 0.8875 | 16.36 | 21.3611376 |
| 28.04.2015 14:33:44.0 | -70.07 | 517.1 | 0.9508 | 16.26 | 22.1097985 |
| 28.04.2015 14:33:44.1 | -71.53 | 517.2 | 0.92 | 16.1 | 21.7487405 |
| 28.04.2015 14:33:44.2 | -72.53 | 517.3 | 0.8992 | 16.3 | 21.5014796 |
| 28.04.2015 14:33:44.3 | -72.42 | 517.3 | 0.9359 | 16.3 | 21.9358729 |
| 28.04.2015 14:33:44.4 | -72.72 | 517.4 | 0.9633 | 16.23 | 22.2546607 |
| 28.04.2015 14:33:44.5 | -75.13 | 517.6 | 0.9359 | 16.26 | 21.9358729 |
| 28.04.2015 14:33:44.6 | -75.01 | 517.7 | 0.992 | 16.29 | 22.5837487 |
| 28.04.2015 14:33:44.7 | -75.07 | 517.6 | 1.0011 | 16.39 | 22.687097 |
| 28.04.2015 14:33:44.8 | -76.58 | 517.7 | 0.9937 | 16.22 | 22.6030914 |
| 28.04.2015 14:33:44.9 | -78.13 | 517.9 | 0.9998 | 16.27 | 22.6723618 |
| 28.04.2015 14:33:45.0 | -77.99 | 518 | 0.9507 | 16.31 | 22.1086357 |
| 28.04.2015 14:33:45.1 | -78.14 | 517.9 | 1.0576 | 16.35 | 23.3185165 |
| 28.04.2015 14:33:45.2 | -79.99 | 518 | 0.9903 | 16.29 | 22.5643894 |
| 28.04.2015 14:33:45.3 | -80.07 | 518.1 | 1.0082 | 16.27 | 22.7674056 |
| 28.04.2015 14:33:45.4 | -80.28 | 518.2 | 0.9932 | 16.38 | 22.5974041 |
| 28.04.2015 14:33:45.5 | -82.26 | 518.1 | 0.925 | 16.23 | 21.8077602 |
| 28.04.2015 14:33:45.6 | -83.17 | 518.1 | 0.9652 | 16.26 | 22.2765973 |
| 28.04.2015 14:33:45.7 | -83.13 | 518.2 | 0.9529 | 16.25 | 22.1342016 |
| 28.04.2015 14:33:45.8 | -83.4 | 518.2 | 0.9133 | 16.35 | 21.669402 |
| 28.04.2015 14:33:45.9 | -85.99 | 518.2 | 0.8913 | 16.28 | 21.4068197 |
| 28.04.2015 14:33:46.0 | -85.5 | 518.3 | 0.9791 | 16.19 | 22.4364283 |
| 28.04.2015 14:33:46.1 | -85.81 | 518.3 | 1.0048 | 16.22 | 22.7289833 |
| 28.04.2015 14:33:46.2 | -87.79 | 518.3 | 0.9811 | 16.36 | 22.459332 |
| 28.04.2015 14:33:46.3 | -88.41 | 518.3 | 0.9298 | 16.14 | 21.8642693 |
| 28.04.2015 14:33:46.4 | -88.31 | 518.4 | 1.0029 | 16.08 | 22.7074838 |
| 28.04.2015 14:33:46.5 | -88.8 | 518.4 | 0.9359 | 16.27 | 21.9358729 |
| 28.04.2015 14:33:46.6 | -91.06 | 518.3 | 0.9021 | 16.35 | 21.5361238 |
| 28.04.2015 14:33:46.7 | -91.11 | 518.3 | 0.9224 | 16.23 | 21.7770899 |
| 28.04.2015 14:33:46.8 | -90.82 | 518.4 | 0.9627 | 16.14 | 22.2477289 |
| 28.04.2015 14:33:46.9 | -93.38 | 518.3 | 0.9886 | 16.3 | 22.5450135 |
| 28.04.2015 14:33:47.0 | -93.55 | 518.2 | 1.0216 | 16.27 | 22.9182071 |
| 28.04.2015 14:33:47.1 | -93.6 | 518.2 | 0.9612 | 16.25 | 22.2303898 |
| 28.04.2015 14:33:47.2 | -94.24 | 518.3 | 0.9245 | 16.31 | 21.8018654 |
| 28.04.2015 14:33:47.3 | -96.31 | 518.4 | 1.0209 | 16.36 | 22.910354 |
| 28.04.2015 14:33:47.4 | -96.23 | 518.3 | 0.9313 | 16.43 | 21.8818985 |
| 28.04.2015 14:33:47.5 | -96.04 | 518.2 | 1.0292 | 16.29 | 23.003297 |
| 28.04.2015 14:33:47.6 | -97.99 | 518.3 | 1.0967 | 16.24 | 23.7456531 |
| 28.04.2015 14:33:47.7 | -98.74 | 518.3 | 1.1077 | 16.29 | 23.8644415 |
| 28.04.2015 14:33:47.8 | -98.92 | 518.2 | 1.0531 | 16.32 | 23.2688545 |
| 28.04.2015 14:33:47.9 | -98.97 | 518.2 | 1.0272 | 16.28 | 22.9809354 |
| 28.04.2015 14:33:48.0 | -101.61 | 518.2 | 1.0095 | 16.27 | 22.7820793 |
| 28.04.2015 14:33:48.1 | -101.75 | 518.2 | 0.974 | 16.38 | 22.3779179 |
| 28.04.2015 14:33:48.2 | -101.7 | 518.1 | 0.9961 | 16.22 | 22.6303707 |
| 28.04.2015 14:33:48.3 | -102.99 | 518.1 | 1.0118 | 16.37 | 22.8080174 |
| 28.04.2015 14:33:48.4 | -104.38 | 518.1 | 0.9459 | 16.38 | 22.0527528 |
| 28.04.2015 14:33:48.5 | -104.29 | 518.1 | 0.9368 | 16.4 | 21.9464176 |
| 28.04.2015 14:33:48.6 | -104.35 | 518.1 | 1.014 | 16.09 | 22.8328001 |
| 28.04.2015 14:33:48.7 | -106.73 | 518.1 | 1.0083 | 16.15 | 22.7685346 |
| 28.04.2015 14:33:48.8 | -106.89 | 518.1 | 1.0513 | 16.39 | 23.24896 |
| 28.04.2015 14:33:48.9 | -106.77 | 518 | 0.9874 | 16.37 | 22.5313264 |
| 28.04.2015 14:33:49.0 | -107.91 | 518 | 0.9313 | 16.29 | 21.8818985 |
| 28.04.2015 14:33:49.1 | -109.92 | 518.1 | 0.9873 | 16.38 | 22.5301854 |
| 28.04.2015 14:33:49.2 | -109.77 | 518.1 | 0.9708 | 16.23 | 22.3411272 |
| 28.04.2015 14:33:49.3 | -109.79 | 518 | 1.041 | 16.36 | 23.13479 |
| 28.04.2015 14:33:49.4 | -111.94 | 518 | 1.035 | 16.3 | 23.0680228 |
| 28.04.2015 14:33:49.5 | -112.29 | 518.2 | 1.0026 | 16.22 | 22.7040873 |
| 28.04.2015 14:33:49.6 | -112.35 | 518.2 | 0.9757 | 16.26 | 22.3974383 |
| 28.04.2015 14:33:49.7 | -112.77 | 518.1 | 0.8448 | 16.59 | 20.8409326 |
| 28.04.2015 14:33:49.8 | -115.19 | 518.1 | 0.8446 | 16.1 | 20.8384655 |
| 28.04.2015 14:33:49.9 | -114.9 | 518.3 | 0.9674 | 16.39 | 22.3019706 |
| 28.04.2015 14:33:50.0 | -114.99 | 518.3 | 0.953 | 16.27 | 22.135363 |
| 28.04.2015 14:33:50.1 | -116.87 | 518.2 | 0.9049 | 16.32 | 21.5695205 |
| 28.04.2015 14:33:50.2 | -117.98 | 518.2 | 0.9435 | 16.34 | 22.0247582 |
| 28.04.2015 14:33:50.3 | -117.69 | 518.3 | 1.0176 | 16.33 | 22.8732958 |
| 28.04.2015 14:33:50.4 | -117.98 | 518.2 | 0.9013 | 16.4 | 21.5265723 |
| 28.04.2015 14:33:50.5 | -120.75 | 518.2 | 0.946 | 16.27 | 22.0539185 |
| 28.04.2015 14:33:50.6 | -120.37 | 518.2 | 0.9295 | 16.32 | 21.8607418 |
| 28.04.2015 14:33:50.7 | -120.43 | 518.3 | 0.8771 | 16.33 | 21.2356106 |
| 28.04.2015 14:33:50.8 | -120.85 | 518.3 | 0.8858 | 16.37 | 21.3406693 |
| 28.04.2015 14:33:50.9 | -123.39 | 518.3 | 0.9566 | 16.25 | 22.1771322 |

