

Supplementary Information

Optimization of vibrationally promoted electronic resonance (VIPER) excitation

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1. Inverted VIPER signal

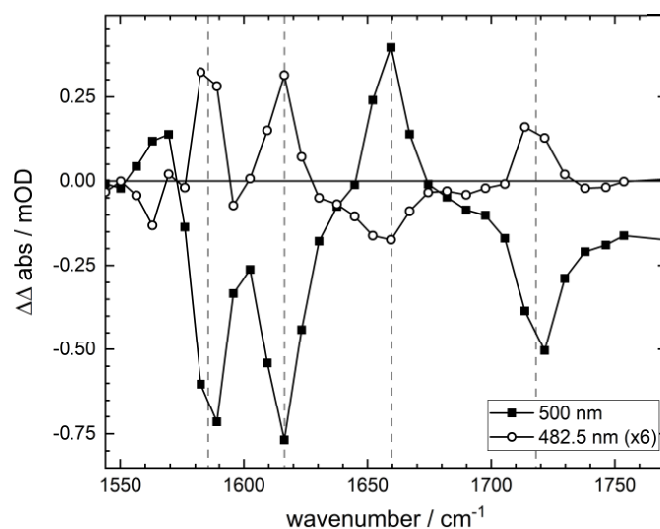


Figure S1: The sign of the VIPER 2D-IR signal depends on the visible pump wavelength (given in the legend). The spectra correspond to the measurements taken at the visible pump wavelengths depicted by the open and square symbols shown in Fig. 4A. The 482.5 nm-pumped spectrum is multiplied by a factor 6.

2. IR pump energy dependence

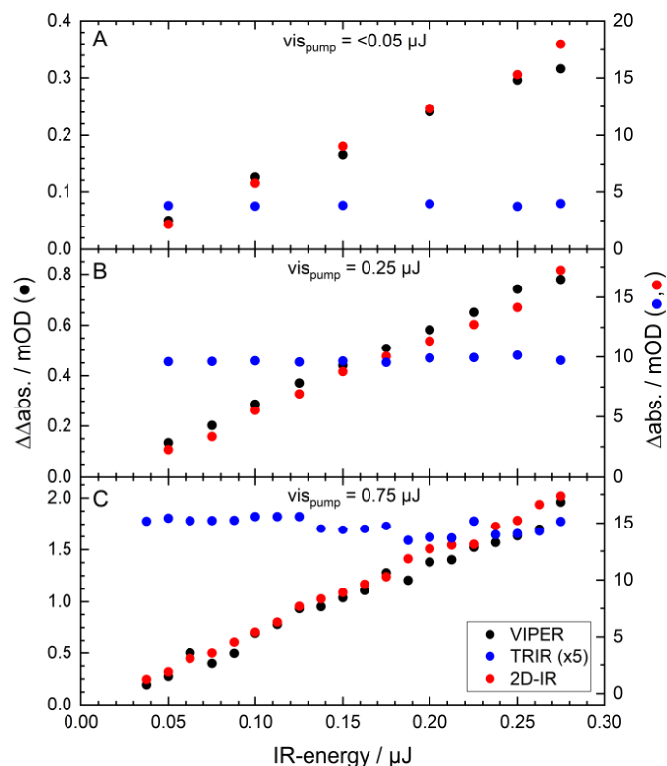


Figure S2. IR pump pulse energy dependence of the VIPER 2D-IR (black spheres), TRIR (blue) and 2D-IR (red) signal amplitudes using different visible pump energies (shown in each panel) in PCE. Panel B is reproduced from Fig. 5. The used visible pump pulse energy in panel A is estimated as it is not measurable with the used power meter.

3. VIPER to TRIR contrast

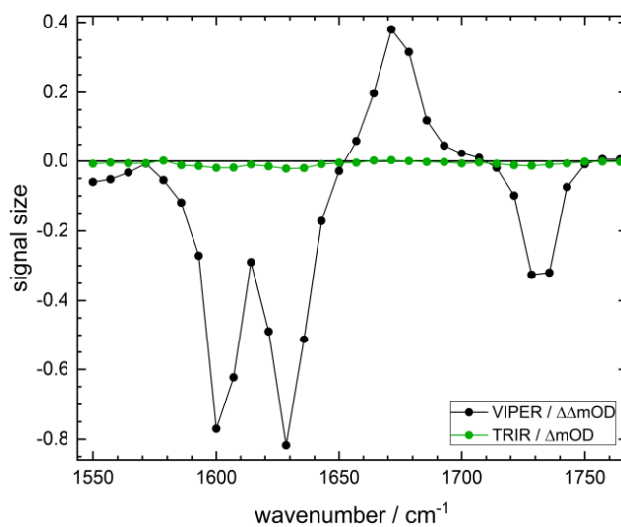


Figure S3. Comparison of the VIPER 2D-IR and TRIR spectra in PCE showing a VIPER 2D-IR/TRIR contrast ratio of about 20. The visible pump wavelength was at 510 nm (at 0.6 $\mu\text{J}/\text{pulse}$). The TRIR delay is $t_{\text{vis}}=100$ ps, the VIPER delays are $t_{\text{IR}}=100.2$ ps, $t_{\text{vis}}=100$ ps.

4. Transition Dipole Moments

Data in Figures 7 and S4 has been generated for all angles up to 90 degrees using equation 15 from: J. Breidenbeck, J. Helbing and P. Hamm, *J. Chem. Phys.*, 2004, **121**(12), 5943 with the transition dipole moment orientations:

THF	x	y	z
VIS	-4.0681	0.3447	-0.0679
RM1	42.0639	-18.3637	2.2946
RM2	26.4004	-3.6439	0.5188
CO	-9.5527	26.2958	-2.5924
PCE			
VIS	-4.0673	0.3564	-0.0738
RM1	36.5068	-14.1158	1.7801
RM2	26.7103	-2.8515	0.3314
CO	-12.2962	22.9650	-2.3701

5. Polarization dependence in PCE

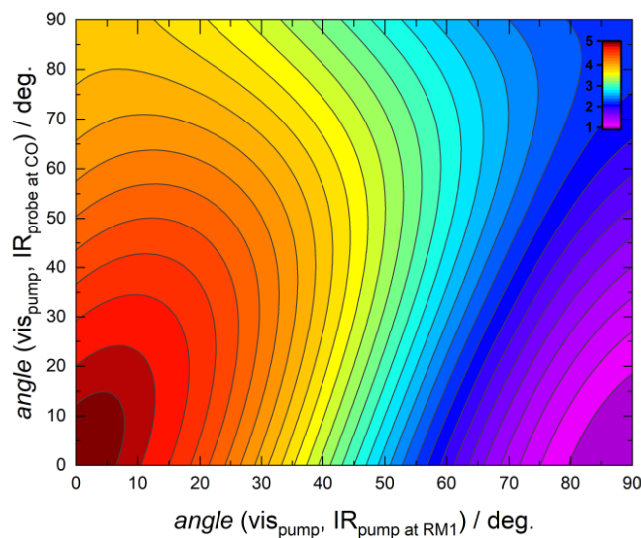


Figure S4. Same (normalized) computed polarization dependence as shown in Fig. 7, but now in the solvent PCE. In this case about a 25% gain (as opposed to 5% in THF) can be obtained for parallel vs. perpendicular orientation of the electronic transition dipole and the CO mode. The gain for optimal conditions for the RM1 remains about a factor of 5 for parallel vs. perpendicular orientation of RM1 vs. the visible transition dipole vis_{pump} .

6. VIPER-induced change in the UV/VIS spectrum in PCE

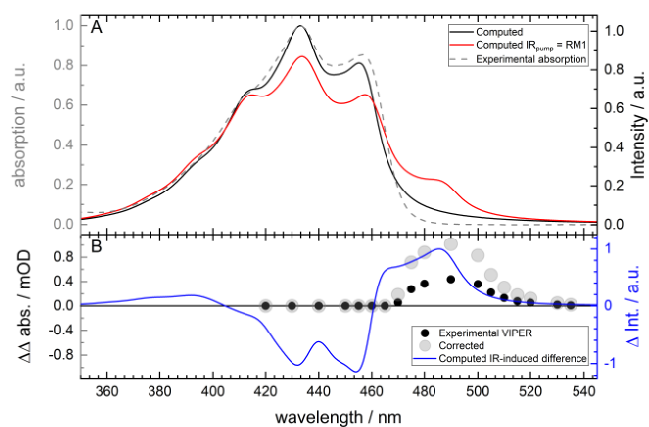


Figure S5. Same computed influence of the vibrational pre-excitation on the electronic absorption spectrum as shown in Fig. 10, but now using the solvent PCE. The visible pump power is 0.75 μ J (max. OD = 2.84), the IR power (at RM1 with OD=0.125) 5 μ J.

7. Data

Figure 2.

Panel A		Panel B			Panel C
1500.3744	0.04967	1543.9977	0.17521	0.29509	-0.05971
1501.3386	0.05461	1550.2339	0.19092	0.5016	-0.04038
1502.3029	0.06104	1556.5353	0.36716	1.053	0.01975
1503.2671	0.06922	1562.9028	0.59668	2.4179	0.11236
1504.2314	0.07945	1569.3372	0.38145	5.8276	0.11092
1505.1956	0.09222	1575.8394	-0.87733	9.0953	-0.16021
1506.1599	0.10828	1582.4102	-3.1097	0.84134	-0.6792
1507.1242	0.12843	1589.0506	-3.0086	-11.254	-0.80292
1508.0884	0.15343	1595.7615	-1.1917	-3.2496	-0.37482
1509.0527	0.18445	1602.5438	-1.1794	3.2491	-0.30453
1510.0169	0.22326	1609.3985	-2.6349	4.281	-0.58539
1510.9812	0.2714	1616.3264	-3.6411	-3.7776	-0.82055
1511.9454	0.32979	1623.3286	-1.8681	-3.8875	-0.47562
1512.9097	0.39737	1630.4061	-0.55353	-1.192	-0.16361
1513.8739	0.46803	1637.5598	-0.04394	-0.29062	-0.06678
1514.8382	0.52757	1644.7908	0.29621	-0.12026	0.02074
1515.8024	0.55161	1652.1002	1.0159	-0.01788	0.27801
1516.7667	0.52367	1659.489	1.315	-7.4977E-5	0.43951
1517.7309	0.45868	1666.9582	0.59051	-0.01751	0.16037
1518.6952	0.38381	1674.509	0.19764	0.02792	0.0092
1519.6594	0.31448	1682.1425	0.09935	0.06866	-0.03965
1520.6237	0.25545	1689.8598	0.04192	-0.01821	-0.05955
1521.5879	0.20787	1697.6621	0.00218	0.16792	-0.07126
1522.5522	0.17091	1705.5505	-0.2749	0.88908	-0.13165
1523.5164	0.14238	1713.5263	-1.1077	1.0266	-0.36901
1524.4807	0.12003	1721.5907	-1.1147	-1.2052	-0.4974
1525.4449	0.10234	1729.7449	-0.31685	-0.57062	-0.24091
1526.4092	0.08837	1737.9902	-0.08942	-0.14628	-0.14603
1527.3734	0.0773	1746.3278	-0.01929	-0.11731	-0.12846
1528.3377	0.06836	1753.6492	0.01033	-0.05218	-0.12954
1529.3019	0.06107	1771.0555	0.00613	-0.03708	-0.12008
1530.2662	0.0551				
1531.2304	0.05015				
1532.1947	0.04606				
1533.1589	0.0427				
1534.1232	0.04005				
1535.0874	0.03806				
1536.0517	0.03666				
1537.0159	0.03579				
1537.9802	0.03544				
1538.9444	0.0357				
1539.9087	0.03664				
1540.8729	0.038				
1541.8372	0.03925				
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1799.2922	-0.00147				
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Figure 3A

550	2.1684E-17	4.33681E-19	420	0
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548	-0.00833	-1.66667E-4	460	0
547.5	-0.00833	-1.66667E-4	470	0
547	-0.01667	-3.33333E-4	475	-0.07276
546.5	-0.01667	-3.33333E-4	480	-0.07797
546	-0.00833	-1.66667E-4	485	-0.11242
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545	2.1684E-17	4.33681E-19	495	0.7059
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544	2.1684E-17	4.33681E-19	500	1.3923
543.5	2.1684E-17	4.33681E-19	505	1.3997
543	2.1684E-17	4.33681E-19	510	1.34085
542.5	0.00833	1.66667E-4	515	0.8637
542	0.00833	1.66667E-4	520	0.5799
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541	0.00833	1.66667E-4	525	0.36278
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535	0.00833	1.66667E-4		
534.5	0.00833	1.66667E-4		
534	0.00833	1.66667E-4		
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532.5	2.1684E-17	4.33681E-19		
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531.5	2.1684E-17	4.33681E-19		
531	2.1684E-17	4.33681E-19		
530.5	-0.00833	-1.66667E-4		
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526.5	2.1684E-17	4.33681E-19		
526	2.1684E-17	4.33681E-19		
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525	-0.00833	-1.66667E-4		
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523	-0.00833	-1.66667E-4		
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522	-0.00833	-1.66667E-4		
521.5	-0.00833	-1.66667E-4		
521	-0.00833	-1.66667E-4		
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517.5	2.1684E-17	4.33681E-19		
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516.5	2.1684E-17	4.33681E-19		

516	2.1684E-17	4.33681E-19		
515.5	2.1684E-17	4.33681E-19		
515	0.00833	1.66667E-4		
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512	0.01667	3.33333E-4		
511.5	0.01667	3.33333E-4		
511	0.025	5E-4		
510.5	0.025	5E-4		
510	0.025	5E-4		
509.5	0.04167	8.33333E-4		
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508.5	0.04167	8.33333E-4		
508	0.05	0.001		
507.5	0.05	0.001		
507	0.05833	0.00117		
506.5	0.05833	0.00117		
506	0.06667	0.00133		
505.5	0.08333	0.00167		
505	0.08333	0.00167		
504.5	0.10833	0.00217		
504	0.10833	0.00217		
503.5	0.125	0.0025		
503	0.13333	0.00267		
502.5	0.14167	0.00283		
502	0.16667	0.00333		
501.5	0.18333	0.00367		
501	0.2	0.004		
500.5	0.225	0.0045		
500	0.23333	0.00467		
499.5	0.25833	0.00517		
499	0.29167	0.00583		
498.5	0.30833	0.00617		
498	0.34167	0.00683		
497.5	0.36667	0.00733		
497	0.425	0.0085		
496.5	0.46667	0.00933		
496	0.50833	0.01017		
495.5	0.55833	0.01117		
495	0.625	0.0125		
494.5	0.68333	0.01367		
494	0.75833	0.01517		
493.5	0.84167	0.01683		
493	0.925	0.0185		
492.5	1.025	0.0205		
492	1.125	0.0225		
491.5	1.25	0.025		
491	1.375	0.0275		
490.5	1.50833	0.03017		
490	1.65833	0.03317		
489.5	1.825	0.0365		
489	2	0.04		
488.5	2.19167	0.04383		
488	2.39167	0.04783		
487.5	2.625	0.0525		
487	2.85833	0.05717		
486.5	3.10833	0.06217		
486	3.375	0.0675		
485.5	3.675	0.0735		
485	3.975	0.0795		
484.5	4.3	0.086		
484	4.64167	0.09283		
483.5	5.00833	0.10017		
483	5.39167	0.10783		
482.5	5.79167	0.11583		
482	6.21667	0.12433		

