



Level 5, 66 - 72 Rickard Road, Bankstown NSW  
PO Box 8, Bankstown NSW 1885  
Tel: (02) 9707 9020 - Fax: (02) 9707 9560  
DX 11220 BANKSTOWN  
council@bankstown.nsw.gov.au

## BANKSTOWN CITY COUNCIL

---

To: Acor Consultants (Cc) Pty Ltd  
C/- CIVIL DESIGN ENGINEERS  
PO Box 778  
GOSFORD NSW 2250

---

### STORMWATER SYSTEM REPORT 921, 921A, 921B, 923, 925 Punchbowl Road & 21 Canterbury Road, PUNCHBOWL NSW 2196

Date: 18-Aug-2016  
Ref: WP-SIA/978/2016  
Development type: **Residential Flat Buildings**

YES
-----

FLOOD/OVERLAND FLOW STUDY & FLOOD IMPACT  
STATEMENT REQUIRED

---

The site is affected by the following Council & Sydney Water stormwater system components:

- An open channel & culvert (according to Council records) and associated variable width easements located within the site.
- Overland flowpath [floodway] for excess stormwater runoff from the upstream catchment and associated with these drainage systems.

The site will be subject to stormwater inundation from this overland flowpath during large storm events. Refer to the attached "**100 Year ARI Flood Extent Maps from Salt Pan Creek Catchment Study**" showing the flood contours to mAHD\*\*. Provision should be made on site, and at boundary fences, for this stormwater runoff to pass unobstructed over the site. Stormwater flowing naturally onto the site must not be impeded or diverted.

For the proposed development, it will be necessary to carry out a flood/overland flow study to determine the following:

- The post development 100 year ARI\* water surface levels, and extent of flooding, at the site.
- The impact of the development on the 100 year ARI\* inundation levels and on adjoining properties.
- The required floodway width for conveyance of the 100 year ARI\* overland flow through the site (based on a maximum velocity-depth product of  $0.4\text{m}^2/\text{s}$ ). The floodway calculations need to incorporate any requirements of the Department of Water and Energy (DWE) for a riparian corridor along the open creek.
- The hydraulic grade line of the proposed drainage system from the site to the point of connection to Council's system, for the 10 year ARI\* storm.
- Boundary fencing treatments necessary to pass the design floodway flows.

The necessary flood/overland flow study shall be prepared by a qualified Civil Engineer competent in the field of drainage analysis. Flood/overland flow study requirements are detailed in Bankstown Council's *Development Engineering Standards*\*\*\*. The Flood Study & Flood Impact Statement shall be subject to Sydney Water's approval.

The completed flood/ overland flow study and drainage concept plan are to be submitted with your Development Application. The concept drainage plan is to show all necessary floodways and minimum floor levels as determined by the flood / overland flow study.

The Development Application submission shall be based on an AHD datum for levels where sites are affected by overland flow / flooding. Refer Bankstown Council's *Development Engineering Standards*\*\*\*.

The proposed development including floor levels, shall comply with the development controls specified in Part B12 Schedule 5, of Bankstown's Development Control Plan 2015 - Catchments Affected by Stormwater Flooding.

Habitable floor levels are to be at least 500mm above the 100 year ARI\* flood level at the site adjacent to the proposed buildings.

Garage floor levels are to be no lower than the determined 100 year ARI\* flood level.

Runoff from the site is to be collected and piped by gravity to open channel & culverts at the site. The connection is subject to Sydney Water's approval.

Runoff on the site, and naturally draining to it is to be collected and disposed of to Council's requirements detailed in Bankstown Council's *Development Engineering Standards*\*\*\*.

All structures and buildings must be located clear of open channel, culvert, easements. Proposed structures may require special footings due to their proximity to stormwater easements and pipelines. Refer to Bankstown Council's *Development Engineering Standards*\*\*\*.

This report is based on site plans prepared by CMT Architects dated 20/07/2016 no site survey. Council may choose to vary some report requirements following evaluation of detailed plans when they are submitted.

This report relates to the exposure of the subject site to Council's & Sydney Water's & stormwater system, both underground and overland. It does not assess the suitability or otherwise of this site for the proposed development.

\* Average Recurrence Interval

\*\* Australian Height Datum

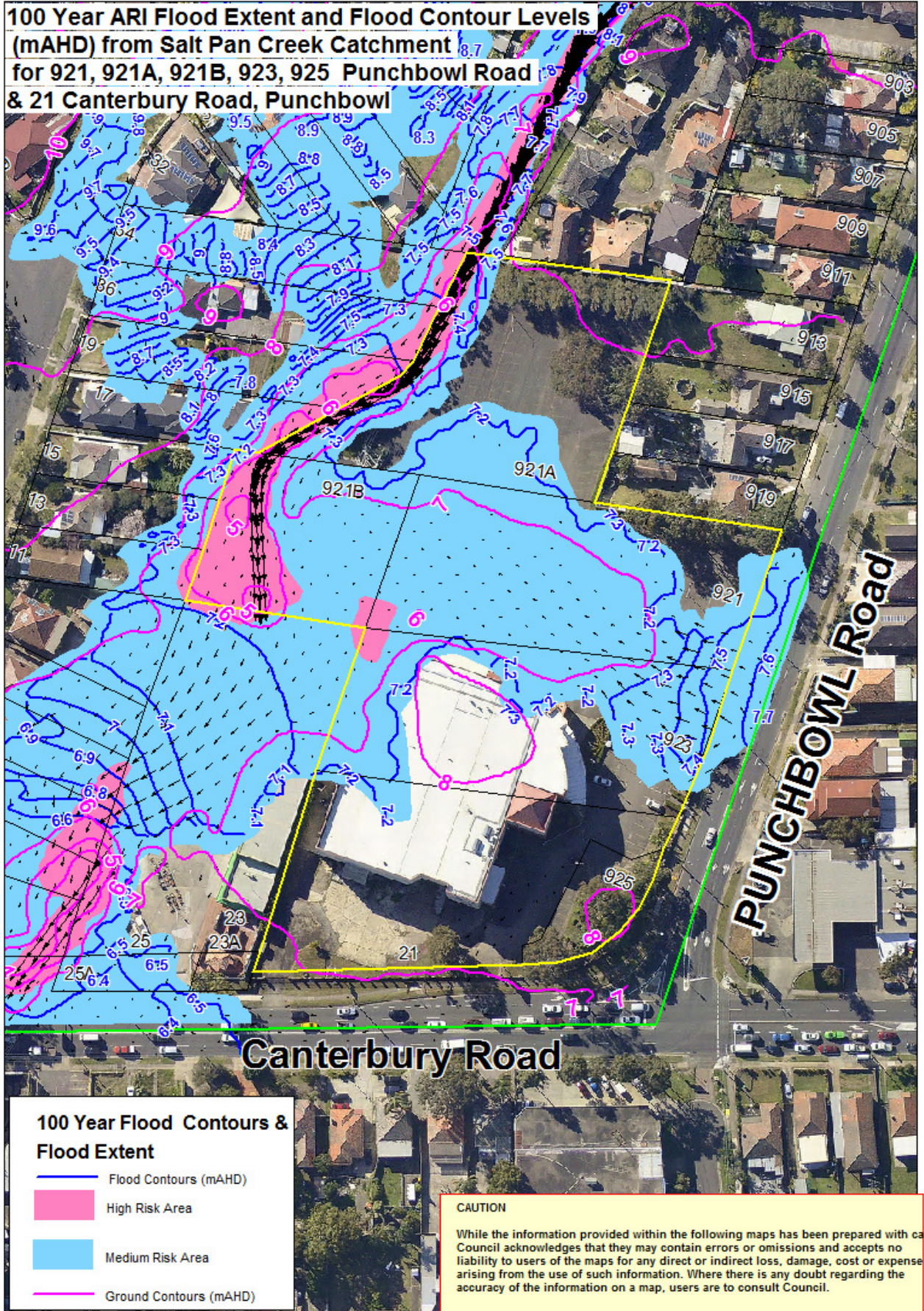
\*\*\* Bankstown Council's *Development Engineering Standards* and *Bankstown's Development Control Plan 2015* is available from Council's Customer Service Centre, and from <http://www.bankstown.nsw.gov.au/planb/guidelines/dcp.cfm>