| | | | | | |
|-----------------------|---------|-------|--------|-------|------------|
| 28.04.2015 14:33:51.0 | -122.88 | 518.3 | 0.9622 | 16.17 | 22.2419507 |
| 28.04.2015 14:33:51.1 | -123.01 | 518.4 | 1.0031 | 16.33 | 22.7097479 |
| 28.04.2015 14:33:51.2 | -124.62 | 518.4 | 1.0506 | 16.27 | 23.2412186 |
| 28.04.2015 14:33:51.3 | -126.21 | 518.4 | 0.9797 | 16.19 | 22.4433019 |
| 28.04.2015 14:33:51.4 | -125.98 | 518.4 | 1.0105 | 16.07 | 22.7933603 |
| 28.04.2015 14:33:51.5 | -126.06 | 518.4 | 1.097 | 16.2 | 23.7489007 |
| 28.04.2015 14:33:51.6 | -128.85 | 518.4 | 0.9627 | 16.38 | 22.2477289 |
| 28.04.2015 14:33:51.7 | -129.09 | 518.4 | 0.9371 | 16.16 | 21.9499313 |
| 28.04.2015 14:33:51.8 | -128.93 | 518.6 | 0.9813 | 16.26 | 22.4616211 |
| 28.04.2015 14:33:51.9 | -128.94 | 518.6 | 1.0612 | 16.28 | 23.3581702 |
| 28.04.2015 14:33:52.0 | -131.69 | 518.5 | 0.978 | 16.3 | 22.4238213 |
| 28.04.2015 14:33:52.1 | -131.64 | 518.5 | 1.0039 | 16.19 | 22.7188019 |
| 28.04.2015 14:33:52.2 | -131.51 | 518.7 | 0.8985 | 16.14 | 21.4931088 |
| 28.04.2015 14:33:52.3 | -132.65 | 518.7 | 0.914 | 16.28 | 21.6777047 |
| 28.04.2015 14:33:52.4 | -134.41 | 518.6 | 0.9571 | 16.25 | 22.1829273 |
| 28.04.2015 14:33:52.5 | -134.15 | 518.6 | 0.8516 | 16.33 | 20.9246414 |
| 28.04.2015 14:33:52.6 | -134.43 | 518.8 | 1.0045 | 16.22 | 22.72559 |
| 28.04.2015 14:33:52.7 | -137.33 | 518.8 | 1.0983 | 16.29 | 23.7629683 |
| 28.04.2015 14:33:52.8 | -137.43 | 518.8 | 0.969 | 16.19 | 22.3204058 |
| 28.04.2015 14:33:52.9 | -137.04 | 518.8 | 0.9615 | 16.26 | 22.2338587 |
| 28.04.2015 14:33:53.0 | -138.46 | 518.9 | 0.8729 | 16.24 | 21.1847061 |
| 28.04.2015 14:33:53.1 | -139.9 | 518.9 | 0.925 | 16.32 | 21.8077602 |
| 28.04.2015 14:33:53.2 | -139.87 | 518.9 | 0.8632 | 16.22 | 21.066671 |
| 28.04.2015 14:33:53.3 | -139.56 | 519 | 0.9668 | 16.11 | 22.2950535 |
| 28.04.2015 14:33:53.4 | -141.41 | 519 | 1.029 | 16.24 | 23.0010618 |
| 28.04.2015 14:33:53.5 | -142.35 | 519 | 0.8565 | 16.3 | 20.9847539 |
| 28.04.2015 14:33:53.6 | -142.54 | 519 | 0.9804 | 16.28 | 22.4513184 |
| 28.04.2015 14:33:53.7 | -142.32 | 519.1 | 0.9869 | 16.12 | 22.5256209 |
| 28.04.2015 14:33:53.8 | -145.39 | 519.1 | 0.9653 | 16.31 | 22.2777512 |
| 28.04.2015 14:33:53.9 | -145.21 | 519.1 | 0.9845 | 16.35 | 22.4982147 |
| 28.04.2015 14:33:54.0 | -145.34 | 519.1 | 1.0325 | 16.17 | 23.040146 |
| 28.04.2015 14:33:54.1 | -147.34 | 519.3 | 1.1021 | 16.22 | 23.8040415 |
| 28.04.2015 14:33:54.2 | -147.85 | 519.4 | 1.0766 | 16.21 | 23.5270451 |
| 28.04.2015 14:33:54.3 | -147.85 | 519.4 | 0.9711 | 16.36 | 22.3445789 |
| 28.04.2015 14:33:54.4 | -148.41 | 519.4 | 0.9013 | 16.18 | 21.5265723 |