481.5	6.65	0.133		
481	7.10833	0.14217		
480.5	7.56667	0.15133		
480	8.06667	0.16133		
479.5	8.575	0.1715		
479	9.1	0.182		
478.5	9.65	0.193		
478	10.2	0.204		
477.5	10.75833	0.21517		
477	11.35	0.227		
476.5	11.95833	0.23917		
476	12.575	0.2515		
475.5	13.2	0.264		
475	13.8	0.276		
474.5	14.41667	0.28833		
474	15.04167	0.30083		
473.5	15.69167	0.31383		
473	16.31667	0.32633		
472.5	16.95833	0.33917		
472	17.575	0.3515		
471.5	18.15833	0.36317		
471	18.75	0.375		
470.5	19.34167	0.38683		
470	19.90833	0.39817		
469.5	20.45833	0.40917		
469	20.96667	0.41933		
468.5	21.45	0.429		
468	21.91667	0.43833		
467.5	22.35833	0.44717		
467	22.775	0.4555		
466.5	23.175	0.4635		
466	23.525	0.4705		
465.5	23.84167	0.47683		
465	24.15	0.483		
464.5	24.43333	0.48867		
464	24.69167	0.49383		
463.5	24.93333	0.49867		
463	25.125	0.5025		
462.5	25.3	0.506		
462	25.45	0.509		
461.5	25.6	0.512		
461	25.70833	0.51417		
460.5	25.81667	0.51633		
460	25.9	0.518		
459.5	25.96667	0.51933		
459	26.00833	0.52017		
458.5	26.06667	0.52133		
458	26.1	0.522		
457.5	26.11667	0.52233		
457	26.14167	0.52283		
456.5	26.15	0.523		
456	26.15	0.523		
455.5	26.15	0.523		
455	26.15	0.523		
454.5	26.15	0.523		
454	26.14167	0.52283		
453.5	26.13333	0.52267		
453	26.14167	0.52283		
452.5	26.15	0.523		
452	26.15	0.523		
451.5	26.175	0.5235		
451	26.18333	0.52367		
450.5	26.2	0.524		
450	26.24167	0.52483		
449.5	26.275	0.5255		
449	26.3	0.526		
448.5	26.35	0.527		
448	26.39167	0.52783		
447.5	26.43333	0.52867		

447	26.475	0.5295		
446.5	26.525	0.5305		
446	26.58333	0.53167		
445.5	26.625	0.5325		
445	26.65833	0.53317		
444.5	26.69167	0.53383		
444	26.71667	0.53433		
443.5	26.74167	0.53483		
443	26.76667	0.53533		
442.5	26.78333	0.53567		
442	26.78333	0.53567		
441.5	26.76667	0.53533		
441	26.73333	0.53467		
440.5	26.70833	0.53417		
440	26.66667	0.53333		
439.5	26.61667	0.53233		
439	26.53333	0.53067		
438.5	26.45	0.529		
438	26.34167	0.52683		
437.5	26.23333	0.52467		
437	26.11667	0.52233		
436.5	25.96667	0.51933		
436	25.79167	0.51583		
435.5	25.63333	0.51267		
435	25.45	0.509		
434.5	25.25833	0.50517		
434	25.05	0.501		
433.5	24.825	0.4965		
433	24.58333	0.49167		
432.5	24.33333	0.48667		
432	24.1	0.482		
431.5	23.83333	0.47667		
431	23.58333	0.47167		
430.5	23.31667	0.46633		
430	23.03333	0.46067		
429.5	22.76667	0.45533		
429	22.48333	0.44967		
428.5	22.2	0.444		
428	21.925	0.4385		
427.5	21.65833	0.43317		
427	21.375	0.4275		
426.5	21.1	0.422		
426	20.825	0.4165		
425.5	20.55833	0.41117		
425	20.28333	0.40567		
424.5	20.025	0.4005		
424	19.76667	0.39533		
423.5	19.50833	0.39017		
423	19.25833	0.38517		
422.5	19.01667	0.38033		
422	18.76667	0.37533		
421.5	18.525	0.3705		
421	18.28333	0.36567		
420.5	18.04167	0.36083		
420	17.79167	0.35583		
419.5	17.56667	0.35133		
419	17.33333	0.34667		
418.5	17.10833	0.34217		
418	16.875	0.3375		
417.5	16.63333	0.33267		
417	16.4	0.328		
416.5	16.18333	0.32367		
416	15.95	0.319		
415.5	15.71667	0.31433		
415	15.48333	0.30967		
414.5	15.24167	0.30483		
414	15	0.3		
413.5	14.75	0.295		
413	14.50833	0.29017		

412.5	14.26667	0.28533		
412	14.01667	0.28033		
411.5	13.775	0.2755		
411	13.525	0.2705		
410.5	13.275	0.2655		
410	13.025	0.2605		

Figure 3B.

420	7.7928	17.92
430	13.578	11.893
440	13.812	16.551
450	15.981	14.709
460	16.4805	17.7745
470	21.297	17.282
475	23.025	20.757
480	22.5375	18.206
485	30.4815	17.4945
490	31.293	16.387
495	30.483	14.3
497	30.819	15.883
500	16.254	18.668
505	8.5233	19.2
510	3.9435	19.8995
515	2.2401	15.996
520	1.6491	16.336
522	1.9068	16.779
525	1.1718	19.206
527	0.65754	16.112
530	0.8499	11.036
532	0.62856	18.067
535	0.3036	15.343
540	0.10995	19.113

Figure 4A

	1594.3	1630.4	1673.8	1724.5
98	0.01121	-0.00819	-0.00792	-0.01066
98.5	0.00128	-0.00399	-0.00364	-0.01782
99	0.0154	0.00808	-7.06E-4	-0.00423
99.2	0.00861	-0.01026	-0.00638	-0.00819
99.4	0.01243	0.00575	0.00181	-0.01164
99.6	0.00611	0.00415	0.00467	-0.00662
99.8	0.00582	0.00206	0.00432	-0.00373
100	-0.02646	-0.0345	0.00899	-0.02509
100.2	-0.14077	-0.14996	0.08397	-0.07883
100.4	-0.44708	-0.43888	0.2535	-0.22338
100.6	-0.84147	-0.85162	0.47996	-0.40693
100.8	-1.11943	-1.11353	0.64378	-0.52062
101	-1.13513	-1.09682	0.64156	-0.52398
101.33	-0.93857	-0.92693	0.54217	-0.43806
101.78	-0.64171	-0.63983	0.3835	-0.30335
102.37	-0.39243	-0.39158	0.23879	-0.18233
103.16	-0.20602	-0.20863	0.13218	-0.09907
104.22	-0.09595	-0.10671	0.07306	-0.05118
105.62	-0.04463	-0.05615	0.04023	-0.02282
107.5	-0.00816	-0.03304	0.03133	-0.00942
113.34	0.00841	-0.00269	0.01936	0.00189
123.71	0.01754	-2.21E-4	0.00906	0.00334
142.17	0.00377	0.00556	0.00493	0.00357

Figure 4B

	1594.3	1630.4	1673.8	1724.5
98	-0.01027	-0.00141	-0.01112	-0.01373
98.5	-0.01361	-7.22E-4	-0.0096	-0.01179
99	-0.00147	-0.0013	-0.00708	-0.02167
99.2	1.95E-4	7.85E-4	-0.00952	-0.01454
99.4	1.37E-4	4.61E-4	-0.00719	-0.01685
99.6	-0.00474	0.00515	-0.00821	-0.02578
99.8	-0.02546	-0.01149	-0.01275	-0.02874
100	-0.02789	-0.02272	0.00325	-0.03747
100.2	-0.10315	-0.10808	0.0389	-0.07626
100.4	-0.22064	-0.21078	0.10078	-0.1216
100.6	-0.31618	-0.30568	0.15061	-0.15971
100.8	-0.22935	-0.23331	0.11076	-0.13025
101	-0.17517	-0.1693	0.06834	-0.09675
101.33	-0.14631	-0.13668	0.0533	-0.08986
101.78	-0.14216	-0.12995	0.0477	-0.08717
102.37	-0.10224	-0.10422	0.03389	-0.08646
103.16	-0.08691	-0.07352	0.01262	-0.07253
104.22	-0.05082	-0.05155	0.01193	-0.05702
105.62	-0.04486	-0.03486	0.01103	-0.04838
107.5	-0.03683	-0.0233	0.00159	-0.04102
113.34	-0.02521	-0.01681	-0.00539	-0.04413
123.71	-0.01615	-0.01047	-0.01845	-0.03469
142.17	-0.01227	-0.01014	-0.01806	-0.03187

Figure 4C

	1594.3	1630.4	1673.8	1724.5
98	-0.01264	-0.01673	-0.00484	-0.00519
98.5	-0.00623	-6.12E-4	7.29E-4	-0.00352
99	-0.00918	-0.00882	-0.00113	-0.0083
99.2	0.0016	-0.00104	-0.00591	-0.01382
99.4	-0.00992	-0.01044	-0.00743	-0.00845
99.6	-0.00532	-0.01248	-0.00136	-0.01619
99.8	-0.0178	-0.02625	-6.98E-4	-0.02291
100	-0.03954	-0.02727	0.00737	-0.02525
100.2	-0.08815	-0.0845	0.02769	-0.05456
100.4	-0.12931	-0.12807	0.05615	-0.07144
100.6	-0.15486	-0.16661	0.0829	-0.08352
100.8	-0.19473	-0.20375	0.10218	-0.1003
101	-0.14076	-0.14441	0.08262	-0.08242
101.33	-0.13354	-0.15151	0.07938	-0.07481
101.78	-0.11054	-0.12549	0.04689	-0.06246
102.37	-0.0751	-0.06207	0.03241	-0.03681

103.16	-0.03872	-0.04278	0.01393	-0.02674
104.22	-0.02894	-0.03407	0.01028	-0.01637
105.62	-0.01732	-0.03087	0.005	-0.01436
107.5	-0.02009	-0.01805	0.00858	-0.00411
113.34	-0.00418	-0.0101	-9.64E-4	-0.00772
123.71	-0.01162	-0.00888	0.00329	-0.00534
142.17	-0.01029	-0.00867	0.00105	-0.00151

Figure 5.

0.275	0.7794	17.231	9.7095
0.25	0.7418	14.155	10.1325
0.225	0.6513	12.725	9.9395
0.2	0.5822	11.373	9.905
0.175	0.5097	10.043	9.5425
0.15	0.44056	8.791	9.648
0.125	0.3711	6.937	9.566
0.1	0.28817	5.517	9.6735
0.075	0.20218	3.352	9.6235
0.05	0.13411	2.26	9.6025

Figure 6.

	Panel A			Panel B
0.2	0.8993	20.747	3.598	0.49989
0.4	1.4259	20.094	6.2696	0.45486
0.6	1.6511	19.369	8.3774	0.39418
1	2.0844	20.674	11.982	0.34792
1.2	2.1315	20.573	13.694	0.3113
1.4	2.2114	20.111	15.408	0.28705
1.6	2.2717	20.939	17.404	0.26105
1.8	2.12	21.421	19.546	0.21692
2	2.127	21.514	21.784	0.19528
2.25	2.13	21.767	22.26	0.19137
2.5	2.5672	21.95	25.23	0.2035
3	2.5142	22.27	31.086	0.16176

Figure 7 and Figure S4.

Data has been generated for all angles up to 90 degrees using equation 15 from: J. Bredenbeck, J. Helbing and P. Hamm, *J. Chem. Phys.*, 2004, **121**(12), 5943 with the transition dipole moment orientations:

THF	x	y	z
VIS	-4.0681	0.3447	-0.0679
RM1	42.0639	-18.3637	2.2946
RM2	26.4004	-3.6439	0.5188
CO	-9.5527	26.2958	-2.5924
PCE			
VIS	-4.0673	0.3564	-0.0738
RM1	36.5068	-14.1158	1.7801
RM2	26.7103	-2.8515	0.3314
CO	-12.2962	22.9650	-2.3701

Figure 8A.