---

**Pushpa Goonetilleke**  
**ENGINEER**



**100 Year ARI Flood Extent and Flood Contour Levels (mAHD) from Salt Pan Creek Catchment for 921, 921A, 921B, 923, 925 Punchbowl Road & 21 Canterbury Road, Punchbowl**



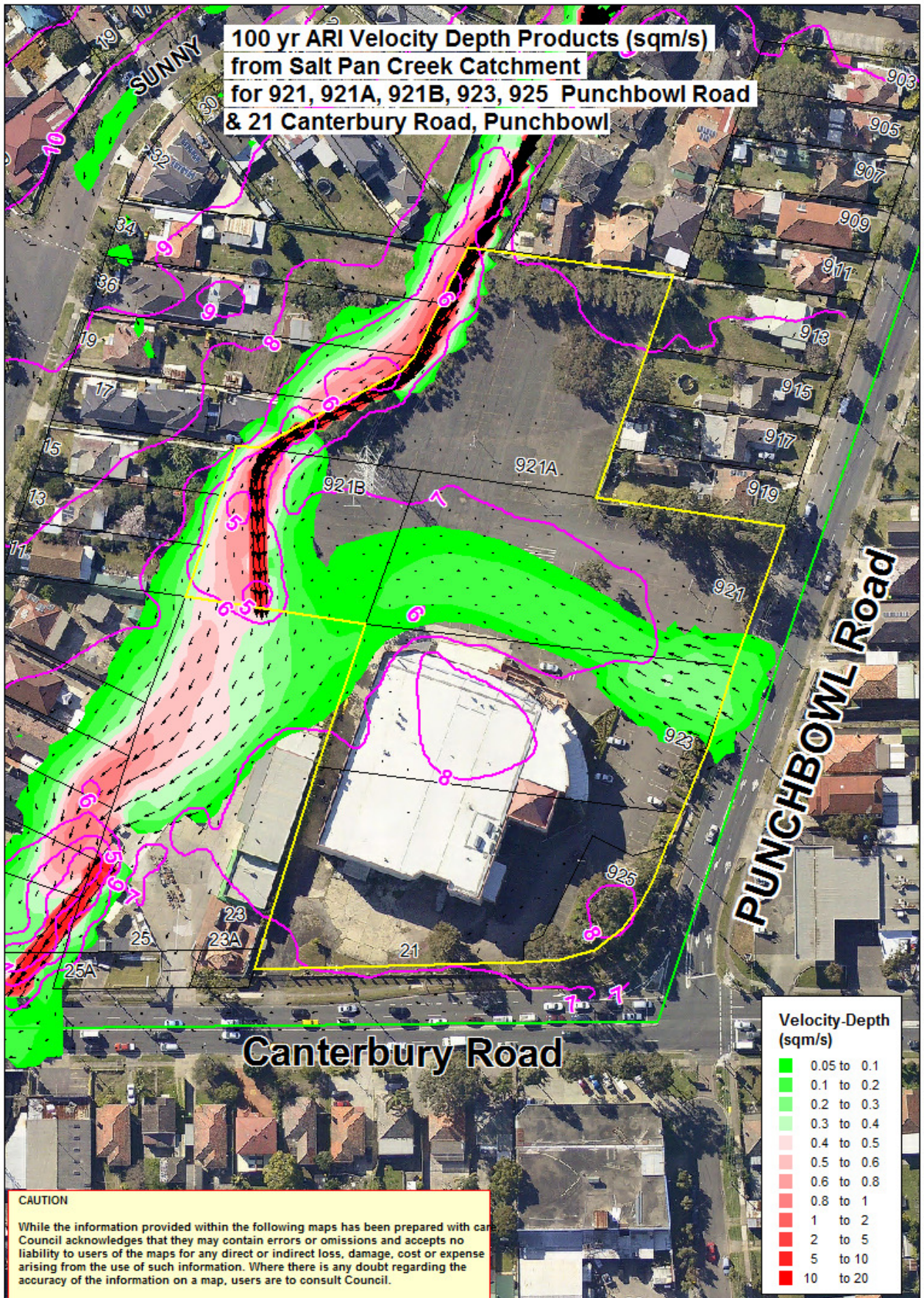
**100 Year Flood Contours & Flood Extent**

- Flood Contours (mAHD)
- High Risk Area
- Medium Risk Area
- Ground Contours (mAHD)

**CAUTION**  
 While the information provided within the following maps has been prepared with care, Council acknowledges that they may contain errors or omissions and accepts no liability to users of the maps for any direct or indirect loss, damage, cost or expense arising from the use of such information. Where there is any doubt regarding the accuracy of the information on a map, users are to consult Council.



**100 yr ARI Velocity Depth Products (sqm/s)  
from Salt Pan Creek Catchment  
for 921, 921A, 921B, 923, 925 Punchbowl Road  
& 21 Canterbury Road, Punchbowl**



Velocity-Depth (sqm/s)	
0.05 to 0.1	0.1 to 0.2
0.2 to 0.3	0.3 to 0.4
0.4 to 0.5	0.5 to 0.6
0.6 to 0.8	0.8 to 1
1 to 2	2 to 5
5 to 10	10 to 20

**CAUTION**

While the information provided within the following maps has been prepared with care, Council acknowledges that they may contain errors or omissions and accepts no liability to users of the maps for any direct or indirect loss, damage, cost or expense arising from the use of such information. Where there is any doubt regarding the accuracy of the information on a map, users are to consult Council.