| 28.04.2015 14:33:54.5 | -150.52 | 519.6 | 0.9911 | 16.22 | 22.5735018 |
| 28.04.2015 14:33:54.6 | -150.38 | 519.6 | 1.1007 | 16.25 | 23.7889175 |
| 28.04.2015 14:33:54.7 | -150.49 | 519.5 | 1.0759 | 16.27 | 23.5193953 |
| 28.04.2015 14:33:54.8 | -152.87 | 519.6 | 1.0146 | 16.14 | 22.8395544 |
| 28.04.2015 14:33:54.9 | -152.88 | 519.7 | 0.9219 | 16.09 | 21.7711868 |
| 28.04.2015 14:33:55.0 | -153.06 | 519.7 | 0.9609 | 16.11 | 22.2269204 |
| 28.04.2015 14:33:55.1 | -153.29 | 519.7 | 1.0154 | 16.14 | 22.848557 |
| 28.04.2015 14:33:55.2 | -155.64 | 519.8 | 1.0017 | 16.23 | 22.6938946 |
| 28.04.2015 14:33:55.3 | -155.38 | 519.8 | 1.0384 | 16.26 | 23.1058812 |
| 28.04.2015 14:33:55.4 | -155.81 | 519.8 | 1.0557 | 16.29 | 23.297561 |
| 28.04.2015 14:33:55.5 | -158.1 | 519.8 | 1.0222 | 16.15 | 22.9249362 |
| 28.04.2015 14:33:55.6 | -158.47 | 519.8 | 1.0012 | 16.1 | 22.6882301 |
| 28.04.2015 14:33:55.7 | -158.48 | 519.8 | 1.0386 | 16.34 | 23.1081063 |
| 28.04.2015 14:33:55.8 | -158.59 | 519.7 | 1.0127 | 16.31 | 22.818159 |
| 28.04.2015 14:33:55.9 | -160.94 | 519.7 | 1.0063 | 16.21 | 22.7459423 |
| 28.04.2015 14:33:56.0 | -161.05 | 519.7 | 0.9446 | 16.04 | 22.0375935 |
| 28.04.2015 14:33:56.1 | -161.26 | 519.7 | 1.033 | 16.42 | 23.0457241 |
| 28.04.2015 14:33:56.2 | -161.74 | 519.6 | 0.978 | 16.32 | 22.4238213 |
| 28.04.2015 14:33:56.3 | -164.48 | 519.6 | 0.9987 | 16.09 | 22.6598861 |
| 28.04.2015 14:33:56.4 | -163.98 | 519.6 | 1.0277 | 16.3 | 22.9865279 |
| 28.04.2015 14:33:56.5 | -164.05 | 519.6 | 1.0165 | 16.29 | 22.8609297 |
| 28.04.2015 14:33:56.6 | -164.83 | 519.5 | 0.9475 | 16.37 | 22.0713962 |
| 28.04.2015 14:33:56.7 | -166.94 | 519.4 | 1.0392 | 16.17 | 23.1147801 |
| 28.04.2015 14:33:56.8 | -166.61 | 519.5 | 1.0981 | 16.31 | 23.7608046 |
| 28.04.2015 14:33:56.9 | -166.68 | 519.5 | 0.9773 | 16.28 | 22.415795 |
| 28.04.2015 14:33:57.0 | -169.02 | 519.3 | 0.9831 | 16.29 | 22.4822123 |
| 28.04.2015 14:33:57.1 | -169.69 | 519.3 | 0.8774 | 16.21 | 21.2392419 |
| 28.04.2015 14:33:57.2 | -169.46 | 519.3 | 1.0388 | 16.28 | 23.1103311 |
| 28.04.2015 14:33:57.3 | -170.87 | 519.2 | 1.1172 | 16.25 | 23.9665577 |
| 28.04.2015 14:33:57.4 | -172.53 | 519 | 0.923 | 16.25 | 21.7841715 |
| 28.04.2015 14:33:57.5 | -172.13 | 518.9 | 0.9796 | 16.17 | 22.4421564 |
| 28.04.2015 14:33:57.6 | -172.17 | 518.8 | 1.007 | 16.25 | 22.7538522 |
| 28.04.2015 14:33:57.7 | -173.82 | 518.7 | 0.9569 | 16.38 | 22.1806094 |
| 28.04.2015 14:33:57.8 | -175.04 | 518.6 | 0.9216 | 16.15 | 21.7676442 |
| 28.04.2015 14:33:57.9 | -174.7 | 518.5 | 1.0204 | 16.14 | 22.9047429 |
| 28.04.2015 14:33:58.0 | -175.44 | 518.5 | 1.0088 | 16.29 | 22.7741792 |