545	-8.33333E-4	-8.33333E-5	420	0
544.5	-0.00333	-3.33333E-4	430	0
544	-0.00333	-3.33333E-4	440	0
543.5	-8.33333E-4	-8.33333E-5	450	0
543	-8.33333E-4	-8.33333E-5	455	0
542.5	-8.33333E-4	-8.33333E-5	460	0
542	-8.33333E-4	-8.33333E-5	465	0
541.5	-8.33333E-4	-8.33333E-5	470	0.05593
541	-8.33333E-4	-8.33333E-5	475	0.27481
540.5	-8.33333E-4	-8.33333E-5	480	0.36473
540	-8.33333E-4	-8.33333E-5	490	0.4374
539.5	-0.00333	-3.33333E-4	500	0.35872
539	-0.00333	-3.33333E-4	505	0.2209
538.5	-0.00333	-3.33333E-4	510	0.13142
538	-8.33333E-4	-8.33333E-5	515	0.07769
537.5	-8.33333E-4	-8.33333E-5	520	0.05357
537	-0.00333	-3.33333E-4	530	0.02065
536.5	-0.00333	-3.33333E-4	535	0.00842
536	-8.33333E-4	-8.33333E-5		
535.5	-8.33333E-4	-8.33333E-5		
535	-8.33333E-4	-8.33333E-5		
534.5	-8.33333E-4	-8.33333E-5		
534	-8.33333E-4	-8.33333E-5		
533.5	-8.33333E-4	-8.33333E-5		
533	-8.33333E-4	-8.33333E-5		
532.5	-8.33333E-4	-8.33333E-5		
532	-8.33333E-4	-8.33333E-5		
531.5	-8.33333E-4	-8.33333E-5		
531	-8.33333E-4	-8.33333E-5		
530.5	-0.00333	-3.33333E-4		
530	-0.00333	-3.33333E-4		
529.5	-0.00333	-3.33333E-4		
529	-0.00333	-3.33333E-4		
528.5	-0.00333	-3.33333E-4		
528	-0.00333	-3.33333E-4		
527.5	-0.00333	-3.33333E-4		
527	-0.00333	-3.33333E-4		
526.5	-0.00333	-3.33333E-4		
526	-0.00333	-3.33333E-4		
525.5	-0.00333	-3.33333E-4		
525	-0.00333	-3.33333E-4		
524.5	-0.00333	-3.33333E-4		
524	-0.00333	-3.33333E-4		
523.5	-0.00333	-3.33333E-4		
523	-0.00333	-3.33333E-4		
522.5	-0.00333	-3.33333E-4		
522	-0.00333	-3.33333E-4		
521.5	-0.00333	-3.33333E-4		
521	-0.00333	-3.33333E-4		
520.5	-0.00333	-3.33333E-4		
520	-0.00333	-3.33333E-4		
519.5	-0.00333	-3.33333E-4		
519	-0.00417	-4.16667E-4		
518.5	-0.00417	-4.16667E-4		
518	-0.00417	-4.16667E-4		
517.5	-0.00417	-4.16667E-4		
517	-0.00417	-4.16667E-4		
516.5	-0.00417	-4.16667E-4		
516	-0.00417	-4.16667E-4		
515.5	-0.00417	-4.16667E-4		
515	-0.00417	-4.16667E-4		
514.5	-0.00417	-4.16667E-4		
514	-0.00417	-4.16667E-4		
513.5	-0.00167	-1.66667E-4		
513	-0.00417	-4.16667E-4		
512.5	-0.00333	-3.33333E-4		
512	-0.00417	-4.16667E-4		
511.5	-0.00417	-4.16667E-4		

511	-0.00417	-4.16667E-4		
510.5	-0.00417	-4.16667E-4		
510	-0.00417	-4.16667E-4		
509.5	-0.00333	-3.33333E-4		
509	-8.33333E-4	-8.33333E-5		
508.5	-0.00167	-1.66667E-4		
508	-0.00167	-1.66667E-4		
507.5	-0.00167	-1.66667E-4		
507	-0.00167	-1.66667E-4		
506.5	-0.00333	-3.33333E-4		
506	-8.33333E-4	-8.33333E-5		
505.5	-8.33333E-4	-8.33333E-5		
505	-8.33333E-4	-8.33333E-5		
504.5	-8.33333E-4	-8.33333E-5		
504	-8.33333E-4	-8.33333E-5		
503.5	-8.33333E-4	-8.33333E-5		
503	-8.33333E-4	-8.33333E-5		
502.5	-8.33333E-4	-8.33333E-5		
502	-8.33333E-4	-8.33333E-5		
501.5	-8.33333E-4	-8.33333E-5		
501	-1.59016E-17	-1.59016E-18		
500.5	-1.59016E-17	-1.59016E-18		
500	-1.59016E-17	-1.59016E-18		
499.5	-1.59016E-17	-1.59016E-18		
499	-1.59016E-17	-1.59016E-18		
498.5	0.0025	2.5E-4		
498	0.00167	1.66667E-4		
497.5	0.00167	1.66667E-4		
497	0.0025	2.5E-4		
496.5	0.0025	2.5E-4		
496	0.0025	2.5E-4		
495.5	0.0025	2.5E-4		
495	1.4456E-18	1.4456E-19		
494.5	1.4456E-18	1.4456E-19		
494	0.0025	2.5E-4		
493.5	0.00333	3.33333E-4		
493	0.00333	3.33333E-4		
492.5	0.00333	3.33333E-4		
492	0.00583	5.83333E-4		
491.5	0.00667	6.66667E-4		
491	0.00667	6.66667E-4		
490.5	0.00667	6.66667E-4		
490	0.00667	6.66667E-4		
489.5	0.0075	7.5E-4		
489	0.01	0.001		
488.5	0.01	0.001		
488	0.01333	0.00133		
487.5	0.01333	0.00133		
487	0.01583	0.00158		
486.5	0.01667	0.00167		
486	0.01917	0.00192		
485.5	0.02	0.002		
485	0.0225	0.00225		
484.5	0.02583	0.00258		
484	0.02667	0.00267		
483.5	0.0325	0.00325		
483	0.03333	0.00333		
482.5	0.03917	0.00392		
482	0.0425	0.00425		
481.5	0.04667	0.00467		
481	0.0525	0.00525		
480.5	0.05917	0.00592		
480	0.06583	0.00658		
479.5	0.075	0.0075		
479	0.0825	0.00825		
478.5	0.0925	0.00925		
478	0.1025	0.01025		
477.5	0.11	0.011		
477	0.12333	0.01233		

476.5	0.14167	0.01417		
476	0.16083	0.01608		
475.5	0.17583	0.01758		
475	0.19583	0.01958		
474.5	0.2225	0.02225		
474	0.24917	0.02492		
473.5	0.27917	0.02792		
473	0.315	0.0315		
472.5	0.35833	0.03583		
472	0.40167	0.04017		
471.5	0.45417	0.04542		
471	0.50667	0.05067		
470.5	0.56917	0.05692		
470	0.64167	0.06417		
469.5	0.72167	0.07217		
469	0.8075	0.08075		
468.5	0.89417	0.08942		
468	0.99333	0.09933		
467.5	1.09917	0.10992		
467	1.2125	0.12125		
466.5	1.335	0.1335		
466	1.46	0.146		
465.5	1.58833	0.15883		
465	1.715	0.1715		
464.5	1.8425	0.18425		
464	1.97583	0.19758		
463.5	2.11167	0.21117		
463	2.235	0.2235		
462.5	2.35417	0.23542		
462	2.46417	0.24642		
461.5	2.57083	0.25708		
461	2.6675	0.26675		
460.5	2.7575	0.27575		
460	2.83167	0.28317		
459.5	2.89167	0.28917		
459	2.94417	0.29442		
458.5	2.9825	0.29825		
458	3.01583	0.30158		
457.5	3.03917	0.30392		
457	3.05	0.305		
456.5	3.05583	0.30558		
456	3.05333	0.30533		
455.5	3.0475	0.30475		
455	3.035	0.3035		
454.5	3.02167	0.30217		
454	3.00583	0.30058		
453.5	2.99167	0.29917		
453	2.975	0.2975		
452.5	2.95583	0.29558		
452	2.9425	0.29425		
451.5	2.92833	0.29283		
451	2.91583	0.29158		
450.5	2.90333	0.29033		
450	2.89583	0.28958		
449.5	2.88833	0.28883		
449	2.87917	0.28792		
448.5	2.8725	0.28725		
448	2.86583	0.28658		
447.5	2.865	0.2865		
447	2.85917	0.28592		
446.5	2.85333	0.28533		
446	2.8525	0.28525		
445.5	2.8525	0.28525		
445	2.8525	0.28525		
444.5	2.85833	0.28583		
444	2.865	0.2865		
443.5	2.8725	0.28725		
443	2.88583	0.28858		
442.5	2.9025	0.29025		

442	2.925	0.2925		
441.5	2.95083	0.29508		
441	2.98083	0.29808		
440.5	3.0175	0.30175		
440	3.06	0.306		
439.5	3.10583	0.31058		
439	3.1525	0.31525		
438.5	3.20417	0.32042		
438	3.25417	0.32542		
437.5	3.30667	0.33067		
437	3.36	0.336		
436.5	3.41	0.341		
436	3.4525	0.34525		
435.5	3.49167	0.34917		
435	3.52417	0.35242		
434.5	3.54833	0.35483		
434	3.56417	0.35642		
433.5	3.57417	0.35742		
433	3.57167	0.35717		
432.5	3.56583	0.35658		
432	3.55	0.355		
431.5	3.52583	0.35258		
431	3.49667	0.34967		
430.5	3.46083	0.34608		
430	3.4275	0.34275		
429.5	3.39083	0.33908		
429	3.35083	0.33508		
428.5	3.30833	0.33083		
428	3.265	0.3265		
427.5	3.2225	0.32225		
427	3.1825	0.31825		
426.5	3.14333	0.31433		
426	3.10583	0.31058		
425.5	3.06917	0.30692		
425	3.02667	0.30267		
424.5	2.99	0.299		
424	2.95417	0.29542		
423.5	2.9175	0.29175		
423	2.87833	0.28783		
422.5	2.845	0.2845		
422	2.80583	0.28058		
421.5	2.76917	0.27692		
421	2.73583	0.27358		
420.5	2.7025	0.27025		
420	2.66667	0.26667		
419.5	2.63583	0.26358		
419	2.60333	0.26033		
418.5	2.57083	0.25708		
418	2.54333	0.25433		
417.5	2.51667	0.25167		
417	2.4925	0.24925		
416.5	2.46917	0.24692		
416	2.44417	0.24442		
415.5	2.42667	0.24267		
415	2.41	0.241		
414.5	2.39333	0.23933		
414	2.37667	0.23767		
413.5	2.36333	0.23633		
413	2.34333	0.23433		
412.5	2.32667	0.23267		
412	2.3075	0.23075		
411.5	2.28667	0.22867		
411	2.26333	0.22633		
410.5	2.2375	0.22375		
410	2.205	0.2205		

Figure 8B.

420	15.099	5.545
430	8.46045	4.7435

440	1.69125	5.7495
450	0.31089	5.811
455	0.18035	6.55525
460	0.08177	5.62325
465	0.12113	6.8975
470	0.03	6.1885
475	0.08226	6.798
480	0.06464	6.498

Figure 8C-E.

	Panel C			Panel D			Panel E		
0.0625	0.022	0.02528	0.02799	1.3842	1.5629	1.8751	0.5185	0.52763	0.53094
0.125	0.02914	0.03825	0.03578	2.4751	3.1387	3.006	0.9588	0.99259	0.95811
0.25	0.03104	0.05238	0.05134	3.562	5.6127	5.2679	1.6389	1.7554	1.8125
0.5	0.03104	0.08168	0.08248	4.19	9.6276	9.7916	3.1021	3.5526	3.5212
1	0	0	0	4.665	18.838	18.839	5.321	6.933	6.9386

Figure 9.

	Panel A			Panel B			Panel C		
25	0.5743	0.64983	0.88353	0.836	0.85898	1.2031	4.842	5.3322	4.6277
50	1.1321	1.444	1.4827	1.6364	1.7269	1.8577	8.577	10.367	10.443
100	1.613	2.5877	2.681	3.0319	3.3725	3.1669	14.85	21.418	22.072
250	2.3505	6.9391	6.276	5.911	7.6552	7.0945	24.92	56.806	56.961
500	1.8303	11.97	12.268	8.154	13.349	13.64	28.86	115.29	115.11

Figure 10.

	Panel A						Panel B		
545.6538	0.02907	0.03599	550	2.168E-17	545.6538	0.05049	420	0	0
545.2235	0.02928	0.03633	549.5	2.168E-17	545.2235	0.05139	430	0.025	1.36065
544.794	0.0295	0.03668	549	-0.00833	544.794	0.05232	440	0	0
544.3652	0.02972	0.03703	548.5	-0.00833	544.3652	0.05328	450	0	0
543.9371	0.02994	0.03739	548	-0.00833	543.9371	0.05425	460	0	0
543.5097	0.03017	0.03775	547.5	-0.00833	543.5097	0.05526	470	0	0
543.0831	0.0304	0.03812	547	-0.01667	543.0831	0.05628	475	-0.07276	-2.41302
542.6571	0.03063	0.03849	546.5	-0.01667	542.6571	0.05733	480	-0.07797	-1.55612
542.2319	0.03087	0.03888	546	-0.00833	542.2319	0.05841	485	-0.11242	-1.18436
541.8074	0.0311	0.03927	545.5	2.168E-17	541.8074	0.05952	490	0.0725	0.37906
541.3836	0.03134	0.03966	545	2.168E-17	541.3836	0.06066	495	0.7059	2.11676
540.9605	0.03159	0.04007	544.5	0.00833	540.9605	0.06182	497	1.008	2.62636
540.5382	0.03183	0.04048	544	2.168E-17	540.5382	0.06302	500	1.3923	3.13022
540.1165	0.03208	0.04089	543.5	2.168E-17	540.1165	0.06424	505	1.3997	2.77744
539.6956	0.03233	0.04132	543	2.168E-17	539.6956	0.0655	510	1.34085	2.52859
539.2753	0.03259	0.04175	542.5	0.00833	539.2753	0.0668			
538.8558	0.03285	0.04219	542	0.00833	538.8558	0.06812			
538.4369	0.03311	0.04264	541.5	0.00833	538.4369	0.06949			
538.0188	0.03337	0.0431	541	0.00833	538.0188	0.07089			
537.6013	0.03364	0.04356	540.5	0.00833	537.6013	0.07233			
537.1846	0.03391	0.04404	540	2.168E-17	537.1846	0.07381			
536.7685	0.03419	0.04452	539.5	0.00833	536.7685	0.07533			
536.3532	0.03447	0.04501	539	0.00833	536.3532	0.07689			
535.9385	0.03475	0.04552	538.5	0.00833	535.9385	0.0785			
535.5245	0.03504	0.04603	538	0.00833	535.5245	0.08016			
535.1112	0.03533	0.04655	537.5	0.00833	535.1112	0.08186			
534.6986	0.03562	0.04709	537	0.00833	534.6986	0.08361			
534.2867	0.03592	0.04763	536.5	0.00833	534.2867	0.08541			
533.8754	0.03622	0.04819	536	0.00833	533.8754	0.08727			
533.4649	0.03652	0.04875	535.5	0.00833	533.4649	0.08918			
533.055	0.03683	0.04933	535	0.00833	533.055	0.09115			
532.6458	0.03715	0.04992	534.5	0.00833	532.6458	0.09318			
532.2372	0.03746	0.05053	534	0.00833	532.2372	0.09527			
531.8294	0.03779	0.05115	533.5	2.168E-17	531.8294	0.09742			
531.4222	0.03811	0.05178	533	2.168E-17	531.4222	0.09964			
531.0156	0.03844	0.05242	532.5	2.168E-17	531.0156	0.10193			
530.6098	0.03878	0.05308	532	2.168E-17	530.6098	0.10429			
530.2046	0.03912	0.05375	531.5	2.168E-17	530.2046	0.10673			
529.8001	0.03946	0.05444	531	2.168E-17	529.8001	0.10924			
529.3962	0.03981	0.05515	530.5	-0.00833	529.3962	0.11183			
528.993	0.04017	0.05587	530	-0.00833	528.993	0.11451			
528.5905	0.04052	0.05661	529.5	-0.00833	528.5905	0.11728			
528.1886	0.04089	0.05736	529	-0.00833	528.1886	0.12013			
527.7874	0.04126	0.05814	528.5	-0.00833	527.7874	0.12309			
527.3869	0.04163	0.05893	528	-0.00833	527.3869	0.12614			
526.9869	0.04201	0.05974	527.5	-0.00833	526.9869	0.12929			
526.5877	0.0424	0.06058	527	-0.00833	526.5877	0.13255			
526.1891	0.04279	0.06143	526.5	2.168E-17	526.1891	0.13592			
525.7911	0.04319	0.06231	526	2.168E-17	525.7911	0.13941			
525.3938	0.04359	0.0632	525.5	2.168E-17	525.3938	0.14302			
524.9972	0.044	0.06413	525	-0.00833	524.9972	0.14676			
524.6011	0.04441	0.06507	524.5	-0.00833	524.6011	0.15063			
524.2058	0.04483	0.06604	524	2.168E-17	524.2058	0.15464			
523.811	0.04526	0.06704	523.5	2.168E-17	523.811	0.15879			
523.4169	0.0457	0.06806	523	-0.00833	523.4169	0.16309			
523.0235	0.04614	0.06912	522.5	-0.00833	523.0235	0.16755			
522.6307	0.04658	0.0702	522	-0.00833	522.6307	0.17218			