1:1,677  
22 August 2016





















### 921 Punchbowl Road, Punchbowl

*Aerial Map*

**DISCLAIMER:** COUNCIL EXPRESSLY DISCLAIMS ALL LIABILITY FOR ERRORS OR OMISSIONS. THIS PLAN HAS NO LEGAL STANDING

The NEW City of  
**CANTERBURY  
BANKSTOWN**

# Legend

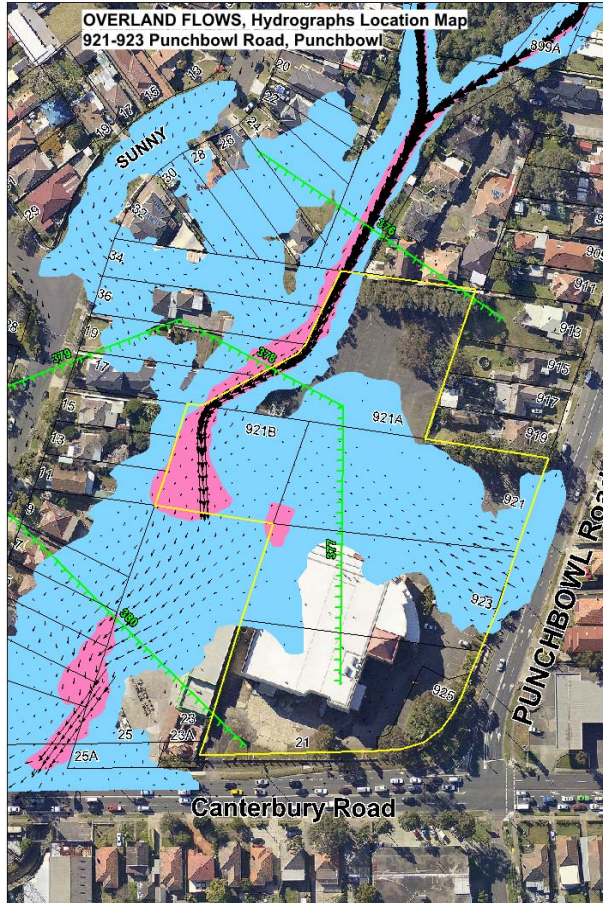
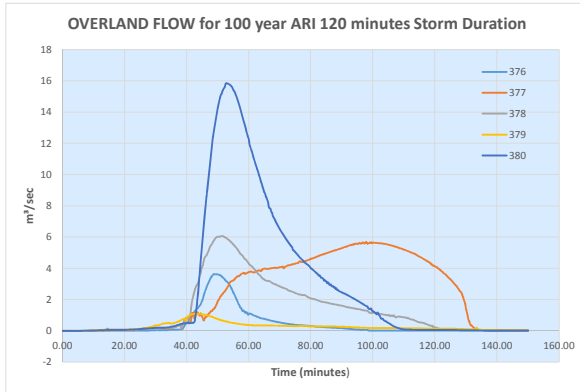
	Suburb
	Drainage Conduits
	Drainage Devices
	Sydney Water
	Contour Major 5m
	Contour Intermediate 2.5m
	Contour Minor 0.5m
	Parcel
	Parcel Associate
	Parcel Vinculum
	Jetty
	Easements
	Road Boundaries
	Aerial Photo August 2013
	Road Names
	Road Sections
	Airport Internal Road
	Water Boundary
	Railway
	Airport Taxiway



**Stormwater Data from Salt Pan Creek Catchment study**

**Property address:- 921A, 921B, 921 923 Punchbowl Road, & 21 Canterbury Road**

Location	Time (hours)	Minutes	376 m <sup>3</sup> /sec	377 m <sup>3</sup> /sec	378 m <sup>3</sup> /sec	379 m <sup>3</sup> /sec	380 m <sup>3</sup> /sec	Refer the Hydrogrphs Location Map
	0	0.00	0	0	0	0	0	
	0.004167	0.25	0	0	0	0	0	
	0.008333	0.50	0	0	0	0	0	
	0.0125	0.75	0	0	0	0	0	
	0.016667	1.00	0	0	0	0	0	
	0.020833	1.25	0	0	0	0	0	
	0.025	1.50	0	0	0	0	0	
	0.029167	1.75	0	0	0	0	0	
	0.033333	2.00	0	0	0	0	0	
	0.0375	2.25	0	0	0	0	0	
	0.041667	2.50	0	0	0	0	0	
	0.045833	2.75	0	0	0	0	0	
	0.05	3.00	0	0	0	0	0	
	0.054167	3.25	0	0	0	0	0	
	0.058333	3.50	0	0	0	0	0	
	0.0625	3.75	0	0	0	0	0	
	0.066667	4.00	0	-0.002	0	0	0.001	
	0.070833	4.25	0	0	0	0	0	
	0.075	4.50	0	0	0	0	0	
	0.079167	4.75	0	0	0	0	0	
	0.083333	5.00	0	0	0	0	0	
	0.0875	5.25	0	0	0	0	0	
	0.091667	5.50	0	0	0	0	0	
	0.095833	5.75	0	0	0	0.001	0.001	
	0.1	6.00	0	0.001	0	0.001	0.002	
	0.104167	6.25	0	0.002	0	0.001	0.002	
	0.108333	6.50	0	0.002	0	0.001	0.003	
	0.1125	6.75	0	0.002	0	0.002	0.003	
	0.116667	7.00	0	0.003	0.001	0.002	0.004	
	0.120833	7.25	0	0.003	0.001	0.003	0.004	
	0.125	7.50	0	0.003	0.001	0.003	0.005	
	0.129167	7.75	0	0.003	0.001	0.003	0.006	
	0.133333	8.00	0.001	0.004	0.001	0.004	0.007	
	0.1375	8.25	0.001	0.004	0.001	0.004	0.008	
	0.141667	8.50	0.001	0.005	0.001	0.004	0.009	
	0.145833	8.75	0.001	0.005	0.001	0.005	0.01	
	0.15	9.00	0.001	0.006	0.001	0.005	0.01	
	0.154167	9.25	0.001	0.007	0.001	0.006	0.013	
	0.158333	9.50	0.001	0.008	0.001	0.006	0.014	
	0.1625	9.75	0.001	0.01	0.002	0.007	0.015	
	0.166667	10.00	0.001	0.013	0.003	0.007	0.016	
	0.170833	10.25	0.001	0.016	0.004	0.008	0.018	
	0.175	10.50	0.001	0.02	0.006	0.008	0.02	
	0.179167	10.75	0.001	0.024	0.007	0.009	0.022	
	0.183333	11.00	0.001	0.03	0.01	0.01	0.023	
	0.1875	11.25	0.001	0.034	0.01	0.011	0.025	
	0.191667	11.50	0.001	0.038	0.011	0.012	0.025	
	0.195833	11.75	0.001	0.042	0.013	0.013	0.029	
	0.2	12.00	0.001	0.044	0.014	0.014	0.03	
	0.204167	12.25	0.002	0.047	0.015	0.014	0.027	
	0.208333	12.50	0.002	0.051	0.016	0.015	0.032	
	0.2125	12.75	0.002	0.052	0.017	0.016	0.034	
	0.216667	13.00	0.002	0.054	0.019	0.018	0.034	
	0.220833	13.25	0.002	0.06	0.02	0.019	0.038	
	0.225	13.50	0.003	0.066	0.021	0.02	0.04	
	0.229167	13.75	0.006	0.071	0.022	0.021	0.043	
	0.233333	14.00	0.002	0.076	0.023	0.022	0.044	
	0.2375	14.25	0.002	0.079	0.023	0.024	0.047	
	0.241667	14.50	0.002	0.081	0.024	0.024	0.047	
	0.245833	14.75	0.002	0.083	0.025	0.025	0.049	
	0.25	15.00	0.002	0.085	0.025	0.028	0.048	
	0.254167	15.25	0.003	0.086	0.025	0.03	0.05	
	0.258333	15.50	0.004	0.087	0.025	0.032	0.051	
	0.2625	15.75	0.004	0.087	0.025	0.033	0.052	
	0.266667	16.00	0.004	0.087	0.025	0.034	0.051	
	0.270833	16.25	0.004	0.087	0.025	0.035	0.051	
	0.275	16.50	0.004	0.087	0.025	0.038	0.051	
	0.279167	16.75	0.004	0.086	0.025	0.039	0.052	
	0.283333	17.00	0.004	0.086	0.025	0.041	0.05	
	0.2875	17.25	0.004	0.085	0.025	0.042	0.052	
	0.291667	17.50	0.004	0.084	0.024	0.043	0.052	
	0.295833	17.75	0.004	0.083	0.024	0.045	0.052	
	0.3	18.00	0.005	0.082	0.024	0.046	0.052	
	0.304167	18.25	0.005	0.081	0.023	0.048	0.05	
	0.308333	18.50	0.005	0.08	0.023	0.05	0.053	
	0.3125	18.75	0.005	0.079	0.023	0.051	0.054	
	0.316667	19.00	0.004	0.078	0.023	0.053	0.053	
	0.320833	19.25	0.006	0.077	0.023	0.055	0.052	
	0.325	19.50	0.007	0.077	0.023	0.057	0.055	
	0.329167	19.75	0.008	0.077	0.023	0.059	0.058	
	0.333333	20.00	0.009	0.076	0.023	0.061	0.057	
	0.3375	20.25	0.009	0.076	0.024	0.063	0.058	
	0.341667	20.50	0.01	0.076	0.024	0.065	0.062	
	0.345833	20.75	0.01	0.076	0.024	0.067	0.061	
	0.35	21.00	0.01	0.077	0.025	0.069	0.065	
	0.354167	21.25	0.011	0.077	0.026	0.072	0.066	
	0.358333	21.50	0.011	0.078	0.026	0.075	0.067	
	0.3625	21.75	0.011	0.079	0.023	0.077	0.071	
	0.366667	22.00	0.011	0.079	0.025	0.08	0.071	
	0.370833	22.25	0.011	0.08	0.027	0.083	0.076	
	0.375	22.50	0.011	0.081	0.028	0.086	0.077	
	0.379167	22.75	0.011	0.083	0.031	0.089	0.079	
	0.383333	23.00	0.011	0.084	0.06	0.093	0.081	
	0.3875	23.25	0.011	0.086	0.054	0.096	0.084	
	0.391667	23.50	0.011	0.088	0.057	0.1	0.085	