| | | | | | |
|-----------------------|---------|-------|--------|-------|------------|
| 28.04.2015 14:33:58.1 | -178.15 | 518.5 | 1.0173 | 16.25 | 22.8699239 |
| 28.04.2015 14:33:58.2 | -177.89 | 518.4 | 1.0078 | 16.27 | 22.7628887 |
| 28.04.2015 14:33:58.3 | -177.67 | 518.4 | 0.9935 | 16.19 | 22.6008167 |
| 28.04.2015 14:33:58.4 | -178.74 | 518.4 | 0.9914 | 16.06 | 22.5769179 |
| 28.04.2015 14:33:58.5 | -180.54 | 518.3 | 0.9929 | 16.29 | 22.5939911 |
| 28.04.2015 14:33:58.6 | -180.49 | 518.3 | 0.9747 | 16.34 | 22.3859578 |
| 28.04.2015 14:33:58.7 | -180.27 | 518.3 | 1.002 | 16.11 | 22.6972927 |
| 28.04.2015 14:33:58.8 | -182.54 | 518.3 | 0.9859 | 16.36 | 22.5142057 |
| 28.04.2015 14:33:58.9 | -182.95 | 518.2 | 0.983 | 16.4 | 22.4810689 |
| 28.04.2015 14:33:59.0 | -183.15 | 518.2 | 1.06 | 16.25 | 23.3449598 |
| 28.04.2015 14:33:59.1 | -182.89 | 518.4 | 1.0725 | 16.18 | 23.4822035 |
| 28.04.2015 14:33:59.2 | -185.56 | 518.5 | 1.0696 | 16.25 | 23.4504345 |
| 28.04.2015 14:33:59.3 | -186 | 518.4 | 0.9701 | 16.29 | 22.3330711 |
| 28.04.2015 14:33:59.4 | -185.91 | 518.4 | 1.059 | 16.2 | 23.3339454 |
| 28.04.2015 14:33:59.5 | -187.74 | 518.6 | 1.0244 | 16.21 | 22.9495927 |
| 28.04.2015 14:33:59.6 | -189.05 | 518.7 | 1.0037 | 16.22 | 22.7165387 |
| 28.04.2015 14:33:59.7 | -189.28 | 518.6 | 0.9424 | 16.3 | 22.0119154 |
| 28.04.2015 14:33:59.8 | -188.81 | 518.7 | 0.9947 | 16.2 | 22.6144618 |
| 28.04.2015 14:33:59.9 | -191.51 | 518.9 | 0.917 | 16.22 | 21.7132516 |
| 28.04.2015 14:34:00.0 | -191.48 | 518.9 | 0.9973 | 16.35 | 22.6439979 |
| 28.04.2015 14:34:00.1 | -191.56 | 518.9 | 1.0363 | 16.25 | 23.0825054 |
| 28.04.2015 14:34:00.2 | -191.61 | 518.9 | 0.9932 | 16.28 | 22.5974041 |
| 28.04.2015 14:34:00.3 | -194.28 | 519 | 1.0679 | 16.23 | 23.4317913 |
| 28.04.2015 14:34:00.4 | -194.11 | 519 | 1.009 | 16.38 | 22.7764367 |
| 28.04.2015 14:34:00.5 | -194.31 | 519 | 1.0486 | 16.22 | 23.2190862 |
| 28.04.2015 14:34:00.6 | -196.57 | 519 | 1.0623 | 16.11 | 23.3702731 |
| 28.04.2015 14:34:00.7 | -197.05 | 519.1 | 1.001 | 16.36 | 22.6859639 |
| 28.04.2015 14:34:00.8 | -197.05 | 519.1 | 0.9927 | 16.31 | 22.5917154 |
| 28.04.2015 14:34:00.9 | -197.66 | 519.1 | 1.0006 | 16.27 | 22.6814307 |
| 28.04.2015 14:34:01.0 | -199.77 | 519.2 | 1.1177 | 16.12 | 23.9719202 |
| 28.04.2015 14:34:01.1 | -199.76 | 519.2 | 1.1491 | 16.29 | 24.3063143 |
| 28.04.2015 14:34:01.2 | -199.74 | 519.2 | 1.0372 | 16.3 | 23.0925265 |
| 28.04.2015 14:34:01.3 | -201.48 | 519.2 | 1.0413 | 16.12 | 23.1381233 |
| 28.04.2015 14:34:01.4 | -202.26 | 519.3 | 0.9273 | 16.1 | 21.8348557 |
| 28.04.2015 14:34:01.5 | -202.2 | 519.3 | 1.0267 | 16.14 | 22.9753416 |
| 28.04.2015 14:34:01.6 | -203.22 | 519.2 | 0.9772 | 16.14 | 22.4146482 |
| 28.04.2015 14:34:01.7 | -204.92 | 519.1 | 0.7993 | 16.11 | 20.2719303 |
| 28.04.2015 14:34:01.8 | -204.82 | 519.2 | 0.9292 | 16.21 | 21.8572137 |
| 28.04.2015 14:34:01.9 | -204.84 | 519.2 | 1.0251 | 16.29 | 22.9574324 |
| 28.04.2015 14:34:02.0 | -206.23 | 519.1 | 0.9881 | 16.3 | 22.5393116 |
| 28.04.2015 14:34:02.1 | -207.43 | 519 | 0.9224 | 16.28 | 21.7770899 |
| 28.04.2015 14:34:02.2 | -207.37 | 519.1 | 1.0603 | 16.2 | 23.3482631 |
| 28.04.2015 14:34:02.3 | -207.98 | 519 | 0.9875 | 16.35 | 22.5324673 |
| 28.04.2015 14:34:02.4 | -210.48 | 519 | 0.8629 | 16.26 | 21.0630099 |
| 28.04.2015 14:34:02.5 | -210.2 | 519 | 0.8631 | 16.19 | 21.0654507 |
| 28.04.2015 14:34:02.6 | -210.36 | 519 | 0.9797 | 16.23 | 22.4433019 |
| 28.04.2015 14:34:02.7 | -211.99 | 519 | 0.928 | 16.28 | 21.8430955 |
| 28.04.2015 14:34:02.8 | -212.98 | 519 | 0.9625 | 16.25 | 22.2454178 |
| 28.04.2015 14:34:02.9 | -212.84 | 518.9 | 1.0269 | 16.18 | 22.9775793 |
| 28.04.2015 14:34:03.0 | -212.88 | 518.9 | 0.8993 | 16.28 | 21.5026751 |
| 28.04.2015 14:34:03.1 | -214.74 | 518.8 | 0.9105 | 16.33 | 21.6361594 |
| 28.04.2015 14:34:03.2 | -215.46 | 518.7 | 1.0096 | 16.21 | 22.7832076 |
| 28.04.2015 14:34:03.3 | -215.37 | 518.7 | 1.0378 | 16.13 | 23.0992049 |
| 28.04.2015 14:34:03.4 | -216.37 | 518.7 | 1.1229 | 16.26 | 24.0276191 |
| 28.04.2015 14:34:03.5 | -217.72 | 518.6 | 0.9626 | 16.31 | 22.2465733 |
| 28.04.2015 14:34:03.6 | -217.59 | 518.5 | 0.9981 | 16.16 | 22.6530782 |
| 28.04.2015 14:34:03.7 | -217.62 | 518.6 | 0.9716 | 16.26 | 22.3503305 |
| 28.04.2015 14:34:03.8 | -217.57 | 518.6 | 0.9934 | 16.27 | 22.5996792 |
| 28.04.2015 14:34:03.9 | -217.56 | 518.5 | 1.0891 | 16.28 | 23.6632328 |
| 28.04.2015 14:34:04.0 | -217.6 | 518.5 | 0.9479 | 16.21 | 22.0760546 |
| 28.04.2015 14:34:04.1 | -217.62 | 518.6 | 0.9423 | 16.15 | 22.0107476 |
| 28.04.2015 14:34:04.2 | -217.56 | 518.7 | 0.9829 | 16.24 | 22.4799253 |
| 28.04.2015 14:34:04.3 | -217.62 | 518.6 | 0.8798 | 16.28 | 21.2682705 |
| 28.04.2015 14:34:04.4 | -217.61 | 518.6 | 0.8882 | 16.18 | 21.3695601 |
| 28.04.2015 14:34:04.5 | -217.59 | 518.7 | 0.9089 | 16.25 | 21.6171407 |
| 28.04.2015 14:34:04.6 | -217.56 | 518.8 | 1.0277 | 16.27 | 22.9865279 |
| 28.04.2015 14:34:04.7 | -217.61 | 518.7 | 0.9918 | 16.2 | 22.581472 |
| 28.04.2015 14:34:04.8 | -217.57 | 518.7 | 1.0612 | 16.18 | 23.3581702 |
| 28.04.2015 14:34:04.9 | -217.57 | 518.8 | 1.066 | 16.19 | 23.4109372 |
| 28.04.2015 14:34:05.0 | -217.6 | 518.8 | 1.0774 | 16.29 | 23.5357847 |
| 28.04.2015 14:34:05.1 | -217.6 | 518.8 | 1.1271 | 16.24 | 24.0725126 |