522.2385	0.04704	0.07131	521.5	-0.00833	522.2385	0.17697			
521.8469	0.0475	0.07245	521	-0.00833	521.8469	0.18195			
521.456	0.04797	0.07363	520.5	-0.00833	521.456	0.18711			
521.0657	0.04844	0.07484	520	-0.00833	521.0657	0.19246			
520.6761	0.04893	0.07608	519.5	2.168E-17	520.6761	0.19803			
520.287	0.04942	0.07737	519	2.168E-17	520.287	0.2038			
519.8986	0.04992	0.07869	518.5	2.168E-17	519.8986	0.2098			
519.5109	0.05042	0.08005	518	2.168E-17	519.5109	0.21603			
519.1237	0.05094	0.08145	517.5	2.168E-17	519.1237	0.22251			
518.7372	0.05146	0.0829	517	2.168E-17	518.7372	0.22924			
518.3512	0.05199	0.08439	516.5	2.168E-17	518.3512	0.23624			
517.966	0.05253	0.08593	516	2.168E-17	517.966	0.24351			
517.5813	0.05308	0.08752	515.5	2.168E-17	517.5813	0.25108			
517.1972	0.05364	0.08915	515	0.00833	517.1972	0.25895			
516.8138	0.05421	0.09084	514.5	0.00833	516.8138	0.26713			
516.4309	0.05479	0.09259	514	0.00833	516.4309	0.27565			
516.0487	0.05537	0.09439	513.5	0.01667	516.0487	0.2845			
515.6671	0.05597	0.09625	513	0.01667	515.6671	0.29372			
515.2861	0.05658	0.09818	512.5	0.01667	515.2861	0.30331			
514.9057	0.0572	0.10016	512	0.01667	514.9057	0.31329			
514.5259	0.05783	0.10222	511.5	0.01667	514.5259	0.32367			
514.1467	0.05847	0.10434	511	0.025	514.1467	0.33447			
513.7681	0.05912	0.10653	510.5	0.025	513.7681	0.3457			
513.3901	0.05978	0.10879	510	0.025	513.3901	0.35738			
513.0127	0.06046	0.11113	509.5	0.04167	513.0127	0.36952			
512.6359	0.06114	0.11355	509	0.04167	512.6359	0.38213			
512.2597	0.06184	0.11605	508.5	0.04167	512.2597	0.39523			
511.8841	0.06255	0.11862	508	0.05	511.8841	0.40884			
511.5091	0.06328	0.12128	507.5	0.05	511.5091	0.42295			
511.1347	0.06402	0.12403	507	0.05833	511.1347	0.43758			
510.7609	0.06477	0.12686	506.5	0.05833	510.7609	0.45274			
510.3876	0.06554	0.12978	506	0.06667	510.3876	0.46843			
510.015	0.06632	0.13278	505.5	0.08333	510.015	0.48464			
509.6429	0.06712	0.13588	505	0.08333	509.6429	0.50139			
509.2714	0.06793	0.13906	504.5	0.10833	509.2714	0.51865			
508.9006	0.06875	0.14232	504	0.10833	508.9006	0.53642			
508.5302	0.0696	0.14567	503.5	0.125	508.5302	0.55468			
508.1605	0.07046	0.1491	503	0.13333	508.1605	0.5734			
507.7914	0.07133	0.1526	502.5	0.14167	507.7914	0.59256			
507.4228	0.07223	0.15618	502	0.16667	507.4228	0.61212			
507.0548	0.07314	0.15982	501.5	0.18333	507.0548	0.63202			
506.6874	0.07407	0.16352	501	0.2	506.6874	0.65223			
506.3206	0.07502	0.16727	500.5	0.225	506.3206	0.67267			
505.9543	0.07599	0.17107	500	0.23333	505.9543	0.69327			
505.5886	0.07698	0.17489	499.5	0.25833	505.5886	0.71395			
505.2235	0.07799	0.17874	499	0.29167	505.2235	0.73463			
504.8589	0.07902	0.18259	498.5	0.30833	504.8589	0.7552			
504.4949	0.08007	0.18644	498	0.34167	504.4949	0.77557			
504.1315	0.08115	0.19027	497.5	0.36667	504.1315	0.79563			
503.7687	0.08225	0.19406	497	0.425	503.7687	0.81527			
503.4064	0.08337	0.1978	496.5	0.46667	503.4064	0.83436			
503.0446	0.08452	0.20148	496	0.50833	503.0446	0.85281			
502.6835	0.08569	0.20507	495.5	0.55833	502.6835	0.8705			
502.3229	0.08689	0.20858	495	0.625	502.3229	0.88731			
501.9628	0.08812	0.21198	494.5	0.68333	501.9628	0.90317			
501.6033	0.08937	0.21526	494	0.75833	501.6033	0.91797			
501.2444	0.09065	0.21842	493.5	0.84167	501.2444	0.93165			
500.886	0.09196	0.22144	493	0.925	500.886	0.94413			
500.5282	0.0933	0.22433	492.5	1.025	500.5282	0.95537			
500.1709	0.09468	0.22706	492	1.125	500.1709	0.96533			
499.8142	0.09608	0.22966	491.5	1.25	499.8142	0.974			
499.458	0.09752	0.23211	491	1.375	499.458	0.98138			
499.1024	0.09899	0.23442	490.5	1.50833	499.1024	0.98747			
498.7473	0.1005	0.23659	490	1.65833	498.7473	0.99231			
498.3928	0.10205	0.23863	489.5	1.825	498.3928	0.99593			
498.0388	0.10363	0.24055	489	2	498.0388	0.99837			
497.6853	0.10526	0.24236	488.5	2.19167	497.6853	0.99971			
497.3324	0.10692	0.24406	488	2.39167	497.3324	1			
496.9801	0.10863	0.24568	487.5	2.625	496.9801	0.99932			

496.6283	0.11038	0.24721	487	2.85833	496.6283	0.99773			
496.277	0.11217	0.24867	486.5	3.10833	496.277	0.99533			
495.9262	0.11401	0.25008	486	3.375	495.9262	0.99218			
495.576	0.1159	0.25145	485.5	3.675	495.576	0.98836			
495.2263	0.11784	0.25279	485	3.975	495.2263	0.98396			
494.8772	0.11984	0.25411	484.5	4.3	494.8772	0.97905			
494.5286	0.12188	0.25542	484	4.64167	494.5286	0.97369			
494.1805	0.12398	0.25673	483.5	5.00833	494.1805	0.96796			
493.833	0.12614	0.25806	483	5.39167	493.833	0.96192			
493.4859	0.12836	0.25942	482.5	5.79167	493.4859	0.95563			
493.1394	0.13064	0.26081	482	6.21667	493.1394	0.94914			
492.7935	0.13299	0.26225	481.5	6.65	492.7935	0.9425			
492.448	0.1354	0.26374	481	7.10833	492.448	0.93575			
492.1031	0.13789	0.26528	480.5	7.56667	492.1031	0.92893			
491.7587	0.14044	0.2669	480	8.06667	491.7587	0.92208			
491.4148	0.14307	0.26859	479.5	8.575	491.4148	0.91521			
491.0715	0.14578	0.27035	479	9.1	491.0715	0.90835			
490.7287	0.14857	0.27221	478.5	9.65	490.7287	0.90151			
490.3863	0.15144	0.27415	478	10.2	490.3863	0.89472			
490.0445	0.15441	0.27618	477.5	10.75833	490.0445	0.88798			
489.7032	0.15746	0.27832	477	11.35	489.7032	0.88129			
489.3625	0.16061	0.28056	476.5	11.95833	489.3625	0.87466			
489.0222	0.16385	0.28291	476	12.575	489.0222	0.86809			
488.6825	0.1672	0.28536	475.5	13.2	488.6825	0.86158			
488.3432	0.17066	0.28794	475	13.8	488.3432	0.85513			
488.0045	0.17423	0.29063	474.5	14.41667	488.0045	0.84874			
487.6663	0.17792	0.29345	474	15.04167	487.6663	0.84241			
487.3286	0.18172	0.29639	473.5	15.69167	487.3286	0.83614			
486.9914	0.18566	0.29948	473	16.31667	486.9914	0.82992			
486.6547	0.18972	0.3027	472.5	16.95833	486.6547	0.82376			
486.3185	0.19393	0.30607	472	17.575	486.3185	0.81766			
485.9828	0.19828	0.30959	471.5	18.15833	485.9828	0.81163			
485.6476	0.20277	0.31327	471	18.75	485.6476	0.80566			
485.3129	0.20743	0.31711	470.5	19.34167	485.3129	0.79977			
484.9787	0.21225	0.32113	470	19.90833	484.9787	0.79396			
484.645	0.21723	0.32533	469.5	20.45833	484.645	0.78823			
484.3119	0.2224	0.32973	469	20.96667	484.3119	0.78259			
483.9792	0.22775	0.33432	468.5	21.45	483.9792	0.77705			
483.647	0.2333	0.33912	468	21.91667	483.647	0.77162			
483.3152	0.23905	0.34414	467.5	22.35833	483.3152	0.76629			
482.984	0.245	0.34938	467	22.775	482.984	0.76107			
482.6533	0.25118	0.35486	466.5	23.175	482.6533	0.75595			
482.3231	0.25759	0.36058	466	23.525	482.3231	0.75094			
481.9933	0.26424	0.36655	465.5	23.84167	481.9933	0.74603			
481.6641	0.27114	0.37279	465	24.15	481.6641	0.7412			
481.3353	0.2783	0.37929	464.5	24.43333	481.3353	0.73642			
481.007	0.28572	0.38607	464	24.69167	481.007	0.73169			
480.6792	0.29343	0.39313	463.5	24.93333	480.6792	0.72695			
480.3519	0.30144	0.40048	463	25.125	480.3519	0.72217			
480.0251	0.30975	0.40812	462.5	25.3	480.0251	0.7173			
479.6988	0.31837	0.41605	462	25.45	479.6988	0.71227			
479.3729	0.32732	0.42428	461.5	25.6	479.3729	0.70701			
479.0475	0.33661	0.43281	461	25.70833	479.0475	0.70143			
478.7226	0.34625	0.44163	460.5	25.81667	478.7226	0.69544			
478.3982	0.35625	0.45073	460	25.9	478.3982	0.68892			
478.0742	0.36663	0.46013	459.5	25.96667	478.0742	0.68175			
477.7507	0.37738	0.46979	459	26.00833	477.7507	0.6738			
477.4277	0.38853	0.47972	458.5	26.06667	477.4277	0.6649			
477.1052	0.40007	0.48989	458	26.1	477.1052	0.6549			
476.7832	0.41203	0.50029	457.5	26.11667	476.7832	0.64362			
476.4616	0.42439	0.51091	457	26.14167	476.4616	0.63088			
476.1405	0.43716	0.52171	456.5	26.15	476.1405	0.61648			
475.8198	0.45035	0.53267	456	26.15	475.8198	0.60022			
475.4996	0.46395	0.54375	455.5	26.15	475.4996	0.58191			
475.1799	0.47796	0.55494	455	26.15	475.1799	0.56135			
474.8607	0.49236	0.56619	454.5	26.15	474.8607	0.53834			
474.5419	0.50715	0.57746	454	26.14167	474.5419	0.51271			
474.2236	0.5223	0.58872	453.5	26.13333	474.2236	0.48428			
473.9058	0.5378	0.59992	453	26.14167	473.9058	0.45292			