0.395833	23.75	0.011	0.09	0.062	0.104	0.09
0.4	24.00	0.011	0.092	0.068	0.108	0.094
0.404167	24.25	0.011	0.094	0.077	0.113	0.098
0.408333	24.50	0.011	0.097	0.09	0.118	0.102
0.4125	24.75	0.01	0.1	0.099	0.123	0.106
0.416667	25.00	0.011	0.103	0.108	0.128	0.11
0.420833	25.25	0.011	0.107	0.117	0.134	0.114
0.425	25.50	0.012	0.111	0.126	0.141	0.119
0.429167	25.75	0.012	0.115	0.133	0.148	0.124
0.433333	26.00	0.013	0.118	0.14	0.155	0.128
0.4375	26.25	0.014	0.123	0.146	0.162	0.132
0.441667	26.50	0.015	0.127	0.151	0.17	0.136
0.445833	26.75	0.016	0.131	0.155	0.179	0.14
0.45	27.00	0.017	0.135	0.158	0.186	0.143
0.454167	27.25	0.019	0.139	0.161	0.195	0.146
0.458333	27.50	0.021	0.144	0.163	0.207	0.149
0.4625	27.75	0.016	0.147	0.167	0.218	0.153
0.466667	28.00	0.021	0.153	0.169	0.229	0.158
0.470833	28.25	0.026	0.157	0.174	0.24	0.163
0.475	28.50	0.031	0.158	0.18	0.251	0.168
0.479167	28.75	0.04	0.163	0.184	0.264	0.173
0.483333	29.00	0.034	0.166	0.188	0.276	0.177
0.4875	29.25	0.039	0.167	0.187	0.29	0.182
0.491667	29.50	0.04	0.171	0.199	0.304	0.186
0.495833	29.75	0.033	0.168	0.195	0.345	0.188
0.5	30.00	0.037	0.172	0.191	0.339	0.191
0.504167	30.25	0.041	0.169	0.172	0.345	0.192
0.508333	30.50	0.044	0.168	0.152	0.354	0.194
0.5125	30.75	0.044	0.166	0.19	0.358	0.196
0.516667	31.00	0.042	0.163	0.194	0.36	0.198
0.520833	31.25	0.036	0.163	0.182	0.376	0.2
0.525	31.50	0.035	0.159	0.135	0.397	0.202
0.529167	31.75	0.042	0.158	0.187	0.418	0.203
0.533333	32.00	0.053	0.152	0.189	0.439	0.203
0.5375	32.25	0.043	0.152	0.141	0.459	0.203
0.541667	32.50	0.039	0.147	0.178	0.466	0.204
0.545833	32.75	0.046	0.148	0.193	0.47	0.204
0.55	33.00	0.044	0.143	0.194	0.476	0.204
0.554167	33.25	0.037	0.143	0.189	0.481	0.206
0.558333	33.50	0.041	0.143	0.163	0.488	0.208
0.5625	33.75	0.058	0.144	0.136	0.493	0.212
0.566667	34.00	0.046	0.146	0.185	0.499	0.217
0.570833	34.25	0.048	0.147	0.173	0.503	0.223
0.575	34.50	0.077	0.156	0.149	0.493	0.23
0.579167	34.75	0.067	0.161	0.206	0.47	0.248
0.583333	35.00	0.074	0.175	0.185	0.461	0.262
0.5875	35.25	0.064	0.187	0.201	0.465	0.269
0.591667	35.50	0.067	0.198	0.224	0.474	0.274
0.595833	35.75	0.065	0.21	0.194	0.485	0.289
0.6	36.00	0.07	0.228	0.229	0.5	0.3
0.604167	36.25	0.074	0.246	0.233	0.517	0.313
0.608333	36.50	0.078	0.263	0.253	0.534	0.329
0.6125	36.75	0.079	0.29	0.264	0.55	0.346
0.616667	37.00	0.076	0.329	0.293	0.566	0.361
0.620833	37.25	0.079	0.352	0.315	0.588	0.375
0.625	37.50	0.086	0.374	0.332	0.611	0.391
0.629167	37.75	0.085	0.39	0.346	0.633	0.406
0.633333	38.00	0.089	0.41	0.363	0.659	0.422
0.6375	38.25	0.099	0.431	0.115	0.68	0.433
0.641667	38.50	0.097	0.448	0.252	0.711	0.445
0.645833	38.75	0.128	0.465	0.389	0.744	0.458
0.65	39.00	0.215	0.483	0.497	0.755	0.461
0.654167	39.25	0.284	0.486	0.735	0.769	0.474
0.658333	39.50	0.416	0.488	0.74	0.777	0.487
0.6625	39.75	0.435	0.497	0.818	0.615	0.497
0.666667	40.00	0.521	0.502	0.847	0.815	0.509
0.670833	40.25	0.544	0.506	0.843	0.878	0.509
0.675	40.50	0.581	0.508	0.746	0.921	0.493
0.679167	40.75	0.708	0.513	0.799	0.959	0.488
0.683333	41.00	0.799	0.521	1	1.002	0.493
0.6875	41.25	0.873	0.561	1.133	1.027	0.507
0.691667	41.50	0.914	0.778	1.587	1.055	0.503
0.695833	41.75	0.995	1.127	1.904	1.065	0.499
0.7	42.00	1.073	1.151	2.089	1.07	0.503
0.704167	42.25	1.138	1.118	2.343	1.073	0.518
0.708333	42.50	1.217	0.775	2.511	1.074	0.584
0.7125	42.75	1.294	0.919	2.695	1.085	0.757
0.716667	43.00	1.349	1.039	2.822	1.079	1.181
0.720833	43.25	1.389	1.109	2.902	1.077	1.599
0.725	43.50	1.444	1.188	2.996	1.074	2.073
0.729167	43.75	1.486	1.116	3.106	1.077	2.529
0.733333	44.00	1.556	1.029	3.333	1.071	3.209
0.7375	44.25	1.625	0.966	3.53	1.078	3.843
0.741667	44.50	1.687	1.114	3.724	1.074	4.437
0.745833	44.75	1.817	1.064	3.947	1.062	4.996
0.75	45.00	1.918	0.892	4.098	1.054	5.576
0.754167	45.25	2.058	0.799	4.221	1.044	6.105
0.758333	45.50	2.258	0.657	4.474	1.035	6.752
0.7625	45.75	2.417	0.753	4.656	1.033	7.277
0.766667	46.00	2.57	0.879	4.726	1.02	7.805
0.770833	46.25	2.679	0.879	4.795	1.004	8.339
0.775	46.50	2.837	0.921	4.871	1.006	8.767
0.779167	46.75	2.955	1.001	4.997	0.987	9.27
0.783333	47.00	3.065	1.077	5.099	0.961	9.751
0.7875	47.25	3.179	1.128	5.21	0.944	10.21
0.791667	47.50	3.279	1.159	5.354	0.938	10.62
0.795833	47.75	3.371	1.255	5.452	0.922	11.014
0.8	48.00	3.458	1.265	5.52	0.916	11.453
0.804167	48.25	3.532	1.279	5.584	0.891	12.115
0.808333	48.50	3.591	1.376	5.704	0.875	12.444
0.8125	48.75	3.634	1.396	5.765	0.851	12.771
0.816667	49.00	3.619	1.439	5.837	0.825	13.04
0.820833	49.25	3.611	1.536	5.919	0.808	13.396
0.825	49.50	3.617	1.643	5.971	0.792	13.674
0.829167	49.75	3.626	1.737	6.012	0.766	13.967