| | | | | | |
|-----------------------|---------|-------|--------|-------|------------|
| 28.04.2015 14:34:05.2 | -217.58 | 518.9 | 0.9946 | 16.2 | 22.613325 |
| 28.04.2015 14:34:05.3 | -217.61 | 518.9 | 0.7821 | 16.3 | 20.05263 |
| 28.04.2015 14:34:05.4 | -217.59 | 519 | 0.8733 | 16.38 | 21.1895594 |
| 28.04.2015 14:34:05.5 | -217.59 | 519 | 0.8887 | 16.28 | 21.3755741 |
| 28.04.2015 14:34:05.6 | -217.6 | 519 | 0.7448 | 16.2 | 19.5686124 |
| 28.04.2015 14:34:05.7 | -217.57 | 519.1 | 0.9484 | 16.32 | 22.0818762 |
| | | | | | 0 |
| | | | | | 0 |

Calculation of mass flow rate based on polynomial equation fitted to the experimental data

$$y = -4.94940568E-14x^6 + 5.41276709E-12x^5 + 2.96200050E-09x^4 - 1.65293582E-07x^3 - 1.57269408E-05x^2 - 2.34777331E-03x + 2.14847389E+01$$

Please enter below Polynomial Coefficients

| Order no | Coeff |
|----------|-----------------|
| 6 | -4.94940568E-14 |
| 5 | 5.41276709E-12 |
| 4 | 2.96200050E-09 |
| 3 | -1.65293582E-07 |
| 2 | -1.57269408E-05 |
| 1 | -2.34777331E-03 |
| 0 | 2.14847389E+01 |

| | | |
|----------------------|-------------|--------|
| Actual Area | 0.274324656 | [m2] |
| Integrated area | 0.274324656 | [m2] |
| Area Error | 0 | [%] |
| Integrated Mass flow | 2.263342975 | [Kg/s] |

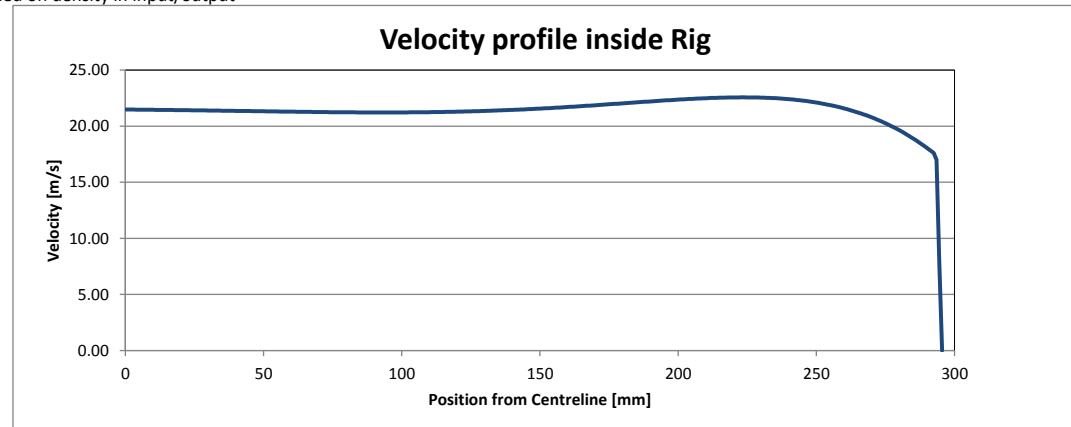
Polynomial curve (dP vs position)

Please do NOT alter any of the figures below

| position [mm] | Velocity [m/s] |
|---------------|----------------|
| 0 | 21.484739 |
| 1 | 21.482375 |
| 2 | 21.479979 |
| 3 | 21.477550 |
| 4 | 21.475086 |
| 5 | 21.472588 |
| 6 | 21.470054 |
| 7 | 21.467484 |
| 8 | 21.464878 |
| 9 | 21.462234 |
| 10 | 21.459553 |
| 11 | 21.456835 |
| 12 | 21.454078 |
| 13 | 21.451283 |
| 14 | 21.448450 |
| 15 | 21.445579 |
| 16 | 21.442670 |
| 17 | 21.439723 |
| 18 | 21.436739 |
| 19 | 21.433717 |
| 20 | 21.430658 |
| 21 | 21.427563 |
| 22 | 21.424432 |
| 23 | 21.421266 |
| 24 | 21.418065 |
| 25 | 21.414830 |
| 26 | 21.411563 |
| 27 | 21.408263 |
| 28 | 21.404933 |
| 29 | 21.401572 |
| 30 | 21.398183 |
| 31 | 21.394767 |
| 32 | 21.391324 |
| 33 | 21.387856 |

| Delta Area [m2] | Delta Mass flow [Kg/s] |
|-----------------|------------------------|
| 0 | 0 |
| 3.14159E-06 | 2.62532E-05 |
| 9.42478E-06 | 7.87507E-05 |
| 1.5708E-05 | 0.000131236 |
| 2.19911E-05 | 0.00018371 |
| 2.82743E-05 | 0.000236171 |
| 3.45575E-05 | 0.000288619 |
| 4.08407E-05 | 0.000341055 |
| 4.71239E-05 | 0.000393477 |
| 5.34071E-05 | 0.000445885 |
| 5.96903E-05 | 0.00049828 |
| 6.59734E-05 | 0.000550661 |
| 7.22566E-05 | 0.000603028 |
| 7.85398E-05 | 0.000655379 |
| 8.4823E-05 | 0.000707716 |
| 9.11062E-05 | 0.000760038 |
| 9.73894E-05 | 0.000812344 |
| 0.000103673 | 0.000864635 |
| 0.000109956 | 0.000916909 |
| 0.000116239 | 0.000969167 |
| 0.000122522 | 0.001021409 |
| 0.000128805 | 0.001073634 |
| 0.000135088 | 0.001125841 |
| 0.000141372 | 0.001178032 |
| 0.000147655 | 0.001230205 |
| 0.000153938 | 0.001282361 |
| 0.000160221 | 0.001334498 |
| 0.000166504 | 0.001386618 |
| 0.000172788 | 0.001438719 |
| 0.000179071 | 0.001490802 |
| 0.000185354 | 0.001542867 |
| 0.000191637 | 0.001594912 |
| 0.00019792 | 0.00164694 |
| 0.000204204 | 0.001698948 |

Based on density in input/output



| | |
|----|-----------|
| 34 | 21.384365 |
| 35 | 21.380853 |
| 36 | 21.377320 |
| 37 | 21.373768 |
| 38 | 21.370200 |
| 39 | 21.366617 |
| 40 | 21.363020 |
| 41 | 21.359413 |
| 42 | 21.355796 |
| 43 | 21.352173 |
| 44 | 21.348545 |
| 45 | 21.344914 |
| 46 | 21.341282 |
| 47 | 21.337653 |
| 48 | 21.334028 |
| 49 | 21.330410 |
| 50 | 21.326802 |
| 51 | 21.323205 |
| 52 | 21.319624 |
| 53 | 21.316060 |
| 54 | 21.312516 |
| 55 | 21.308995 |
| 56 | 21.305500 |
| 57 | 21.302034 |
| 58 | 21.298600 |
| 59 | 21.295201 |
| 60 | 21.291839 |
| 61 | 21.288519 |
| 62 | 21.285244 |
| 63 | 21.282015 |
| 64 | 21.278838 |
| 65 | 21.275715 |
| 66 | 21.272649 |
| 67 | 21.269644 |
| 68 | 21.266703 |
| 69 | 21.263831 |
| 70 | 21.261029 |
| 71 | 21.258302 |
| 72 | 21.255654 |
| 73 | 21.253087 |
| 74 | 21.250606 |
| 75 | 21.248214 |
| 76 | 21.245915 |
| 77 | 21.243712 |
| 78 | 21.241610 |
| 79 | 21.239611 |
| 80 | 21.237720 |
| 81 | 21.235940 |
| 82 | 21.234275 |
| 83 | 21.232729 |