473.5884	0.55362	0.61101	452.5	26.15	473.5884	0.41852			
473.2714	0.56971	0.62196	452	26.15	473.2714	0.38098			
472.955	0.58605	0.63271	451.5	26.175	472.955	0.34028			
472.639	0.60258	0.64323	451	26.18333	472.639	0.29641			
472.3234	0.61924	0.65345	450.5	26.2	472.3234	0.24944			
472.0083	0.63599	0.66335	450	26.24167	472.0083	0.19948			
471.6937	0.65275	0.67287	449.5	26.275	471.6937	0.14669			
471.3795	0.66946	0.68198	449	26.3	471.3795	0.09131			
471.0658	0.68603	0.69064	448.5	26.35	471.0658	0.03361			
470.7525	0.70238	0.69881	448	26.39167	470.7525	-0.02605			
470.4397	0.71844	0.70647	447.5	26.43333	470.4397	-0.0873			
470.1273	0.73412	0.71359	447	26.475	470.1273	-0.14969			
469.8154	0.74934	0.72016	446.5	26.525	469.8154	-0.21274			
469.504	0.76401	0.72616	446	26.58333	469.504	-0.27598			
469.1929	0.77806	0.73158	445.5	26.625	469.1929	-0.33888			
468.8824	0.79141	0.73643	445	26.65833	468.8824	-0.40094			
468.5723	0.80401	0.74069	444.5	26.69167	468.5723	-0.46167			
468.2626	0.8158	0.7444	444	26.71667	468.2626	-0.52061			
467.9533	0.82672	0.74755	443.5	26.74167	467.9533	-0.57731			
467.6446	0.83676	0.75017	443	26.76667	467.6446	-0.6314			
467.3362	0.84589	0.75228	442.5	26.78333	467.3362	-0.68255			
467.0283	0.85409	0.75391	442	26.78333	467.0283	-0.73049			
466.7208	0.86138	0.75509	441.5	26.76667	466.7208	-0.77501			
466.4138	0.86775	0.75584	441	26.73333	466.4138	-0.81598			
466.1072	0.87323	0.75621	440.5	26.70833	466.1072	-0.8533			
465.8011	0.87786	0.75622	440	26.66667	465.8011	-0.88695			
465.4954	0.88167	0.75592	439.5	26.61667	465.4954	-0.91696			
465.1901	0.88471	0.75533	439	26.53333	465.1901	-0.94342			
464.8853	0.88703	0.75449	438.5	26.45	464.8853	-0.96642			
464.5808	0.88868	0.75344	438	26.34167	464.5808	-0.98614			
464.2769	0.88973	0.75221	437.5	26.23333	464.2769	-1.00273			
463.9733	0.89022	0.75083	437	26.11667	463.9733	-1.01642			
463.6702	0.89023	0.74933	436.5	25.96667	463.6702	-1.02741			
463.3675	0.8898	0.74773	436	25.79167	463.3675	-1.03593			
463.0653	0.889	0.74607	435.5	25.63333	463.0653	-1.04223			
462.7635	0.88788	0.74436	435	25.45	462.7635	-1.04652			
462.4621	0.8865	0.74263	434.5	25.25833	462.4621	-1.04905			
462.1611	0.8849	0.74089	434	25.05	462.1611	-1.05005			
461.8606	0.88313	0.73916	433.5	24.825	461.8606	-1.04973			
461.5605	0.88123	0.73746	433	24.58333	461.5605	-1.0483			
461.2608	0.87924	0.7358	432.5	24.33333	461.2608	-1.04594			
460.9615	0.8772	0.73418	432	24.1	460.9615	-1.04284			
460.6627	0.87513	0.73262	431.5	23.83333	460.6627	-1.03915			
460.3642	0.87307	0.73113	431	23.58333	460.3642	-1.035			
460.0662	0.87103	0.7297	430.5	23.31667	460.0662	-1.03051			
459.7687	0.86903	0.72835	430	23.03333	459.7687	-1.02577			
459.4715	0.86709	0.72708	429.5	22.76667	459.4715	-1.02086			
459.1748	0.86521	0.7259	429	22.48333	459.1748	-1.01583			
458.8784	0.86341	0.7248	428.5	22.2	458.8784	-1.01071			
458.5825	0.86169	0.72379	428	21.925	458.5825	-1.00551			
458.287	0.86006	0.72288	427.5	21.65833	458.287	-1.00025			
457.9919	0.85851	0.72207	427	21.375	457.9919	-0.99489			
457.6973	0.85705	0.72136	426.5	21.1	457.6973	-0.98942			
457.403	0.85567	0.72075	426	20.825	457.403	-0.98379			
457.1092	0.85438	0.72026	425.5	20.55833	457.1092	-0.97798			
456.8157	0.85317	0.71988	425	20.28333	456.8157	-0.97193			
456.5227	0.85205	0.71963	424.5	20.025	456.5227	-0.96561			
456.2301	0.85102	0.7195	424	19.76667	456.2301	-0.95896			
455.9379	0.85006	0.71951	423.5	19.50833	455.9379	-0.95195			
455.6461	0.8492	0.71966	423	19.25833	455.6461	-0.94455			
455.3547	0.84843	0.71996	422.5	19.01667	455.3547	-0.93674			
455.0637	0.84776	0.72042	422	18.76667	455.0637	-0.92849			
454.7731	0.84719	0.72105	421.5	18.525	454.7731	-0.91981			
454.483	0.84674	0.72184	421	18.28333	454.483	-0.91069			
454.1932	0.8464	0.72281	420.5	18.04167	454.1932	-0.90117			
453.9038	0.8462	0.72397	420	17.79167	453.9038	-0.89126			
453.6149	0.84615	0.72533	419.5	17.56667	453.6149	-0.88101			
453.3263	0.84625	0.72687	419	17.33333	453.3263	-0.87047			
453.0381	0.84652	0.72862	418.5	17.10833	453.0381	-0.85969			

452.7504	0.84698	0.73058	418	16.875	452.7504	-0.84876			
452.463	0.84763	0.73274	417.5	16.63333	452.463	-0.83774			
452.176	0.84849	0.73511	417	16.4	452.176	-0.82673			
451.8894	0.84958	0.73769	416.5	16.18333	451.8894	-0.81582			
451.6033	0.8509	0.74048	416	15.95	451.6033	-0.80511			
451.3175	0.85246	0.74348	415.5	15.71667	451.3175	-0.79469			
451.0321	0.85428	0.74667	415	15.48333	451.0321	-0.78468			
450.7471	0.85637	0.75006	414.5	15.24167	450.7471	-0.77518			
450.4625	0.85873	0.75364	414	15	450.4625	-0.76628			
450.1783	0.86137	0.7574	413.5	14.75	450.1783	-0.75809			
449.8944	0.86429	0.76133	413	14.50833	449.8944	-0.75071			
449.611	0.86749	0.76542	412.5	14.26667	449.611	-0.74423			
449.328	0.87097	0.76966	412	14.01667	449.328	-0.73873			
449.0453	0.87473	0.77403	411.5	13.775	449.0453	-0.73429			
448.763	0.87877	0.77852	411	13.525	448.763	-0.73098			
448.4812	0.88306	0.78311	410.5	13.275	448.4812	-0.72884			
448.1997	0.88761	0.78779	410	13.025	448.1997	-0.72792			
447.9186	0.8924	0.79253	409.5	12.775	447.9186	-0.72825			
447.6378	0.89741	0.79732	409	12.53333	447.6378	-0.72983			
447.3575	0.90262	0.80213	408.5	12.29167	447.3575	-0.73267			
447.0775	0.908	0.80696	408	12.05833	447.0775	-0.73673			
446.798	0.91353	0.81177	407.5	11.79167	446.798	-0.74198			
446.5188	0.91917	0.81654	407	11.55833	446.5188	-0.74835			
446.2399	0.92491	0.82126	406.5	11.325	446.2399	-0.75576			
445.9615	0.93069	0.82589	406	11.1	445.9615	-0.76413			
445.6835	0.93649	0.83043	405.5	10.85833	445.6835	-0.77333			
445.4058	0.94225	0.83484	405	10.625	445.4058	-0.78324			
445.1285	0.94795	0.8391	404.5	10.4	445.1285	-0.79372			
444.8516	0.95355	0.8432	404	10.18333	444.8516	-0.80463			
444.575	0.95899	0.84711	403.5	9.95833	444.575	-0.81581			
444.2989	0.96424	0.85081	403	9.74167	444.2989	-0.82713			
444.0231	0.96926	0.85428	402.5	9.54167	444.0231	-0.83842			
443.7476	0.97401	0.8575	402	9.33333	443.7476	-0.84954			
443.4726	0.97845	0.86046	401.5	9.125	443.4726	-0.86035			
443.1979	0.98255	0.86314	401	8.925	443.1979	-0.87073			
442.9236	0.98628	0.86552	400.5	8.725	442.9236	-0.88055			
442.6497	0.98961	0.86759	400	8.54167	442.6497	-0.88972			
442.3761	0.99251	0.86933	399.5	8.35	442.3761	-0.89813			
442.1029	0.99496	0.87075	399	8.15833	442.1029	-0.90572			
441.8301	0.99694	0.87181	398.5	7.975	441.8301	-0.91241			
441.5576	0.99845	0.87253	398	7.8	441.5576	-0.91816			
441.2855	0.99946	0.87289	397.5	7.61667	441.2855	-0.92294			
441.0138	0.99998	0.87289	397	7.45	441.0138	-0.92671			
440.7424	1	0.87253	396.5	7.275	440.7424	-0.92946			
440.4714	0.99952	0.87181	396	7.10833	440.4714	-0.93119			
440.2008	0.99855	0.87074	395.5	6.93333	440.2008	-0.93191			
439.9305	0.99709	0.86932	395	6.775	439.9305	-0.93162			
439.6606	0.99515	0.86756	394.5	6.60833	439.6606	-0.93036			
439.3911	0.99276	0.86547	394	6.44167	439.3911	-0.92815			
439.1219	0.98992	0.86306	393.5	6.28333	439.1219	-0.92503			
438.8531	0.98666	0.86034	393	6.13333	438.8531	-0.92105			
438.5846	0.98299	0.85734	392.5	5.96667	438.5846	-0.91624			
438.3165	0.97895	0.85406	392	5.80833	438.3165	-0.91066			
438.0488	0.97455	0.85052	391.5	5.66667	438.0488	-0.90437			
437.7814	0.96983	0.84676	391	5.525	437.7814	-0.89742			
437.5143	0.96481	0.84277	390.5	5.375	437.5143	-0.88987			
437.2477	0.95952	0.83859	390	5.23333	437.2477	-0.88177			
436.9814	0.95398	0.83423	389.5	5.1	436.9814	-0.87318			
436.7154	0.94823	0.82972	389	4.95833	436.7154	-0.86416			
436.4498	0.9423	0.82507	388.5	4.825	436.4498	-0.85476			
436.1845	0.93619	0.8203	388	4.7	436.1845	-0.84503			
435.9196	0.92996	0.81544	387.5	4.575	435.9196	-0.83501			
435.6551	0.92361	0.8105	387	4.44167	435.6551	-0.82475			
435.3908	0.91717	0.80549	386.5	4.325	435.3908	-0.81428			
435.127	0.91065	0.80044	386	4.2	435.127	-0.80363			
434.8635	0.90409	0.79536	385.5	4.09167	434.8635	-0.79283			
434.6003	0.89749	0.79026	385	3.975	434.6003	-0.78189			
434.3375	0.89088	0.78516	384.5	3.86667	434.3375	-0.77084			
434.0751	0.88426	0.78007	384	3.75833	434.0751	-0.75969			

433.813	0.87765	0.775	383.5	3.65833	433.813	-0.74844			
433.5512	0.87105	0.76997	383	3.55	433.5512	-0.73711			
433.2898	0.86449	0.76497	382.5	3.44167	433.2898	-0.72569			
433.0287	0.85796	0.76002	382	3.35	433.0287	-0.71419			
432.768	0.85148	0.75512	381.5	3.25	432.768	-0.70261			
432.5076	0.84504	0.75028	381	3.15833	432.5076	-0.69095			
432.2475	0.83866	0.74552	380.5	3.03333	432.2475	-0.67921			
431.9878	0.83235	0.74082	380	2.90833	431.9878	-0.66738			
431.7285	0.82609	0.7362	379.5	2.80833	431.7285	-0.65548			
431.4695	0.81991	0.73166	379	2.75	431.4695	-0.64349			
431.2108	0.8138	0.7272	378.5	2.66667	431.2108	-0.63142			
430.9524	0.80776	0.72283	378	2.58333	430.9524	-0.61928			
430.6944	0.8018	0.71855	377.5	2.50833	430.6944	-0.60706			
430.4368	0.79593	0.71436	377	2.43333	430.4368	-0.59478			
430.1794	0.79014	0.71026	376.5	2.35833	430.1794	-0.58245			
429.9225	0.78444	0.70626	376	2.30833	429.9225	-0.57007			
429.6658	0.77883	0.70235	375.5	2.23333	429.6658	-0.55766			
429.4095	0.77332	0.69855	375	2.15833	429.4095	-0.54523			
429.1535	0.76792	0.69485	374.5	2.08333	429.1535	-0.5328			
428.8979	0.76261	0.69125	374	2.01667	428.8979	-0.52039			
428.6425	0.75742	0.68775	373.5	1.96667	428.6425	-0.50801			
428.3876	0.75234	0.68436	373	1.90833	428.3876	-0.49569			
428.1329	0.74738	0.68108	372.5	1.84167	428.1329	-0.48345			
427.8786	0.74254	0.6779	372	1.775	427.8786	-0.47131			
427.6246	0.73783	0.67484	371.5	1.71667	427.6246	-0.45929			
427.3709	0.73325	0.67188	371	1.65833	427.3709	-0.44742			
427.1176	0.7288	0.66904	370.5	1.61667	427.1176	-0.43573			
426.8646	0.72449	0.66631	370	1.56667	426.8646	-0.42423			
426.6119	0.72032	0.66368	369.5	1.51667	426.6119	-0.41295			
426.3596	0.71629	0.66117	369	1.45	426.3596	-0.4019			
426.1076	0.7124	0.65877	368.5	1.4	426.1076	-0.39112			
425.8559	0.70867	0.65647	368	1.35833	425.8559	-0.38061			
425.6045	0.70507	0.65428	367.5	1.31667	425.6045	-0.37039			
425.3535	0.70163	0.65219	367	1.28333	425.3535	-0.36047			
425.1028	0.69832	0.6502	366.5	1.25	425.1028	-0.35086			
424.8524	0.69516	0.64831	366	1.2	424.8524	-0.34158			
424.6023	0.69213	0.64651	365.5	1.15833	424.6023	-0.33261			
424.3526	0.68924	0.64481	365	1.125	424.3526	-0.32397			
424.1032	0.68647	0.64318	364.5	1.08333	424.1032	-0.31564			
423.8541	0.68382	0.64163	364	1.05	423.8541	-0.30763			
423.6053	0.68129	0.64016	363.5	1.01667	423.6053	-0.29991			
423.3568	0.67886	0.63875	363	0.99167	423.3568	-0.29248			
423.1087	0.67653	0.6374	362.5	0.95	423.1087	-0.28533			
422.8609	0.67428	0.6361	362	0.925	422.8609	-0.27842			
422.6134	0.67211	0.63484	361.5	0.90833	422.6134	-0.27175			
422.3662	0.67	0.63361	361	0.88333	422.3662	-0.2653			
422.1193	0.66794	0.63242	360.5	0.85833	422.1193	-0.25904			
421.8728	0.66592	0.63123	360	0.825	421.8728	-0.25294			
421.6265	0.66393	0.63006	359.5	0.80833	421.6265	-0.247			
421.3806	0.66195	0.62888	359	0.79167	421.3806	-0.24118			
421.135	0.65998	0.62768	358.5	0.76667	421.135	-0.23547			
420.8897	0.65799	0.62647	358	0.75833	420.8897	-0.22984			
420.6447	0.65598	0.62522	357.5	0.75833	420.6447	-0.22429			
420.4001	0.65393	0.62393	357	0.73333	420.4001	-0.21878			
420.1557	0.65184	0.62259	356.5	0.725	420.1557	-0.2133			
419.9117	0.64969	0.62118	356	0.7	419.9117	-0.20784			
419.6679	0.64746	0.61971	355.5	0.69167	419.6679	-0.20239			
419.4245	0.64516	0.61816	355	0.675	419.4245	-0.19693			
419.1814	0.64277	0.61651	354.5	0.65833	419.1814	-0.19146			
418.9386	0.64028	0.61478	354	0.65	418.9386	-0.18596			
418.6961	0.63769	0.61294	353.5	0.64167	418.6961	-0.18044			
418.4539	0.63498	0.611	353	0.625	418.4539	-0.17489			
418.2121	0.63215	0.60894	352.5	0.6	418.2121	-0.1693			
417.9705	0.62921	0.60676	352	0.6	417.9705	-0.16368			
417.7292	0.62613	0.60446	351.5	0.59167	417.7292	-0.15803			
417.4883	0.62293	0.60203	351	0.59167	417.4883	-0.15235			
417.2476	0.6196	0.59948	350.5	0.60833	417.2476	-0.14666			
417.0073	0.61613	0.5968	350	0.6	417.0073	-0.14094			
416.7672	0.61254	0.59399			416.7672	-0.13522			