0.833333	50.00	3.613	1.887	6.029	0.747	14.226
0.8375	50.25	3.594	1.962	6.011	0.744	14.487
0.841667	50.50	3.585	2.057	6.01	0.707	14.737
0.845833	50.75	3.573	2.149	6.038	0.705	14.929
0.85	51.00	3.535	2.22	6.05	0.679	15.099
0.854167	51.25	3.489	2.295	6.061	0.677	15.157
0.858333	51.50	3.449	2.335	6.075	0.667	15.313
0.8625	51.75	3.409	2.412	6.047	0.651	15.433
0.866667	52.00	3.353	2.474	6.022	0.63	15.526
0.870833	52.25	3.293	2.519	6	0.612	15.59
0.875	52.50	3.227	2.586	5.974	0.609	15.777
0.879167	52.75	3.17	2.655	5.944	0.601	15.855
0.883333	53.00	3.148	2.729	5.91	0.588	15.839
0.8875	53.25	3.095	2.815	5.862	0.567	15.826
0.891667	53.50	3.04	2.924	5.824	0.549	15.812
0.895833	53.75	2.962	3.024	5.788	0.542	15.773
0.9	54.00	2.875	3.115	5.746	0.536	15.737
0.904167	54.25	2.784	3.155	5.69	0.527	15.697
0.908333	54.50	2.685	3.177	5.643	0.517	15.634
0.9125	54.75	2.578	3.196	5.591	0.507	15.551
0.916667	55.00	2.465	3.217	5.535	0.498	15.456
0.920833	55.25	2.367	3.257	5.48	0.484	15.349
0.925	55.50	2.275	3.317	5.425	0.479	15.292
0.929167	55.75	2.167	3.371	5.368	0.474	15.146
0.933333	56.00	2.053	3.424	5.313	0.467	15.008
0.9375	56.25	1.932	3.463	5.248	0.458	14.875
0.941667	56.50	1.816	3.502	5.178	0.45	14.739
0.945833	56.75	1.698	3.49	5.102	0.438	14.585
0.95	57.00	1.622	3.52	5.025	0.433	14.417
0.954167	57.25	1.509	3.569	4.957	0.426	14.24
0.958333	57.50	1.457	3.615	4.9	0.419	14.057
0.9625	57.75	1.384	3.65	4.854	0.413	13.875
0.966667	58.00	1.258	3.677	4.805	0.407	13.698
0.970833	58.25	1.295	3.696	4.736	0.401	13.524
0.975	58.50	1.281	3.713	4.652	0.396	13.346
0.979167	58.75	1.167	3.645	4.597	0.391	13.164
0.983333	59.00	1.211	3.668	4.574	0.386	12.978
0.9875	59.25	1.127	3.675	4.518	0.381	12.775
0.991667	59.50	1.163	3.712	4.45	0.377	12.59
0.995833	59.75	1.029	3.733	4.377	0.374	12.414
1	60.00	1.061	3.76	4.307	0.37	12.272
1.004167	60.25	1.112	3.767	4.254	0.365	11.93
1.008333	60.50	1.092	3.786	4.204	0.361	11.774
1.0125	60.75	1.08	3.799	4.172	0.358	11.622
1.016667	61.00	1.06	3.777	4.133	0.356	11.478
1.020833	61.25	1.018	3.745	4.076	0.354	11.303
1.025	61.50	0.998	3.737	4.014	0.352	11.132
1.029167	61.75	0.973	3.746	3.95	0.35	10.961
1.033333	62.00	0.962	3.746	3.912	0.348	10.814
1.0375	62.25	0.94	3.774	3.853	0.348	10.657
1.041667	62.50	0.919	3.823	3.777	0.355	10.487
1.045833	62.75	0.9	3.853	3.716	0.348	10.323
1.05	63.00	0.88	3.848	3.658	0.344	10.193
1.054167	63.25	0.86	3.859	3.609	0.341	10.009
1.058333	63.50	0.836	3.876	3.568	0.341	9.846
1.0625	63.75	0.815	3.849	3.521	0.339	9.689
1.066667	64.00	0.802	3.824	3.454	0.338	9.53
1.070833	64.25	0.795	3.898	3.389	0.338	9.372
1.075	64.50	0.784	3.946	3.352	0.337	9.199
1.079167	64.75	0.771	3.958	3.316	0.336	9.043
1.083333	65.00	0.768	3.975	3.28	0.335	8.875
1.0875	65.25	0.751	3.982	3.239	0.334	8.794
1.091667	65.50	0.734	3.981	3.218	0.334	8.621
1.095833	65.75	0.732	3.96	3.2	0.333	8.488
1.1	66.00	0.715	3.954	3.189	0.333	8.369
1.104167	66.25	0.699	3.965	3.194	0.333	8.209
1.108333	66.50	0.69	3.971	3.184	0.333	7.9
1.1125	66.75	0.671	3.977	3.174	0.333	7.853
1.116667	67.00	0.659	3.997	3.143	0.333	7.806
1.120833	67.25	0.643	4.012	3.108	0.333	7.644
1.125	67.50	0.635	4.016	3.071	0.333	7.549
1.129167	67.75	0.623	4.02	3.039	0.333	7.373
1.133333	68.00	0.612	4.023	3.014	0.333	7.256
1.1375	68.25	0.602	4.028	2.997	0.332	7.185
1.141667	68.50	0.594	4.024	2.982	0.332	7.098
1.145833	68.75	0.582	4.032	2.965	0.332	6.975
1.15	69.00	0.572	4.038	2.941	0.332	6.886
1.154167	69.25	0.561	4.034	2.918	0.331	6.769
1.158333	69.50	0.552	4.036	2.891	0.33	6.686
1.1625	69.75	0.543	4.059	2.863	0.33	6.599
1.166667	70.00	0.534	4.069	2.84	0.328	6.512
1.170833	70.25	0.525	4.081	2.819	0.327	6.425
1.175	70.50	0.517	4.087	2.797	0.325	6.343
1.179167	70.75	0.509	4.097	2.779	0.324	6.263
1.183333	71.00	0.5	4.103	2.758	0.323	6.185
1.1875	71.25	0.494	3.999	2.742	0.321	6.109
1.191667	71.50	0.486	4.049	2.722	0.319	6.037
1.195833	71.75	0.475	4.109	2.708	0.317	5.963
1.2	72.00	0.465	4.122	2.691	0.316	5.894
1.204167	72.25	0.455	4.144	2.664	0.314	5.802
1.208333	72.50	0.447	4.18	2.629	0.312	5.733
1.2125	72.75	0.438	4.198	2.593	0.31	5.672
1.216667	73.00	0.431	4.199	2.567	0.308	5.613
1.220833	73.25	0.424	4.205	2.551	0.306	5.547
1.225	73.50	0.417	4.227	2.537	0.303	5.472
1.229167	73.75	0.409	4.242	2.524	0.301	5.405
1.233333	74.00	0.403	4.253	2.509	0.3	5.337
1.2375	74.25	0.398	4.259	2.486	0.297	5.176
1.241667	74.50	0.396	4.273	2.465	0.296	5.147
1.245833	74.75	0.384	4.286	2.447	0.295	5.102
1.25	75.00	0.376	4.302	2.416	0.293	5.04
1.254167	75.25	0.375	4.32	2.4	0.292	4.98
1.258333	75.50	0.371	4.328	2.379	0.293	4.921
1.2625	75.75	0.366	4.33	2.355	0.291	4.864
1.266667	76.00	0.363	4.355	2.337	0.293	4.808