| | |
|-------------|-------------|
| 0.000210487 | 0.001750937 |
| 0.00021677 | 0.001802908 |
| 0.000223053 | 0.00185486 |
| 0.000229336 | 0.001906792 |
| 0.000235619 | 0.001958706 |
| 0.000241903 | 0.002010601 |
| 0.000248186 | 0.002062477 |
| 0.000254469 | 0.002114335 |
| 0.000260752 | 0.002166174 |
| 0.000267035 | 0.002217995 |
| 0.000273319 | 0.002269797 |
| 0.000279602 | 0.002321581 |
| 0.000285885 | 0.002373348 |
| 0.000292168 | 0.002425097 |
| 0.000298451 | 0.002476829 |
| 0.000304734 | 0.002528543 |
| 0.000311018 | 0.002580242 |
| 0.000317301 | 0.002631924 |
| 0.000323584 | 0.00268359 |
| 0.000329867 | 0.002735242 |
| 0.00033615 | 0.002786878 |
| 0.000342434 | 0.0028385 |
| 0.000348717 | 0.002890109 |
| 0.000355 | 0.002941704 |
| 0.000361283 | 0.002993287 |
| 0.000367566 | 0.003044858 |
| 0.00037385 | 0.003096418 |
| 0.000380133 | 0.003147968 |
| 0.000386416 | 0.003199508 |
| 0.000392699 | 0.003251039 |
| 0.000398982 | 0.003302563 |
| 0.000405265 | 0.003354079 |
| 0.000411549 | 0.00340559 |
| 0.000417832 | 0.003457095 |
| 0.000424115 | 0.003508596 |
| 0.000430398 | 0.003560095 |
| 0.000436681 | 0.003611591 |
| 0.000442965 | 0.003663086 |
| 0.000449248 | 0.003714582 |
| 0.000455531 | 0.00376608 |
| 0.000461814 | 0.00381758 |
| 0.000468097 | 0.003869084 |
| 0.00047438 | 0.003920594 |
| 0.000480664 | 0.00397211 |
| 0.000486947 | 0.004023635 |
| 0.00049323 | 0.00407517 |
| 0.000499513 | 0.004126715 |
| 0.000505796 | 0.004178273 |
| 0.00051208 | 0.004229846 |
| 0.000518363 | 0.004281434 |

| | |
|-----|-----------|
| 84 | 21.231306 |
| 85 | 21.230008 |
| 86 | 21.228841 |
| 87 | 21.227808 |
| 88 | 21.226912 |
| 89 | 21.226157 |
| 90 | 21.225548 |
| 91 | 21.225087 |
| 92 | 21.224778 |
| 93 | 21.224625 |
| 94 | 21.224633 |
| 95 | 21.224803 |
| 96 | 21.225141 |
| 97 | 21.225649 |
| 98 | 21.226331 |
| 99 | 21.227191 |
| 100 | 21.228232 |
| 101 | 21.229458 |
| 102 | 21.230871 |
| 103 | 21.232476 |
| 104 | 21.234276 |
| 105 | 21.236274 |
| 106 | 21.238472 |
| 107 | 21.240875 |
| 108 | 21.243485 |
| 109 | 21.246306 |
| 110 | 21.249340 |
| 111 | 21.252590 |
| 112 | 21.256059 |
| 113 | 21.259750 |
| 114 | 21.263666 |
| 115 | 21.267808 |
| 116 | 21.272180 |
| 117 | 21.276784 |
| 118 | 21.281622 |
| 119 | 21.286697 |
| 120 | 21.292010 |
| 121 | 21.297563 |
| 122 | 21.303359 |
| 123 | 21.309400 |
| 124 | 21.315686 |
| 125 | 21.322219 |
| 126 | 21.329002 |
| 127 | 21.336034 |
| 128 | 21.343318 |
| 129 | 21.350854 |
| 130 | 21.358644 |
| 131 | 21.366688 |
| 132 | 21.374986 |
| 133 | 21.383539 |

| | |
|-------------|-------------|
| 0.000524646 | 0.00433304 |
| 0.000530929 | 0.004384664 |
| 0.000537212 | 0.00443631 |
| 0.000543496 | 0.004487978 |
| 0.000549779 | 0.004539671 |
| 0.000556062 | 0.004591389 |
| 0.000562345 | 0.004643136 |
| 0.000568628 | 0.004694913 |
| 0.000574911 | 0.004746721 |
| 0.000581195 | 0.004798563 |
| 0.000587478 | 0.004850441 |
| 0.000593761 | 0.004902357 |
| 0.000600044 | 0.004954313 |
| 0.000606327 | 0.00500631 |
| 0.000612611 | 0.005058352 |
| 0.000618894 | 0.005110439 |
| 0.000625177 | 0.005162575 |
| 0.00063146 | 0.005214761 |
| 0.000637743 | 0.005267 |
| 0.000644026 | 0.005319294 |
| 0.00065031 | 0.005371645 |
| 0.000656593 | 0.005424055 |
| 0.000662876 | 0.005476527 |
| 0.000669159 | 0.005529062 |
| 0.000675442 | 0.005581664 |
| 0.000681726 | 0.005634335 |
| 0.000688009 | 0.005687076 |
| 0.000694292 | 0.005739891 |
| 0.000700575 | 0.005792781 |
| 0.000706858 | 0.005845749 |
| 0.000713142 | 0.005898797 |
| 0.000719425 | 0.005951928 |
| 0.000725708 | 0.006005144 |
| 0.000731991 | 0.006058448 |
| 0.000738274 | 0.006111841 |
| 0.000744557 | 0.006165327 |
| 0.000750841 | 0.006218907 |
| 0.000757124 | 0.006272583 |
| 0.000763407 | 0.006326359 |
| 0.00076969 | 0.006380236 |
| 0.000775973 | 0.006434217 |
| 0.000782257 | 0.006488304 |
| 0.00078854 | 0.0065425 |
| 0.000794823 | 0.006596806 |
| 0.000801106 | 0.006651224 |
| 0.000807389 | 0.006705758 |
| 0.000813672 | 0.006760408 |
| 0.000819956 | 0.006815178 |
| 0.000826239 | 0.006870068 |
| 0.000832522 | 0.006925082 |

| | |
|-----|-----------|
| 134 | 21.392348 |
| 135 | 21.401413 |
| 136 | 21.410733 |
| 137 | 21.420309 |
| 138 | 21.430139 |
| 139 | 21.440224 |
| 140 | 21.450563 |
| 141 | 21.461156 |
| 142 | 21.471999 |
| 143 | 21.483094 |
| 144 | 21.494438 |
| 145 | 21.506029 |
| 146 | 21.517867 |
| 147 | 21.529947 |
| 148 | 21.542269 |
| 149 | 21.554830 |
| 150 | 21.567627 |
| 151 | 21.580658 |
| 152 | 21.593918 |
| 153 | 21.607405 |
| 154 | 21.621114 |
| 155 | 21.635043 |
| 156 | 21.649187 |
| 157 | 21.663541 |
| 158 | 21.678100 |
| 159 | 21.692861 |
| 160 | 21.707817 |
| 161 | 21.722963 |
| 162 | 21.738294 |
| 163 | 21.753802 |
| 164 | 21.769483 |
| 165 | 21.785329 |
| 166 | 21.801333 |
| 167 | 21.817488 |
| 168 | 21.833787 |
| 169 | 21.850221 |
| 170 | 21.866783 |
| 171 | 21.883464 |
| 172 | 21.900254 |
| 173 | 21.917146 |
| 174 | 21.934129 |
| 175 | 21.951192 |
| 176 | 21.968328 |
| 177 | 21.985523 |
| 178 | 22.002768 |
| 179 | 22.020051 |
| 180 | 22.037360 |
| 181 | 22.054684 |
| 182 | 22.072010 |
| 183 | 22.089324 |