416.5275	0.60882	0.59105			416.5275	-0.12951			
416.2881	0.60497	0.58799			416.2881	-0.1238			
416.0489	0.601	0.5848			416.0489	-0.11812			
415.8101	0.59691	0.58149			415.8101	-0.11248			
415.5716	0.59271	0.57806			415.5716	-0.10687			
415.3333	0.58841	0.57451			415.3333	-0.10133			
415.0954	0.584	0.57086			415.0954	-0.09585			
414.8578	0.5795	0.5671			414.8578	-0.09045			
414.6204	0.57491	0.56324			414.6204	-0.08513			
414.3834	0.57025	0.55929			414.3834	-0.0799			
414.1467	0.56551	0.55526			414.1467	-0.07476			
413.9102	0.56071	0.55115			413.9102	-0.06973			
413.6741	0.55586	0.54697			413.6741	-0.0648			
413.4382	0.55095	0.54272			413.4382	-0.05998			
413.2027	0.54601	0.53843			413.2027	-0.05527			
412.9674	0.54103	0.53408			412.9674	-0.05066			
412.7325	0.53603	0.5297			412.7325	-0.04617			
412.4978	0.53101	0.52528			412.4978	-0.04177			
412.2634	0.52597	0.52083			412.2634	-0.03748			
412.0294	0.52094	0.51637			412.0294	-0.03329			
411.7956	0.5159	0.5119			411.7956	-0.02919			
411.5621	0.51088	0.50743			411.5621	-0.02517			
411.3289	0.50586	0.50295			411.3289	-0.02124			
411.096	0.50087	0.49848			411.096	-0.0174			
410.8633	0.4959	0.49403			410.8633	-0.01362			
410.631	0.49095	0.48959			410.631	-0.00991			
410.3989	0.48604	0.48518			410.3989	-0.00626			
410.1672	0.48116	0.48079			410.1672	-0.00267			
409.9357	0.47632	0.47644			409.9357	8.62257E-4			
409.7045	0.47152	0.47212			409.7045	0.00435			
409.4736	0.46677	0.46784			409.4736	0.00779			
409.243	0.46207	0.4636			409.243	0.0112			
409.0127	0.45741	0.4594			409.0127	0.01456			
408.7827	0.4528	0.45526			408.7827	0.01789			
408.5529	0.44825	0.45115			408.5529	0.02119			
408.3234	0.44375	0.4471			408.3234	0.02445			
408.0943	0.43931	0.4431			408.0943	0.02768			
407.8654	0.43492	0.43916			407.8654	0.03088			
407.6367	0.4306	0.43527			407.6367	0.03405			
407.4084	0.42633	0.43143			407.4084	0.03718			
407.1803	0.42213	0.42765			407.1803	0.04028			
406.9526	0.41798	0.42393			406.9526	0.04335			
406.7251	0.41391	0.42027			406.7251	0.04638			
406.4979	0.40989	0.41666			406.4979	0.04937			
406.2709	0.40594	0.41312			406.2709	0.05232			
406.0443	0.40206	0.40963			406.0443	0.05523			
405.8179	0.39824	0.4062			405.8179	0.05809			
405.5918	0.39449	0.40284			405.5918	0.0609			
405.366	0.3908	0.39954			405.366	0.06367			
405.1404	0.38719	0.39629			405.1404	0.06639			
404.9151	0.38364	0.39311			404.9151	0.06906			
404.6901	0.38016	0.38999			404.6901	0.07168			
404.4654	0.37675	0.38693			404.4654	0.07424			
404.241	0.3734	0.38393			404.241	0.07676			
404.0168	0.37013	0.38099			404.0168	0.07922			
403.7929	0.36692	0.37811			403.7929	0.08163			
403.5693	0.36377	0.37529			403.5693	0.08398			
403.3459	0.36069	0.37253			403.3459	0.08629			
403.1229	0.35768	0.36982			403.1229	0.08856			
402.9001	0.35472	0.36717			402.9001	0.09077			
402.6775	0.35183	0.36457			402.6775	0.09294			
402.4553	0.34899	0.36203			402.4553	0.09507			
402.2333	0.34621	0.35954			402.2333	0.09716			
402.0116	0.34349	0.3571			402.0116	0.09921			
401.7901	0.34082	0.3547			401.7901	0.10123			
401.5689	0.3382	0.35235			401.5689	0.10321			
401.348	0.33562	0.35004			401.348	0.10516			
401.1274	0.33309	0.34777			401.1274	0.10708			
400.907	0.3306	0.34554			400.907	0.10897			

400.6869	0.32814	0.34334			400.6869	0.11084			
400.467	0.32572	0.34118			400.467	0.11269			
400.2474	0.32334	0.33904			400.2474	0.11451			
400.0281	0.32098	0.33693			400.0281	0.11631			
399.8091	0.31864	0.33484			399.8091	0.1181			
399.5903	0.31633	0.33277			399.5903	0.11986			
399.3718	0.31403	0.33071			399.3718	0.12161			
399.1535	0.31175	0.32867			399.1535	0.12334			
398.9355	0.30948	0.32663			398.9355	0.12505			
398.7178	0.30722	0.3246			398.7178	0.12674			
398.5003	0.30496	0.32257			398.5003	0.12842			
398.2831	0.30271	0.32055			398.2831	0.13007			
398.0661	0.30046	0.31852			398.0661	0.1317			
397.8495	0.2982	0.31648			397.8495	0.13331			
397.633	0.29594	0.31444			397.633	0.13489			
397.4169	0.29367	0.31238			397.4169	0.13644			
397.201	0.29139	0.31031			397.201	0.13796			
396.9853	0.28911	0.30823			396.9853	0.13944			
396.7699	0.28681	0.30613			396.7699	0.14089			
396.5548	0.2845	0.30402			396.5548	0.14229			
396.3399	0.28218	0.30188			396.3399	0.14365			
396.1253	0.27984	0.29972			396.1253	0.14496			
395.9109	0.27749	0.29754			395.9109	0.14621			
395.6968	0.27513	0.29534			395.6968	0.14741			
395.483	0.27275	0.29312			395.483	0.14855			
395.2694	0.27036	0.29088			395.2694	0.14963			
395.0561	0.26795	0.28861			395.0561	0.15064			
394.843	0.26553	0.28632			394.843	0.15158			
394.6301	0.2631	0.28401			394.6301	0.15246			
394.4176	0.26066	0.28168			394.4176	0.15326			
394.2052	0.25822	0.27933			394.2052	0.15398			
393.9932	0.25576	0.27697			393.9932	0.15463			
393.7813	0.2533	0.27458			393.7813	0.15521			
393.5698	0.25083	0.27219			393.5698	0.1557			
393.3585	0.24836	0.26977			393.3585	0.15613			
393.1474	0.24589	0.26735			393.1474	0.15647			
392.9366	0.24342	0.26491			392.9366	0.15674			
392.726	0.24095	0.26247			392.726	0.15694			
392.5157	0.23848	0.26002			392.5157	0.15706			
392.3056	0.23602	0.25757			392.3056	0.15711			
392.0958	0.23357	0.25511			392.0958	0.1571			
391.8862	0.23112	0.25266			391.8862	0.15702			
391.6769	0.22869	0.2502			391.6769	0.15688			
391.4678	0.22626	0.24775			391.4678	0.15668			
391.259	0.22385	0.2453			391.259	0.15642			
391.0504	0.22145	0.24286			391.0504	0.15611			
390.8421	0.21907	0.24043			390.8421	0.15575			
390.634	0.21671	0.23801			390.634	0.15535			
390.4261	0.21436	0.2356			390.4261	0.1549			
390.2185	0.21203	0.23321			390.2185	0.15442			
390.0112	0.20973	0.23083			390.0112	0.1539			
389.8041	0.20744	0.22847			389.8041	0.15335			
389.5972	0.20518	0.22613			389.5972	0.15277			
389.3906	0.20293	0.2238			389.3906	0.15216			
389.1842	0.20072	0.2215			389.1842	0.15154			
388.978	0.19852	0.21921			388.978	0.15089			
388.7721	0.19635	0.21695			388.7721	0.15023			
388.5665	0.19421	0.21472			388.5665	0.14955			
388.361	0.19209	0.2125			388.361	0.14887			
388.1559	0.19	0.21032			388.1559	0.14817			
387.9509	0.18793	0.20815			387.9509	0.14747			
387.7462	0.18589	0.20601			387.7462	0.14676			
387.5417	0.18387	0.2039			387.5417	0.14605			
387.3375	0.18189	0.20182			387.3375	0.14533			
387.1335	0.17993	0.19976			387.1335	0.14461			
386.9298	0.178	0.19773			386.9298	0.1439			
386.7263	0.17609	0.19573			386.7263	0.14318			
386.523	0.17422	0.19376			386.523	0.14247			
386.32	0.17237	0.19181			386.32	0.14175			

386.1172	0.17055	0.18989			386.1172	0.14105			
385.9146	0.16875	0.188			385.9146	0.14034			
385.7123	0.16699	0.18614			385.7123	0.13964			
385.5102	0.16525	0.1843			385.5102	0.13895			
385.3083	0.16353	0.1825			385.3083	0.13826			
385.1067	0.16185	0.18072			385.1067	0.13758			
384.9053	0.16019	0.17897			384.9053	0.13691			
384.7041	0.15856	0.17725			384.7041	0.13624			
384.5032	0.15696	0.17555			384.5032	0.13558			
384.3025	0.15538	0.17388			384.3025	0.13493			
384.102	0.15382	0.17224			384.102	0.13429			
383.9018	0.1523	0.17063			383.9018	0.13366			
383.7018	0.15079	0.16904			383.7018	0.13304			
383.502	0.14932	0.16748			383.502	0.13242			
383.3025	0.14786	0.16594			383.3025	0.13182			
383.1032	0.14643	0.16443			383.1032	0.13123			
382.9041	0.14502	0.16294			382.9041	0.13065			
382.7052	0.14364	0.16148			382.7052	0.13008			
382.5066	0.14227	0.16004			382.5066	0.12952			
382.3082	0.14093	0.15862			382.3082	0.12897			
382.1101	0.13961	0.15722			382.1101	0.12844			
381.9121	0.1383	0.15585			381.9121	0.12791			
381.7144	0.13702	0.15449			381.7144	0.1274			
381.5169	0.13575	0.15316			381.5169	0.1269			
381.3197	0.1345	0.15184			381.3197	0.12642			
381.1226	0.13327	0.15054			381.1226	0.12594			
380.9258	0.13205	0.14926			380.9258	0.12548			
380.7293	0.13085	0.14799			380.7293	0.12502			
380.5329	0.12966	0.14674			380.5329	0.12458			
380.3368	0.12848	0.14551			380.3368	0.12415			
380.1409	0.12732	0.14429			380.1409	0.12372			
379.9452	0.12617	0.14308			379.9452	0.1233			
379.7497	0.12503	0.14188			379.7497	0.12289			
379.5545	0.1239	0.1407			379.5545	0.12249			
379.3595	0.12278	0.13952			379.3595	0.12209			
379.1647	0.12166	0.13835			379.1647	0.12169			
378.9701	0.12056	0.13719			378.9701	0.1213			
378.7758	0.11946	0.13604			378.7758	0.1209			
378.5816	0.11837	0.1349			378.5816	0.12051			
378.3877	0.11729	0.13376			378.3877	0.12011			
378.194	0.11621	0.13263			378.194	0.11971			
378.0006	0.11514	0.1315			378.0006	0.1193			
377.8073	0.11407	0.13038			377.8073	0.11889			
377.6143	0.11301	0.12926			377.6143	0.11847			
377.4215	0.11195	0.12814			377.4215	0.11804			
377.2289	0.1109	0.12703			377.2289	0.1176			
377.0365	0.10985	0.12592			377.0365	0.11715			
376.8444	0.10881	0.12481			376.8444	0.11668			
376.6524	0.10777	0.12371			376.6524	0.1162			
376.4607	0.10673	0.1226			376.4607	0.11571			
376.2692	0.1057	0.1215			376.2692	0.11519			
376.0779	0.10467	0.1204			376.0779	0.11466			
375.8869	0.10365	0.1193			375.8869	0.11412			
375.696	0.10263	0.1182			375.696	0.11355			
375.5054	0.10162	0.11711			375.5054	0.11297			
375.3149	0.1006	0.11601			375.3149	0.11237			
375.1247	0.0996	0.11492			375.1247	0.11174			
374.9347	0.0986	0.11384			374.9347	0.1111			
374.7449	0.0976	0.11275			374.7449	0.11044			
374.5554	0.09661	0.11167			374.5554	0.10976			
374.366	0.09563	0.11059			374.366	0.10906			
374.1769	0.09465	0.10951			374.1769	0.10835			
373.9879	0.09368	0.10844			373.9879	0.10761			
373.7992	0.09271	0.10737			373.7992	0.10686			
373.6107	0.09175	0.1063			373.6107	0.1061			
373.4224	0.0908	0.10524			373.4224	0.10531			
373.2343	0.08986	0.10419			373.2343	0.10452			
373.0465	0.08892	0.10314			373.0465	0.10371			
372.8588	0.08799	0.1021			372.8588	0.10289			