1.270833	76.25	0.362	4.425	2.333	0.303	4.741
1.275	76.50	0.355	4.445	2.334	0.314	4.691
1.279167	76.75	0.354	4.421	2.317	0.316	4.64
1.283333	77.00	0.356	4.429	2.293	0.315	4.586
1.2875	77.25	0.349	4.401	2.285	0.314	4.539
1.291667	77.50	0.353	4.4	2.292	0.311	4.492
1.295833	77.75	0.343	4.431	2.29	0.309	4.441
1.3	78.00	0.343	4.447	2.281	0.306	4.387
1.304167	78.25	0.328	4.465	2.268	0.303	4.344
1.308333	78.50	0.333	4.48	2.23	0.301	4.306
1.3125	78.75	0.326	4.502	2.192	0.3	4.262
1.316667	79.00	0.314	4.516	2.165	0.298	4.229
1.320833	79.25	0.321	4.534	2.134	0.297	4.184
1.325	79.50	0.303	4.562	2.117	0.294	4.137
1.329167	79.75	0.309	4.585	2.09	0.291	4.087
1.333333	80.00	0.307	4.604	2.074	0.288	4.002
1.3375	80.25	0.304	4.621	2.064	0.286	3.978
1.341667	80.50	0.298	4.636	2.047	0.285	3.934
1.345833	80.75	0.293	4.652	2.039	0.284	3.891
1.35	81.00	0.291	4.672	2.03	0.283	3.844
1.354167	81.25	0.286	4.689	2.017	0.282	3.8
1.358333	81.50	0.272	4.708	1.999	0.282	3.755
1.3625	81.75	0.258	4.725	1.989	0.281	3.713
1.366667	82.00	0.267	4.746	1.968	0.28	3.67
1.370833	82.25	0.267	4.768	1.949	0.279	3.623
1.375	82.50	0.25	4.789	1.924	0.28	3.532
1.379167	82.75	0.25	4.809	1.907	0.28	3.558
1.383333	83.00	0.253	4.827	1.891	0.28	3.51
1.3875	83.25	0.254	4.848	1.879	0.28	3.406
1.391667	83.50	0.237	4.868	1.861	0.28	3.394
1.395833	83.75	0.239	4.884	1.855	0.28	3.378
1.4	84.00	0.24	4.897	1.847	0.28	3.333
1.404167	84.25	0.241	4.914	1.838	0.279	3.21
1.408333	84.50	0.227	4.932	1.829	0.279	3.245
1.4125	84.75	0.232	4.949	1.823	0.278	3.211
1.416667	85.00	0.227	4.966	1.815	0.278	3.152
1.420833	85.25	0.219	4.981	1.797	0.278	3.045
1.425	85.50	0.223	4.995	1.787	0.278	3.106
1.429167	85.75	0.222	5.014	1.778	0.279	3.047
1.433333	86.00	0.208	5.033	1.762	0.278	2.947
1.4375	86.25	0.213	5.052	1.752	0.276	2.934
1.441667	86.50	0.218	5.069	1.742	0.277	2.962
1.445833	86.75	0.198	5.087	1.726	0.276	2.85
1.45	87.00	0.2	5.104	1.718	0.275	2.85
1.454167	87.25	0.205	5.122	1.715	0.274	2.848
1.458333	87.50	0.197	5.139	1.7	0.273	2.768
1.4625	87.75	0.187	5.156	1.687	0.272	2.781
1.466667	88.00	0.193	5.163	1.683	0.271	2.675
1.470833	88.25	0.198	5.18	1.673	0.269	2.72
1.475	88.50	0.182	5.189	1.667	0.267	2.609
1.479167	88.75	0.18	5.211	1.647	0.266	2.614
1.483333	89.00	0.182	5.233	1.636	0.264	2.554
1.4875	89.25	0.19	5.246	1.629	0.263	2.53
1.491667	89.50	0.169	5.256	1.62	0.261	2.507
1.495833	89.75	0.17	5.274	1.617	0.259	2.486
1.5	90.00	0.171	5.295	1.612	0.258	2.454
1.504167	90.25	0.17	5.305	1.602	0.257	2.432
1.508333	90.50	0.152	5.33	1.588	0.255	2.406
1.5125	90.75	0.153	5.351	1.574	0.254	2.387
1.516667	91.00	0.16	5.374	1.563	0.252	2.367
1.520833	91.25	0.142	5.387	1.545	0.249	2.345
1.525	91.50	0.133	5.381	1.527	0.247	2.317
1.529167	91.75	0.134	5.413	1.512	0.246	2.293
1.533333	92.00	0.137	5.439	1.503	0.243	2.268
1.5375	92.25	0.13	5.459	1.498	0.24	2.238
1.541667	92.50	0.115	5.473	1.49	0.237	2.207
1.545833	92.75	0.112	5.483	1.476	0.236	2.179
1.55	93.00	0.12	5.484	1.473	0.233	2.154
1.554167	93.25	0.114	5.508	1.459	0.229	2.127
1.558333	93.50	0.098	5.535	1.453	0.229	2.099
1.5625	93.75	0.097	5.512	1.441	0.226	2.069
1.566667	94.00	0.099	5.564	1.427	0.222	2.042
1.570833	94.25	0.103	5.576	1.424	0.222	2.016
1.575	94.50	0.095	5.556	1.413	0.219	1.989
1.579167	94.75	0.083	5.573	1.405	0.216	1.959
1.583333	95.00	0.082	5.591	1.396	0.213	1.931
1.5875	95.25	0.088	5.561	1.389	0.212	1.906
1.591667	95.50	0.087	5.586	1.383	0.211	1.877
1.595833	95.75	0.065	5.629	1.376	0.208	1.845
1.6	96.00	0.063	5.591	1.367	0.206	1.815
1.604167	96.25	0.06	5.579	1.351	0.201	1.783
1.608333	96.50	0.075	5.608	1.338	0.199	1.754
1.6125	96.75	0.078	5.663	1.325	0.197	1.725
1.616667	97.00	0.065	5.615	1.312	0.195	1.689
1.620833	97.25	0.058	5.591	1.307	0.193	1.66
1.625	97.50	0.066	5.619	1.297	0.191	1.625
1.629167	97.75	0.066	5.684	1.294	0.191	1.591
1.633333	98.00	0.065	5.669	1.283	0.188	1.562
1.6375	98.25	0.06	5.573	1.271	0.186	1.557
1.641667	98.50	0.024	5.598	1.235	0.185	1.447
1.645833	98.75	0.009	5.614	1.18	0.185	1.407
1.65	99.00	0.019	5.643	1.157	0.184	1.381
1.654167	99.25	0.019	5.626	1.134	0.183	1.424
1.658333	99.50	0.019	5.67	1.13	0.182	1.409
1.6625	99.75	0.019	5.606	1.142	0.18	1.286
1.666667	100.00	0.012	5.637	1.159	0.177	1.25
1.670833	100.25	0.016	5.642	1.167	0.18	1.223
1.675	100.50	0.022	5.64	1.161	0.179	1.188
1.679167	100.75	0.022	5.634	1.148	0.178	1.153
1.683333	101.00	0.015	5.627	1.132	0.177	1.094
1.6875	101.25	0.015	5.623	1.119	0.177	1.056
1.691667	101.50	0.009	5.619	1.107	0.176	1.172
1.695833	101.75	0.008	5.615	1.097	0.176	1.091
1.7	102.00	0.014	5.611	1.089	0.176	1.001
1.704167	102.25	0.019	5.605	1.078	0.177	0.946