| | |
|-------------|-------------|
| 0.000838805 | 0.006980221 |
| 0.000845088 | 0.007035488 |
| 0.000851372 | 0.007090883 |
| 0.000857655 | 0.007146409 |
| 0.000863938 | 0.007202067 |
| 0.000870221 | 0.00725786 |
| 0.000876504 | 0.007313788 |
| 0.000882788 | 0.007369854 |
| 0.000889071 | 0.007426059 |
| 0.000895354 | 0.007482404 |
| 0.000901637 | 0.007538891 |
| 0.00090792 | 0.007595521 |
| 0.000914203 | 0.007652294 |
| 0.000920487 | 0.007709213 |
| 0.00092677 | 0.007766278 |
| 0.000933053 | 0.00782349 |
| 0.000939336 | 0.00788085 |
| 0.000945619 | 0.007938357 |
| 0.000951903 | 0.007996014 |
| 0.000958186 | 0.00805382 |
| 0.000964469 | 0.008111776 |
| 0.000970752 | 0.008169881 |
| 0.000977035 | 0.008228136 |
| 0.000983319 | 0.00828654 |
| 0.000989602 | 0.008345094 |
| 0.000995885 | 0.008403797 |
| 0.001002168 | 0.008462649 |
| 0.001008451 | 0.008521648 |
| 0.001014734 | 0.008580793 |
| 0.001021018 | 0.008640085 |
| 0.001027301 | 0.008699521 |
| 0.001033584 | 0.0087591 |
| 0.001039867 | 0.008818821 |
| 0.00104615 | 0.008878681 |
| 0.001052434 | 0.008938679 |
| 0.001058717 | 0.008998813 |
| 0.001065 | 0.00905908 |
| 0.001071283 | 0.009119477 |
| 0.001077566 | 0.009180002 |
| 0.001083849 | 0.009240651 |
| 0.001090133 | 0.009301422 |
| 0.001096416 | 0.00936231 |
| 0.001102699 | 0.009423312 |
| 0.001108982 | 0.009484424 |
| 0.001115265 | 0.009545642 |
| 0.001121549 | 0.009606961 |
| 0.001127832 | 0.009668375 |
| 0.001134115 | 0.009729881 |
| 0.001140398 | 0.009791472 |
| 0.001146681 | 0.009853143 |

| | |
|-----|-----------|
| 184 | 22.106614 |
| 185 | 22.123866 |
| 186 | 22.141065 |
| 187 | 22.158198 |
| 188 | 22.175248 |
| 189 | 22.192202 |
| 190 | 22.209043 |
| 191 | 22.225754 |
| 192 | 22.242319 |
| 193 | 22.258721 |
| 194 | 22.274942 |
| 195 | 22.290965 |
| 196 | 22.306769 |
| 197 | 22.322338 |
| 198 | 22.337650 |
| 199 | 22.352685 |
| 200 | 22.367425 |
| 201 | 22.381846 |
| 202 | 22.395928 |
| 203 | 22.409649 |
| 204 | 22.422985 |
| 205 | 22.435915 |
| 206 | 22.448414 |
| 207 | 22.460457 |
| 208 | 22.472021 |
| 209 | 22.483080 |
| 210 | 22.493608 |
| 211 | 22.503579 |
| 212 | 22.512965 |
| 213 | 22.521739 |
| 214 | 22.529873 |
| 215 | 22.537337 |
| 216 | 22.544103 |
| 217 | 22.550141 |
| 218 | 22.555419 |
| 219 | 22.559907 |
| 220 | 22.563572 |
| 221 | 22.566383 |
| 222 | 22.568305 |
| 223 | 22.569305 |
| 224 | 22.569349 |
| 225 | 22.568401 |
| 226 | 22.566426 |
| 227 | 22.563386 |
| 228 | 22.559245 |
| 229 | 22.553965 |
| 230 | 22.547507 |
| 231 | 22.539831 |
| 232 | 22.530898 |
| 233 | 22.520667 |

| | |
|-------------|-------------|
| 0.001152965 | 0.009914887 |
| 0.001159248 | 0.009976699 |
| 0.001165531 | 0.010038571 |
| 0.001171814 | 0.010100497 |
| 0.001178097 | 0.010162469 |
| 0.00118438 | 0.01022448 |
| 0.001190664 | 0.010286521 |
| 0.001196947 | 0.010348585 |
| 0.00120323 | 0.010410661 |
| 0.001209513 | 0.010472742 |
| 0.001215796 | 0.010534818 |
| 0.00122208 | 0.010596878 |
| 0.001228363 | 0.010658913 |
| 0.001234646 | 0.010720911 |
| 0.001240929 | 0.010782862 |
| 0.001247212 | 0.010844754 |
| 0.001253495 | 0.010906574 |
| 0.001259779 | 0.010968311 |
| 0.001266062 | 0.011029951 |
| 0.001272345 | 0.011091481 |
| 0.001278628 | 0.011152887 |
| 0.001284911 | 0.011214155 |
| 0.001291195 | 0.01127527 |
| 0.001297478 | 0.011336216 |
| 0.001303761 | 0.011396978 |
| 0.001310044 | 0.011457539 |
| 0.001316327 | 0.011517882 |
| 0.001322611 | 0.01157799 |
| 0.001328894 | 0.011637844 |
| 0.001335177 | 0.011697426 |
| 0.00134146 | 0.011756718 |
| 0.001347743 | 0.011815698 |
| 0.001354026 | 0.011874346 |
| 0.00136031 | 0.011932642 |
| 0.001366593 | 0.011990565 |
| 0.001372876 | 0.01204809 |
| 0.001379159 | 0.012105197 |
| 0.001385442 | 0.01216186 |
| 0.001391726 | 0.012218057 |
| 0.001398009 | 0.012273761 |
| 0.001404292 | 0.012328948 |
| 0.001410575 | 0.012383591 |
| 0.001416858 | 0.012437663 |
| 0.001423141 | 0.012491136 |
| 0.001429425 | 0.012543982 |
| 0.001435708 | 0.012596172 |
| 0.001441991 | 0.012647675 |
| 0.001448274 | 0.01269846 |
| 0.001454557 | 0.012748496 |
| 0.001460841 | 0.012797751 |