372.6713	0.08707	0.10106			372.6713	0.10205			
372.4841	0.08616	0.10004			372.4841	0.10121			
372.297	0.08525	0.09901			372.297	0.10036			
372.1102	0.08435	0.098			372.1102	0.0995			
371.9236	0.08347	0.09699			371.9236	0.09863			
371.7372	0.08259	0.09599			371.7372	0.09776			
371.551	0.08172	0.095			371.551	0.09688			
371.365	0.08086	0.09402			371.365	0.096			
371.1792	0.08001	0.09305			371.1792	0.09512			
370.9936	0.07917	0.09209			370.9936	0.09423			
370.8082	0.07833	0.09114			370.8082	0.09335			
370.6231	0.07751	0.09019			370.6231	0.09247			
370.4381	0.0767	0.08926			370.4381	0.09158			
370.2533	0.0759	0.08833			370.2533	0.0907			
370.0688	0.0751	0.08742			370.0688	0.08982			
369.8844	0.07432	0.08652			369.8844	0.08895			
369.7003	0.07355	0.08563			369.7003	0.08808			
369.5163	0.07278	0.08474			369.5163	0.08722			
369.3326	0.07203	0.08387			369.3326	0.08636			
369.1491	0.07129	0.08301			369.1491	0.08551			
368.9657	0.07055	0.08216			368.9657	0.08466			
368.7826	0.06983	0.08132			368.7826	0.08383			
368.5997	0.06911	0.0805			368.5997	0.083			
368.4169	0.06841	0.07968			368.4169	0.08217			
368.2344	0.06771	0.07887			368.2344	0.08136			
368.0521	0.06703	0.07808			368.0521	0.08056			
367.87	0.06635	0.07729			367.87	0.07976			
367.6881	0.06569	0.07652			367.6881	0.07898			
367.5063	0.06503	0.07575			367.5063	0.0782			
367.3248	0.06438	0.075			367.3248	0.07743			
367.1435	0.06374	0.07426			367.1435	0.07668			
366.9624	0.06312	0.07353			366.9624	0.07593			
366.7814	0.0625	0.07281			366.7814	0.07519			
366.6007	0.06188	0.0721			366.6007	0.07447			
366.4202	0.06128	0.0714			366.4202	0.07375			
366.2399	0.06069	0.07071			366.2399	0.07305			
366.0597	0.0601	0.07003			366.0597	0.07235			
365.8798	0.05953	0.06935			365.8798	0.07167			
365.7001	0.05896	0.06869			365.7001	0.071			
365.5205	0.0584	0.06804			365.5205	0.07033			
365.3412	0.05784	0.0674			365.3412	0.06968			
365.162	0.0573	0.06677			365.162	0.06904			
364.9831	0.05676	0.06614			364.9831	0.06841			
364.8043	0.05623	0.06553			364.8043	0.06779			
364.6258	0.05571	0.06492			364.6258	0.06718			
364.4474	0.05519	0.06432			364.4474	0.06658			
364.2692	0.05468	0.06373			364.2692	0.066			
364.0912	0.05418	0.06315			364.0912	0.06542			
363.9134	0.05368	0.06257			363.9134	0.06485			
363.7359	0.05319	0.06201			363.7359	0.06429			
363.5585	0.05271	0.06145			363.5585	0.06374			
363.3813	0.05223	0.06089			363.3813	0.06319			
363.2042	0.05176	0.06035			363.2042	0.06266			
363.0274	0.05129	0.05981			363.0274	0.06214			
362.8508	0.05083	0.05928			362.8508	0.06162			
362.6744	0.05037	0.05875			362.6744	0.06111			
362.4981	0.04992	0.05823			362.4981	0.06061			
362.3221	0.04947	0.05771			362.3221	0.06011			
362.1462	0.04903	0.0572			362.1462	0.05962			
361.9705	0.04859	0.0567			361.9705	0.05914			
361.795	0.04816	0.0562			361.795	0.05866			
361.6197	0.04773	0.05571			361.6197	0.05819			
361.4446	0.0473	0.05522			361.4446	0.05772			
361.2697	0.04688	0.05473			361.2697	0.05726			
361.095	0.04646	0.05425			361.095	0.0568			
360.9204	0.04605	0.05377			360.9204	0.05634			
360.7461	0.04564	0.0533			360.7461	0.05588			
360.5719	0.04523	0.05283			360.5719	0.05543			
360.398	0.04483	0.05237			360.398	0.05498			

360.2242	0.04443	0.0519			360.2242	0.05453			
360.0506	0.04403	0.05145			360.0506	0.05408			
359.8772	0.04363	0.05099			359.8772	0.05364			
359.7039	0.04324	0.05054			359.7039	0.05319			
359.5309	0.04286	0.05009			359.5309	0.05274			
359.358	0.04247	0.04964			359.358	0.0523			
359.1854	0.04209	0.0492			359.1854	0.05185			
359.0129	0.04171	0.04876			359.0129	0.0514			
358.8406	0.04134	0.04832			358.8406	0.05095			
358.6685	0.04096	0.04789			358.6685	0.0505			
358.4965	0.04059	0.04746			358.4965	0.05005			
358.3248	0.04023	0.04703			358.3248	0.0496			
358.1532	0.03986	0.0466			358.1532	0.04915			
357.9818	0.0395	0.04618			357.9818	0.0487			
357.8106	0.03915	0.04576			357.8106	0.04824			
357.6396	0.03879	0.04534			357.6396	0.04778			
357.4688	0.03844	0.04493			357.4688	0.04733			
357.2981	0.03809	0.04452			357.2981	0.04687			
357.1277	0.03775	0.04411			357.1277	0.04641			
356.9574	0.0374	0.04371			356.9574	0.04595			
356.7873	0.03706	0.0433			356.7873	0.04549			
356.6174	0.03673	0.0429			356.6174	0.04503			
356.4476	0.0364	0.04251			356.4476	0.04457			
356.278	0.03607	0.04212			356.278	0.04411			
356.1087	0.03574	0.04173			356.1087	0.04365			
355.9395	0.03542	0.04134			355.9395	0.04319			
355.7704	0.0351	0.04096			355.7704	0.04273			
355.6016	0.03478	0.04058			355.6016	0.04227			
355.4329	0.03447	0.0402			355.4329	0.04181			
355.2644	0.03416	0.03983			355.2644	0.04135			
355.0961	0.03385	0.03946			355.0961	0.0409			
354.928	0.03355	0.03909			354.928	0.04045			
354.7601	0.03325	0.03873			354.7601	0.04			
354.5923	0.03295	0.03837			354.5923	0.03955			
354.4247	0.03266	0.03802			354.4247	0.0391			
354.2573	0.03237	0.03767			354.2573	0.03866			
354.09	0.03208	0.03732			354.09	0.03822			
353.923	0.0318	0.03698			353.923	0.03778			
353.7561	0.03152	0.03664			353.7561	0.03735			
353.5894	0.03124	0.0363			353.5894	0.03692			
353.4228	0.03097	0.03597			353.4228	0.03649			
353.2565	0.0307	0.03564			353.2565	0.03607			
353.0903	0.03043	0.03532			353.0903	0.03565			
352.9243	0.03017	0.035			352.9243	0.03523			
352.7584	0.02991	0.03468			352.7584	0.03482			
352.5928	0.02965	0.03437			352.5928	0.03442			
352.4273	0.02939	0.03406			352.4273	0.03401			
352.2619	0.02914	0.03375			352.2619	0.03362			
352.0968	0.0289	0.03345			352.0968	0.03323			
351.9318	0.02865	0.03315			351.9318	0.03284			
351.767	0.02841	0.03286			351.767	0.03245			
351.6024	0.02817	0.03257			351.6024	0.03208			
351.438	0.02793	0.03228			351.438	0.0317			
351.2737	0.0277	0.032			351.2737	0.03133			
351.1096	0.02747	0.03172			351.1096	0.03097			
350.9456	0.02724	0.03144			350.9456	0.03061			
350.7819	0.02702	0.03117			350.7819	0.03026			
350.6183	0.0268	0.0309			350.6183	0.02991			
350.4549	0.02658	0.03063			350.4549	0.02957			
350.2916	0.02636	0.03037			350.2916	0.02923			
350.1285	0.02615	0.03011			350.1285	0.02889			

Supplementary data

Figure S1.

1543.9977	-0.00783	-0.03279
1550.2339	-0.02187	-6E-4
1556.5353	0.04354	-0.04276
1562.9028	0.11814	-0.13099
1569.3372	0.13798	0.02046
1575.8394	-0.13599	-0.0195
1582.4102	-0.60278	0.32196
1589.0506	-0.71502	0.28097
1595.7615	-0.3328	-0.07273
1602.5438	-0.26237	0.0075
1609.3985	-0.5407	0.14976
1616.3264	-0.76802	0.31345
1623.3286	-0.44079	0.07224
1630.4061	-0.17797	-0.05
1637.5598	-0.07591	-0.06896
1644.7908	-0.01129	-0.10456
1652.1002	0.24023	-0.1614
1659.489	0.39612	-0.17368
1666.9582	0.13895	-0.08952
1674.509	-0.00923	-0.03402
1682.1425	-0.04789	-0.03018
1689.8598	-0.086	-0.04092
1697.6621	-0.10138	-0.02142
1705.5505	-0.16938	-0.009
1713.5263	-0.38481	0.16002
1721.5907	-0.50388	0.12767
1729.7449	-0.28862	0.01966
1737.9902	-0.20937	-0.02162
1746.3278	-0.18953	-0.01884
1753.6492	-0.16158	-0.0018
1771.0555	-0.17439	0.00588

Figure S2.

Panel A				Panel B				Panel C			
0.275	0.31622	17.984	3.969	0.275	0.7794	17.231	9.7095	0.275	1.9602	17.349	15.147
0.25	0.2958	15.29	3.7275	0.25	0.7418	14.155	10.1325	0.2625	1.7022	16.61	14.253
0.2	0.24092	12.304	3.9455	0.225	0.6513	12.725	9.9395	0.25	1.6322	15.228	14.025
0.15	0.16631	9.045	3.808	0.2	0.5822	11.373	9.905	0.2375	1.5681	14.718	13.935
0.1	0.12538	5.732	3.744	0.175	0.5097	10.043	9.5425	0.225	1.5228	13.094	15.177
0.05	0.05	2.1822	3.785	0.15	0.44056	8.791	9.648	0.2125	1.4024	13.032	13.65
				0.125	0.3711	6.937	9.566	0.2	1.3811	12.703	13.713
				0.1	0.28817	5.517	9.6735	0.1875	1.2061	11.836	13.44
				0.075	0.20218	3.352	9.6235	0.175	1.2769	10.27	14.727
				0.05	0.13411	2.26	9.6025	0.1625	1.1097	9.609	14.466
								0.15	1.038	8.903	14.382
								0.1375	0.9518	8.341	14.487
								0.125	0.9338	7.684	15.57
								0.1125	0.7796	6.291	15.567
								0.1	0.695	5.413	15.57
								0.0875	0.4955	4.546	15.243
								0.075	0.3996	3.54	15.225
								0.0625	0.50157	3.066	15.21
								0.05	0.27443	1.9001	15.438
								0.0375	0.19323	1.2289	15.174

Figure S3.

1550	-0.06019	-0.00761
1557.1	-0.05242	-0.00448
1564.3	-0.03282	-0.00617
1571.4	-0.00736	-0.00607
1578.5	-0.05474	0.00136
1585.7	-0.11964	-0.01185
1592.8	-0.27186	-0.01419
1600	-0.77021	-0.01956
1607.1	-0.6233	-0.01874
1614.3	-0.29053	-0.00956

1621.4	-0.48901	-0.01514
1628.5	-0.81734	-0.02158
1635.7	-0.51272	-0.02014
1642.8	-0.17145	-0.00877
1650	-0.02848	-0.00457
1657.1	0.05981	-0.00484
1664.3	0.19687	0.00137
1671.4	0.38012	0.00266
1678.5	0.3156	-2.6E-5
1685.7	0.11924	-0.0026
1692.8	0.04662	-0.00293
1700	0.02344	-0.00698
1707.1	0.00939	-0.00412
1714.3	-0.01906	-0.00766
1721.4	-0.09944	-0.01194
1728.5	-0.32623	-0.01323
1735.7	-0.32042	-0.00969
1742.8	-0.07481	-0.00667
1750	-0.00894	-0.00177
1757.1	0.00598	-0.00137
1764.3	0.00503	-0.00198

Figure S4.
See Figure 7

Figure S5.

Panel A					Panel B				
545.0245	932.27611	1121.99918	550	2.8312E-14	545.0245	0.01719	420	0	0
544.6112	938.94769	1131.56892	549.5	2.8312E-14	544.6112	0.01745	430	0	0
544.1986	945.68728	1141.26485	549	-16.32082	544.1986	0.01772	440	0	0
543.7867	952.4958	1151.08939	548.5	-48.96246	543.7867	0.01799	450	0	0
543.3754	959.37422	1161.045	548	-48.96246	543.3754	0.01827	455	0	0
542.9649	966.3235	1171.13422	547.5	-16.32082	542.9649	0.01856	460	0	0
542.555	973.34463	1181.35966	547	-32.64164	542.555	0.01885	465	0	0
542.1458	980.43862	1191.72398	546.5	-81.6041	542.1458	0.01914	470	0.05593	0.18533
541.7372	987.60649	1202.22994	546	-65.28328	541.7372	0.01945	475	0.27481	0.71602
541.3294	994.84928	1212.88034	545.5	-16.32082	541.3294	0.01976	480	0.36473	0.87913
540.9222	1002.16805	1223.67807	545	-16.32082	540.9222	0.02007	490	0.4374	1.01632
540.5156	1009.56388	1234.6261	544.5	-65.28328	540.5156	0.02039	500	0.35872	0.83002
540.1098	1017.03787	1245.72749	544	-65.28328	540.1098	0.02072	505	0.2209	0.51086
539.7046	1024.59113	1256.98536	543.5	-16.32082	539.7046	0.02106	510	0.13142	0.30329
539.3001	1032.22482	1268.40293	543	-16.32082	539.3001	0.0214	515	0.07769	0.17929
538.8962	1039.94008	1279.98351	542.5	-16.32082	538.8962	0.02175	520	0.05357	0.12369
538.493	1047.73809	1291.7305	542	-16.32082	538.493	0.02211	530	0.02065	0.04768
538.0905	1055.62008	1303.6474	541.5	-16.32082	538.0905	0.02247	535	0.00842	0.01947
537.6886	1063.58724	1315.7378	541	-16.32082	537.6886	0.02285			
537.2874	1071.64085	1328.0054	540.5	-16.32082	537.2874	0.02323			
536.8869	1079.78216	1340.454	540	-16.32082	536.8869	0.02362			
536.4869	1088.01248	1353.08752	539.5	-65.28328	536.4869	0.02402			
536.0877	1096.33312	1365.90999	539	-65.28328	536.0877	0.02443			
535.6891	1104.74543	1378.92555	538.5	-65.28328	535.6891	0.02484			
535.2911	1113.25079	1392.13848	538	-16.32082	535.2911	0.02527			
534.8938	1121.85058	1405.55317	537.5	-16.32082	534.8938	0.02571			
534.4972	1130.54623	1419.17416	537	-65.28328	534.4972	0.02615			
534.1011	1139.3392	1433.0061	536.5	-65.28328	534.1011	0.02661			
533.7058	1148.23096	1447.05382	536	-16.32082	533.7058	0.02708			
533.311	1157.22303	1461.32227	535.5	-16.32082	533.311	0.02755			
532.9169	1166.31693	1475.81656	535	-16.32082	532.9169	0.02804			
532.5235	1175.51425	1490.54197	534.5	-16.32082	532.5235	0.02854			
532.1307	1184.81657	1505.50394	534	-16.32082	532.1307	0.02906			
531.7385	1194.22553	1520.70808	533.5	-16.32082	531.7385	0.02958			
531.3469	1203.74279	1536.16017	533	-16.32082	531.3469	0.03012			
530.956	1213.37004	1551.86621	532.5	-16.32082	530.956	0.03067			
530.5657	1223.10903	1567.83236	532	-16.32082	530.5657	0.03123			
530.1761	1232.9615	1584.065	531.5	-16.32082	530.1761	0.03181			
529.787	1242.92927	1600.57073	531	-16.32082	529.787	0.0324			
529.3986	1253.01417	1617.35634	530.5	-65.28328	529.3986	0.03301			
529.0109	1263.21808	1634.42888	530	-65.28328	529.0109	0.03363			