1.708333	102.50	0.021	5.601	1.073	0.178	0.828
1.7125	102.75	0.02	5.595	1.068	0.178	0.769
1.716667	103.00	0.013	5.589	1.06	0.179	0.77
1.720833	103.25	0.014	5.582	1.051	0.18	0.761
1.725	103.50	0.02	5.574	1.04	0.182	0.671
1.729167	103.75	0.019	5.566	1.028	0.183	0.658
1.733333	104.00	0.019	5.557	1.015	0.183	0.619
1.7375	104.25	0.015	5.547	1.01	0.183	0.596
1.741667	104.50	0.013	5.536	0.999	0.183	0.562
1.745833	104.75	0.015	5.525	0.996	0.183	0.529
1.75	105.00	0.022	5.514	1.007	0.184	0.498
1.754167	105.25	0.017	5.502	1.01	0.184	0.468
1.758333	105.50	0.009	5.49	0.941	0.182	0.443
1.7625	105.75	0.016	5.476	0.972	0.184	0.409
1.766667	106.00	0.018	5.466	0.982	0.182	0.377
1.770833	106.25	0.016	5.447	0.938	0.181	0.345
1.775	106.50	0.016	5.433	0.97	0.18	0.314
1.779167	106.75	0.012	5.422	0.99	0.18	0.287
1.783333	107.00	0.017	5.403	0.913	0.179	0.264
1.7875	107.25	0.019	5.386	0.878	0.178	0.244
1.791667	107.50	0.016	5.371	0.856	0.177	0.225
1.795833	107.75	0.01	5.359	0.892	0.175	0.206
1.8	108.00	0.01	5.343	0.909	0.177	0.19
1.804167	108.25	0.016	5.321	0.919	0.176	0.171
1.808333	108.50	0.015	5.301	0.911	0.174	0.154
1.8125	108.75	0.012	5.285	0.902	0.174	0.143
1.816667	109.00	0.009	5.272	0.89	0.173	0.129
1.820833	109.25	0.016	5.255	0.893	0.169	0.116
1.825	109.50	0.015	5.237	0.886	0.17	0.107
1.829167	109.75	0.014	5.216	0.865	0.167	0.099
1.833333	110.00	0.008	5.199	0.862	0.168	0.092
1.8375	110.25	0.013	5.187	0.865	0.165	0.087
1.841667	110.50	0.014	5.16	0.86	0.166	0.082
1.845833	110.75	0.012	5.144	0.829	0.164	0.079
1.85	111.00	0.01	5.125	0.804	0.164	0.076
1.854167	111.25	0.013	5.101	0.828	0.163	0.074
1.858333	111.50	0.012	5.083	0.812	0.162	0.072
1.8625	111.75	0.014	5.062	0.766	0.161	0.071
1.866667	112.00	0.012	5.04	0.742	0.16	0.069
1.870833	112.25	0.013	5.018	0.732	0.16	0.068
1.875	112.50	0.01	5.002	0.724	0.159	0.067
1.879167	112.75	0.012	4.983	0.715	0.158	0.066
1.883333	113.00	0.012	4.957	0.703	0.157	0.065
1.8875	113.25	0.012	4.939	0.686	0.157	0.064
1.891667	113.50	0.012	4.932	0.663	0.156	0.064
1.895833	113.75	0.012	4.902	0.64	0.155	0.063
1.9	114.00	0.012	4.864	0.616	0.154	0.063
1.904167	114.25	0.012	4.832	0.59	0.154	0.062
1.908333	114.50	0.011	4.803	0.573	0.153	0.062
1.9125	114.75	0.011	4.776	0.557	0.152	0.061
1.916667	115.00	0.011	4.75	0.543	0.152	0.061
1.920833	115.25	0.011	4.723	0.532	0.15	0.06
1.925	115.50	0.011	4.696	0.529	0.151	0.06
1.929167	115.75	0.011	4.668	0.526	0.148	0.06
1.933333	116.00	0.011	4.64	0.519	0.15	0.059
1.9375	116.25	0.01	4.61	0.502	0.147	0.059
1.941667	116.50	0.011	4.582	0.487	0.149	0.059
1.945833	116.75	0.01	4.549	0.465	0.148	0.058
1.95	117.00	0.01	4.528	0.45	0.148	0.059
1.954167	117.25	0.01	4.481	0.433	0.147	0.058
1.958333	117.50	0.01	4.466	0.414	0.146	0.058
1.9625	117.75	0.01	4.426	0.38	0.146	0.059
1.966667	118.00	0.01	4.414	0.367	0.143	0.058
1.970833	118.25	0.01	4.358	0.339	0.145	0.057
1.975	118.50	0.01	4.344	0.342	0.144	0.058
1.979167	118.75	0.01	4.259	0.332	0.144	0.057
1.983333	119.00	0.01	4.258	0.307	0.143	0.057
1.9875	119.25	0.01	4.194	0.317	0.143	0.057
1.991667	119.50	0.01	4.158	0.193	0.143	0.057
1.995833	119.75	0.01	4.167	0.222	0.139	0.056
2	120.00	0.01	4.12	0.232	0.142	0.057
2.004167	120.25	0.01	4.106	0.166	0.143	0.057
2.008333	120.50	0.01	4.082	0.199	0.141	0.057
2.0125	120.75	0.01	4.04	0.168	0.141	0.056
2.016667	121.00	0.01	3.999	0.155	0.138	0.056
2.020833	121.25	0.01	3.963	0.135	0.14	0.056
2.025	121.50	0.01	3.92	0.117	0.139	0.056
2.029167	121.75	0.01	3.894	0.104	0.139	0.056
2.033333	122.00	0.01	3.839	0.105	0.139	0.056
2.0375	122.25	0.01	3.809	0.096	0.138	0.056
2.041667	122.50	0.01	3.758	0.1	0.138	0.056
2.045833	122.75	0.01	3.694	0.096	0.136	0.056
2.05	123.00	0.01	3.664	0.051	0.138	0.054
2.054167	123.25	0.01	3.626	0.069	0.137	0.055
2.058333	123.50	0.009	3.592	0.064	0.136	0.055
2.0625	123.75	0.01	3.534	0.064	0.136	0.055
2.066667	124.00	0.01	3.481	0.064	0.135	0.054
2.070833	124.25	0.009	3.43	0.063	0.135	0.054
2.075	124.50	0.01	3.388	0.063	0.134	0.053
2.079167	124.75	0.009	3.34	0.063	0.133	0.053
2.083333	125.00	0.009	3.288	0.063	0.133	0.054
2.0875	125.25	0.009	3.24	0.062	0.132	0.054
2.091667	125.50	0.009	3.184	0.062	0.131	0.051
2.095833	125.75	0.008	3.132	0.061	0.13	0.051
2.1	126.00	0.008	3.065	0.061	0.129	0.052
2.104167	126.25	0.008	3.004	0.061	0.128	0.049
2.108333	126.50	0.008	2.957	0.06	0.128	0.048
2.1125	126.75	0.008	2.905	0.06	0.126	0.048
2.116667	127.00	0.007	2.852	0.059	0.125	0.048
2.120833	127.25	0.007	2.784	0.059	0.12	0.045
2.125	127.50	0.007	2.698	0.058	0.123	0.044
2.129167	127.75	0.006	2.627	0.058	0.121	0.044
2.133333	128.00	0.006	2.556	0.057	0.12	0.043
2.1375	128.25	0.006	2.488	0.057	0.115	0.041
2.141667	128.50	0.006	2.459	0.056	0.117	0.04