| | |
|-----|-----------|
| 234 | 22.509095 |
| 235 | 22.496142 |
| 236 | 22.481764 |
| 237 | 22.465917 |
| 238 | 22.448556 |
| 239 | 22.429636 |
| 240 | 22.409111 |
| 241 | 22.386934 |
| 242 | 22.363058 |
| 243 | 22.337433 |
| 244 | 22.310011 |
| 245 | 22.280741 |
| 246 | 22.249572 |
| 247 | 22.216453 |
| 248 | 22.181330 |
| 249 | 22.144150 |
| 250 | 22.104859 |
| 251 | 22.063402 |
| 252 | 22.019722 |
| 253 | 21.973762 |
| 254 | 21.925464 |
| 255 | 21.874770 |
| 256 | 21.821619 |
| 257 | 21.765951 |
| 258 | 21.707705 |
| 259 | 21.646818 |
| 260 | 21.583225 |
| 261 | 21.516864 |
| 262 | 21.447667 |
| 263 | 21.375570 |
| 264 | 21.300505 |
| 265 | 21.222402 |
| 266 | 21.141194 |
| 267 | 21.056809 |
| 268 | 20.969176 |
| 269 | 20.878222 |
| 270 | 20.783875 |
| 271 | 20.686060 |
| 272 | 20.584700 |
| 273 | 20.479720 |
| 274 | 20.371042 |
| 275 | 20.258587 |
| 276 | 20.142275 |
| 277 | 20.022026 |
| 278 | 19.897757 |
| 279 | 19.769384 |
| 280 | 19.636825 |
| 281 | 19.499992 |
| 282 | 19.358801 |
| 283 | 19.213162 |

| | |
|-------------|-------------|
| 0.001467124 | 0.012846192 |
| 0.001473407 | 0.012893783 |
| 0.001479669 | 0.012940491 |
| 0.001485973 | 0.01298628 |
| 0.001492257 | 0.013031112 |
| 0.00149854 | 0.013074951 |
| 0.001504823 | 0.013117758 |
| 0.001511106 | 0.013159494 |
| 0.001517389 | 0.013200117 |
| 0.001523672 | 0.013239588 |
| 0.001529956 | 0.013277864 |
| 0.001536239 | 0.013314902 |
| 0.001542522 | 0.013350657 |
| 0.001548805 | 0.013385084 |
| 0.001555088 | 0.013418138 |
| 0.001561372 | 0.013449771 |
| 0.001567655 | 0.013479934 |
| 0.001573938 | 0.013508579 |
| 0.001580221 | 0.013535655 |
| 0.001586504 | 0.013561111 |
| 0.001592787 | 0.013584893 |
| 0.001599071 | 0.013606949 |
| 0.001605354 | 0.013627222 |
| 0.001611637 | 0.013645658 |
| 0.00161792 | 0.013662199 |
| 0.001624203 | 0.013676787 |
| 0.001630487 | 0.013689361 |
| 0.00163677 | 0.013699861 |
| 0.001643053 | 0.013708225 |
| 0.001649336 | 0.01371439 |
| 0.001655619 | 0.01371829 |
| 0.001661903 | 0.01371986 |
| 0.001668186 | 0.013719033 |
| 0.001674469 | 0.01371574 |
| 0.001680752 | 0.01370991 |
| 0.001687035 | 0.013701474 |
| 0.001693318 | 0.013690357 |
| 0.001699602 | 0.013676486 |
| 0.001705885 | 0.013659785 |
| 0.001712168 | 0.013640177 |
| 0.001718451 | 0.013617584 |
| 0.001724734 | 0.013591925 |
| 0.001731018 | 0.01356312 |
| 0.001737301 | 0.013531085 |
| 0.001743584 | 0.013495736 |
| 0.001749867 | 0.013456986 |
| 0.00175615 | 0.013414749 |
| 0.001762433 | 0.013368934 |
| 0.001768717 | 0.013319451 |
| 0.001775 | 0.013266207 |

| | |
|-------|-----------|
| 284 | 19.062987 |
| 285 | 18.908187 |
| 286 | 18.748669 |
| 287 | 18.584341 |
| 288 | 18.415111 |
| 289 | 18.240882 |
| 290 | 18.061558 |
| 291 | 17.877044 |
| 291.5 | 17.800000 |
| 292.5 | 17.600000 |
| 293.5 | 17.000000 |
| 294.5 | 8.000000 |
| 295.5 | 0.000000 |

| | |
|-------------|-------------|
| 0.001781283 | 0.013209108 |
| 0.001787566 | 0.013148058 |
| 0.001793849 | 0.01308296 |
| 0.001800133 | 0.013013714 |
| 0.001806416 | 0.01294022 |
| 0.001812699 | 0.012862373 |
| 0.001818982 | 0.012780071 |
| 0.001825265 | 0.012693205 |
| 0.000914989 | 0.006335566 |
| 0.00183469 | 0.012561022 |
| 0.001840973 | 0.012174356 |
| 0.001847256 | 0.005748662 |
| 0.00185354 | 0 |

Please do not change any of the values in this sheet

| | | |
|-------------------|---|------------|
| Patm | Atmospheric air pressure - (As recorded from engine data) | 975 [mBar] |
| Patm | | 97500 [Pa] |
| Tatm | | 5 [C] |
| Tatm | | 278 [K] |
| Relative Humidity | | 95 [%] |

$$\rho_{\text{humid air}}^{[1]} = \frac{p_d}{R_d T} + \frac{p_v}{R_v T} = \frac{p_d M_d + p_v M_v}{RT}$$

where:

| | | |
|---------------------------|---|---|
| $\rho_{\text{humid air}}$ | = | Density of the humid air (kg/m ³) |
| p_d | = | Partial pressure of dry air (Pa) |
| R_d | = | Specific gas constant for dry air, 287.058 J/(kg·K) |
| T | = | Temperature (K) |
| p_v | = | Pressure of water vapor (Pa) |
| R_v | = | Specific gas constant for water vapor, 461.495 J/(kg·K) |
| M_d | = | Molar mass of dry air, 0.028964 (kg/mol) |
| M_v | = | Molar mass of water vapor, 0.018016 (kg/mol) |
| R | = | Universal gas constant, 8.314 J/(K·mol) |

$$\rho_{\text{humid air}} = 1.217898 \text{ Kg/m}^3$$

$$0.318090154$$

The vapor pressure of water may be calculated from the [saturation vapor pressure](#) and [relative humidity](#). It is found by:

$$p_v = \phi p_{\text{sat}}$$

$$p_u = 828.6578 \text{ [Pa]}$$

Where:

| | | |
|------------------|---|---------------------------|
| p_v | = | Vapor pressure of water |
| ϕ | = | Relative humidity |
| p_{sat} | = | Saturation vapor pressure |

The [saturation vapor pressure of water](#) at any given temperature is the vapor pressure when relative humidity is 100%. One formula ^[1] used to find the saturation vapor pressure is:

$$p_{\text{sat}} = 6.1078 \times 10^{\frac{7.5T}{T+237.3}}$$

$$p_{\text{sat}} = 8.722714 \text{ hPa}$$

$$p_{\text{sat}} = 872.2714 \text{ [Pa]}$$

where T is in degrees C. Note:

$$\rho = \frac{p}{R_{\text{specific}} T} \quad 1.22177 \text{ [kg/m}^3\text{]}$$

$$R = 287.058 \text{ J/Kg K}$$

$$T = \text{Temperature in degrees Kelvin}$$

$$P = \text{Absolute Pressure in Pa}$$