2.145833	128.75	0.005	2.326	0.055	0.115	0.04
2.15	129.00	0.005	2.199	0.055	0.113	0.038
2.154167	129.25	0.005	2.017	0.054	0.112	0.037
2.158333	129.50	0.005	1.887	0.054	0.111	0.037
2.1625	129.75	0.005	1.737	0.053	0.109	0.036
2.166667	130.00	0.005	1.427	0.053	0.107	0.035
2.170833	130.25	0.005	1.222	0.052	0.106	0.035
2.175	130.50	0.004	0.991	0.052	0.102	0.033
2.179167	130.75	0.004	0.755	0.051	0.104	0.034
2.183333	131.00	0.004	0.618	0.051	0.102	0.032
2.1875	131.25	0.004	0.469	0.05	0.1	0.031
2.191667	131.50	0.004	0.359	0.049	0.099	0.031
2.195833	131.75	0.004	0.354	0.049	0.097	0.03
2.2	132.00	0.004	0.299	0.048	0.091	0.03
2.204167	132.25	0.004	0.245	0.048	0.094	0.029
2.208333	132.50	0.004	0.21	0.047	0.092	0.028
2.2125	132.75	0.004	0.168	0.047	0.09	0.028
2.216667	133.00	0.004	0.108	0.046	0.088	0.027
2.220833	133.25	0.004	0.107	0.046	0.089	0.027
2.225	133.50	0.004	0.097	0.045	0.203	0.026
2.229167	133.75	0.003	0.086	0.045	0.07	0.026
2.233333	134.00	0.003	0.072	0.045	0.068	0.025
2.2375	134.25	0.003	0.065	0.044	0.068	0.025
2.241667	134.50	0.003	0.06	0.044	0.067	0.024
2.245833	134.75	0.003	0.057	0.044	0.067	0.024
2.25	135.00	0.003	0.053	0.044	0.064	0.024
2.254167	135.25	0.003	0.051	0.044	0.063	0.023
2.258333	135.50	0.003	0.048	0.044	0.062	0.023
2.2625	135.75	0.003	0.046	0.044	0.06	0.022
2.266667	136.00	0.003	0.045	0.044	0.059	0.022
2.270833	136.25	0.003	0.043	0.045	0.058	0.021
2.275	136.50	0.003	0.041	0.045	0.057	0.021
2.279167	136.75	0.003	0.04	0.045	0.056	0.021
2.283333	137.00	0.002	0.039	0.045	0.054	0.02
2.2875	137.25	0.002	0.038	0.045	0.054	0.02
2.291667	137.50	0.002	0.037	0.045	0.052	0.019
2.295833	137.75	0.002	0.036	0.044	0.052	0.019
2.3	138.00	0.002	0.041	0.045	0.051	0.019
2.304167	138.25	0.002	0.042	0.044	0.05	0.018
2.308333	138.50	0.002	0.04	0.044	0.05	0.018
2.3125	138.75	0.002	0.038	0.043	0.049	0.018
2.316667	139.00	0.002	0.036	0.043	0.048	0.018
2.320833	139.25	0.002	0.029	0.043	0.048	0.017
2.325	139.50	0.002	0.028	0.042	0.047	0.017
2.329167	139.75	0.002	0.03	0.041	0.046	0.017
2.333333	140.00	0.002	0.03	0.039	0.046	0.017
2.3375	140.25	0.002	0.029	0.039	0.045	0.016
2.341667	140.50	0.002	0.029	0.039	0.044	0.016
2.345833	140.75	0.002	0.03	0.039	0.043	0.016
2.35	141.00	0.002	0.029	0.039	0.043	0.016
2.354167	141.25	0.002	0.028	0.038	0.042	0.015
2.358333	141.50	0.002	0.028	0.038	0.042	0.015
2.3625	141.75	0.002	0.028	0.038	0.041	0.015
2.366667	142.00	0.002	0.027	0.038	0.041	0.015
2.370833	142.25	0.002	0.027	0.037	0.04	0.015
2.375	142.50	0.002	0.026	0.037	0.039	0.014
2.379167	142.75	0.001	0.026	0.037	0.039	0.014
2.383333	143.00	0.002	0.026	0.036	0.038	0.014
2.3875	143.25	0.002	0.025	0.036	0.038	0.014
2.391667	143.50	0.002	0.025	0.036	0.037	0.014
2.395833	143.75	0.002	0.024	0.035	0.037	0.014
2.4	144.00	0.002	0.024	0.035	0.036	0.013
2.404167	144.25	0.002	0.024	0.035	0.035	0.013
2.408333	144.50	0.001	0.024	0.034	0.035	0.013
2.4125	144.75	0.001	0.023	0.034	0.034	0.013
2.416667	145.00	0.002	0.023	0.034	0.034	0.013
2.420833	145.25	0.001	0.023	0.033	0.033	0.013
2.425	145.50	0.001	0.022	0.033	0.033	0.012
2.429167	145.75	0.002	0.022	0.033	0.032	0.012
2.433333	146.00	0.001	0.022	0.033	0.032	0.012
2.4375	146.25	0.001	0.022	0.032	0.031	0.012
2.441667	146.50	0.002	0.022	0.032	0.03	0.012
2.445833	146.75	0.001	0.021	0.032	0.03	0.012
2.45	147.00	0.002	0.021	0.031	0.029	0.012
2.454167	147.25	0.001	0.021	0.031	0.029	0.012
2.458333	147.50	0.001	0.021	0.031	0.028	0.011
2.4625	147.75	0.002	0.021	0.031	0.028	0.011
2.466667	148.00	0.001	0.02	0.03	0.027	0.011
2.470833	148.25	0.001	0.02	0.03	0.027	0.011
2.475	148.50	0.002	0.02	0.03	0.027	0.011
2.479167	148.75	0.001	0.02	0.029	0.026	0.011
2.483333	149.00	0.002	0.019	0.029	0.026	0.011
2.4875	149.25	0.001	0.02	0.029	0.025	0.011
2.491667	149.50	0.001	0.019	0.029	0.025	0.011
2.495833	149.75	0.001	0.019	0.029	0.024	0.011
2.5	150.00	0.001	0.019	0.028	0.024	0.01