528.6237	1273.5429	1651.79563	529.5	-65.28328	528.6237	0.03427			
528.2372	1283.99059	1669.46411	529	-65.28328	528.2372	0.03493			
527.8512	1294.56315	1687.4421	528.5	-65.28328	527.8512	0.0356			
527.466	1305.26261	1705.73768	528	-65.28328	527.466	0.03629			
527.0813	1316.09105	1724.35917	527.5	-65.28328	527.0813	0.03699			
526.6972	1327.05058	1743.31521	527	-65.28328	526.6972	0.03772			
526.3138	1338.14337	1762.61475	526.5	-65.28328	526.3138	0.03846			
525.9309	1349.37163	1782.26706	526	-65.28328	525.9309	0.03922			
525.5487	1360.73762	1802.28175	525.5	-65.28328	525.5487	0.04001			
525.1671	1372.24365	1822.66877	525	-65.28328	525.1671	0.04081			
524.7861	1383.89208	1843.43845	524.5	-65.28328	524.7861	0.04164			
524.4057	1395.6853	1864.6015	524	-65.28328	524.4057	0.04249			
524.0259	1407.62578	1886.16905	523.5	-65.28328	524.0259	0.04336			
523.6467	1419.71603	1908.15262	523	-65.28328	523.6467	0.04426			
523.2681	1431.95861	1930.56421	522.5	-65.28328	523.2681	0.04518			
522.8901	1444.35616	1953.41626	522	-65.28328	522.8901	0.04612			
522.5127	1456.91135	1976.72171	521.5	-65.28328	522.5127	0.0471			
522.1359	1469.62692	2000.494	521	-65.28328	522.1359	0.0481			
521.7597	1482.50567	2024.74712	520.5	-65.28328	521.7597	0.04913			
521.3841	1495.55048	2049.4956	520	-65.28328	521.3841	0.05019			
521.0091	1508.76427	2074.75458	519.5	-65.28328	521.0091	0.05128			
520.6347	1522.15003	2100.53981	519	-81.6041	520.6347	0.05241			
520.2609	1535.71084	2126.86769	518.5	-81.6041	520.2609	0.05356			
519.8876	1549.44981	2153.75532	518	-81.6041	519.8876	0.05475			
519.515	1563.37017	2181.22049	517.5	-81.6041	519.515	0.05598			
519.1429	1577.47519	2209.28178	517	-81.6041	519.1429	0.05725			
518.7714	1591.76822	2237.95855	516.5	-81.6041	518.7714	0.05855			
518.4006	1606.25271	2267.27098	516	-81.6041	518.4006	0.05989			
518.0302	1620.93217	2297.24018	515.5	-81.6041	518.0302	0.06128			
517.6605	1635.81018	2327.88815	515	-81.6041	517.6605	0.06271			
517.2914	1650.89045	2359.23789	514.5	-81.6041	517.2914	0.06418			
516.9228	1666.17674	2391.31343	514	-81.6041	516.9228	0.0657			
516.5548	1681.67291	2424.1399	513.5	-32.64164	516.5548	0.06727			
516.1874	1697.38292	2457.74356	513	-81.6041	516.1874	0.06889			
515.8206	1713.31081	2492.15191	512.5	-65.28328	515.8206	0.07057			
515.4543	1729.46073	2527.39373	512	-81.6041	515.4543	0.0723			
515.0886	1745.83694	2563.49914	511.5	-81.6041	515.0886	0.07409			
514.7235	1762.44379	2600.49972	511	-81.6041	514.7235	0.07593			
514.3589	1779.28575	2638.42855	510.5	-81.6041	514.3589	0.07784			
513.9949	1796.36738	2677.32034	510	-81.6041	513.9949	0.07982			
513.6315	1813.69337	2717.21145	509.5	-65.28328	513.6315	0.08187			
513.2687	1831.26853	2758.1401	509	-16.32082	513.2687	0.08398			
512.9064	1849.09779	2800.14637	508.5	-32.64164	512.9064	0.08617			
512.5446	1867.18619	2843.27238	508	-32.64164	512.5446	0.08844			
512.1835	1885.53893	2887.56238	507.5	-32.64164	512.1835	0.09079			
511.8229	1904.16131	2933.06289	507	-32.64164	511.8229	0.09323			
511.4628	1923.05879	2979.82283	506.5	-65.28328	511.4628	0.09575			
511.1033	1942.23696	3027.89368	506	-16.32082	511.1033	0.09837			
510.7444	1961.70156	3077.32963	505.5	-16.32082	510.7444	0.10108			
510.386	1981.45848	3128.18772	505	-16.32082	510.386	0.1039			
510.0282	2001.51377	3180.52805	504.5	-16.32082	510.0282	0.10683			
509.6709	2021.87364	3234.41397	504	-16.32082	509.6709	0.10986			
509.3142	2042.54446	3289.91225	503.5	-16.32082	509.3142	0.11302			
508.958	2063.53277	3347.0933	503	-16.32082	508.958	0.1163			
508.6024	2084.8453	3406.03143	502.5	-16.32082	508.6024	0.11971			
508.2473	2106.48895	3466.80505	502	-16.32082	508.2473	0.12325			
507.8928	2128.47082	3529.49693	501.5	-16.32082	507.8928	0.12694			
507.5388	2150.7982	3594.19449	501	-3.1143E-13	507.5388	0.13078			
507.1853	2173.47858	3660.99007	500.5	-3.1143E-13	507.1853	0.13478			
506.8324	2196.51967	3729.98122	500	-3.1143E-13	506.8324	0.13894			
506.4801	2219.92937	3801.27106	499.5	-3.1143E-13	506.4801	0.14328			
506.1283	2243.71584	3874.96855	499	-3.1143E-13	506.1283	0.1478			
505.777	2267.88744	3951.18887	498.5	48.96246	505.777	0.15252			
505.4262	2292.45279	4030.05381	498	32.64164	505.4262	0.15744			
505.076	2317.42075	4111.69209	497.5	32.64164	505.076	0.16257			
504.7263	2342.80042	4196.23979	497	48.96246	504.7263	0.16793			
504.3772	2368.60121	4283.84073	496.5	48.96246	504.3772	0.17353			
504.0286	2394.83275	4374.6469	496	48.96246	504.0286	0.17939			
503.6805	2421.505	4468.81884	495.5	48.96246	503.6805	0.1855			

503.333	2448.62819	4566.52606	495	2.8312E-14	503.333	0.1919			
502.9859	2476.21286	4667.94744	494.5	2.8312E-14	502.9859	0.19859			
502.6394	2504.26988	4773.27163	494	48.96246	502.6394	0.20559			
502.2935	2532.81043	4882.69734	493.5	65.28328	502.2935	0.21292			
501.948	2561.84605	4996.43373	493	65.28328	501.948	0.22059			
501.6031	2591.38861	5114.7006	492.5	65.28328	501.6031	0.22863			
501.2587	2621.45038	5237.72858	492	114.24574	501.2587	0.23705			
500.9148	2652.04397	5365.75919	491.5	130.56657	500.9148	0.24588			
500.5715	2683.18242	5499.04481	491	130.56657	500.5715	0.25514			
500.2287	2714.87917	5637.84837	490.5	130.56657	500.2287	0.26484			
499.8863	2747.14808	5782.44295	490	130.56657	499.8863	0.27502			
499.5445	2780.00346	5933.11102	489.5	146.88739	499.5445	0.28569			
499.2032	2813.46007	6090.14341	489	195.84985	499.2032	0.29689			
498.8625	2847.53316	6253.83788	488.5	195.84985	498.8625	0.30864			
498.5222	2882.23847	6424.49714	488	261.13313	498.5222	0.32095			
498.1825	2917.59227	6602.42637	487.5	261.13313	498.1825	0.33387			
497.8432	2953.61134	6787.93006	487	310.09559	497.8432	0.34742			
497.5045	2990.31305	6981.30798	486.5	326.41641	497.5045	0.36161			
497.1663	3027.71534	7182.85034	486	375.37888	497.1663	0.37649			
496.8286	3065.83675	7392.83179	485.5	391.6997	496.8286	0.39206			
496.4914	3104.69645	7611.5043	485	440.66216	496.4914	0.40835			
496.1547	3144.31428	7839.0887	484.5	505.94544	496.1547	0.42538			
495.8185	3184.71076	8075.76478	484	522.26626	495.8185	0.44316			
495.4828	3225.90712	8321.65992	483.5	636.51201	495.4828	0.46171			
495.1476	3267.92534	8576.8361	483	652.83283	495.1476	0.48103			
494.8129	3310.78816	8841.2755	482.5	767.07857	494.8129	0.5011			
494.4787	3354.51914	9114.86464	482	832.36186	494.4787	0.52193			
494.145	3399.1427	9397.37749	481.5	913.96596	494.145	0.54348			
493.8119	3444.6841	9688.4579	481	1028.2117	493.8119	0.56573			
493.4792	3491.16957	9987.60201	480.5	1158.77827	493.4792	0.58862			
493.147	3538.62625	10294.1415	480	1289.34484	493.147	0.6121			
492.8152	3587.08233	10607.22884	479.5	1468.87386	492.8152	0.63608			
492.484	3636.56701	10925.82571	479	1615.76125	492.484	0.66046			
492.1533	3687.1106	11248.69628	478.5	1811.6111	492.1533	0.68513			
491.8231	3738.74457	11574.4069	478	2007.46095	491.8231	0.70997			
491.4933	3791.50156	11901.33376	477.5	2154.34833	491.4933	0.73481			
491.1641	3845.41549	12227.67991	477	2415.48146	491.1641	0.75949			
490.8353	3900.52156	12551.50266	476.5	2774.53952	490.8353	0.78384			
490.507	3956.85638	12870.75171	476	3149.9184	490.507	0.80766			
490.1792	4014.45798	13183.31734	475.5	3443.69317	490.1792	0.83076			
489.8519	4073.36589	13487.08731	475	3835.39287	489.8519	0.85295			
489.5251	4133.62124	13780.0098	474.5	4357.65913	489.5251	0.87403			
489.1988	4195.26679	14060.15894	474	4879.92539	489.1988	0.89383			
488.8729	4258.34705	14325.79873	473.5	5467.47494	488.8729	0.91218			
488.5475	4322.90835	14575.44099	473	6169.27023	488.5475	0.92895			
488.2226	4388.99894	14807.89317	472.5	7017.9529	488.2226	0.94403			
487.8982	4456.66907	15022.2926	472	7866.63558	487.8982	0.95732			
487.5742	4525.97109	15218.12515	471.5	8894.84728	487.5742	0.96879			
487.2507	4596.95958	15395.22739	471	9923.05899	487.2507	0.9784			
486.9277	4669.69143	15553.77329	470.5	11147.12054	486.9277	0.98618			
486.6052	4744.22599	15694.24754	470	12567.03194	486.6052	0.99215			
486.2832	4820.62518	15817.40861	469.5	14133.83073	486.2832	0.99639			
485.9616	4898.95364	15924.24527	469	15814.87526	485.9616	0.99897			
485.6405	4979.27883	16015.93022	468.5	17512.24062	485.6405	1			
485.3198	5061.67124	16093.7741	468	19454.41828	485.3198	0.99959			
484.9996	5146.20451	16159.18247	467.5	21527.16251	484.9996	0.99786			
484.6799	5232.95562	16213.61751	467	23746.79412	484.6799	0.99493			
484.3607	5322.00506	16258.56536	466.5	26145.95477	484.3607	0.99093			
484.0419	5413.437	16295.50924	466	28594.07787	484.0419	0.98599			
483.7236	5507.33956	16325.90804	465.5	31107.48426	483.7236	0.98024			
483.4058	5603.80495	16351.17957	465	33588.24901	483.4058	0.97379			
483.0884	5702.92974	16372.68759	464.5	36085.33458	483.0884	0.96676			
482.7714	5804.81513	16391.73181	464	38696.66589	482.7714	0.95925			
482.455	5909.56713	16409.53992	463.5	41356.95966	482.455	0.95137			
482.139	6017.29692	16427.26123	463	43772.44113	482.139	0.94322			
481.8234	6128.12111	16445.96144	462.5	46106.31849	481.8234	0.93487			
481.5083	6242.16204	16466.61845	462	48260.66682	481.5083	0.92641			
481.1937	6359.54814	16490.11907	461.5	50349.73187	481.1937	0.9179			
480.8795	6480.41428	16517.25691	461	52242.94707	480.8795	0.90941			

480.5658	6604.90214	16548.73144	460.5	54005.59571	480.5658	0.90098			
480.2525	6733.16061	16585.14855	460	55458.14875	480.2525	0.89266			
479.9397	6865.34625	16627.02258	459.5	56633.24784	479.9397	0.88448			
479.6273	7001.62373	16674.78026	459	57661.45955	479.6273	0.87646			
479.3154	7142.1663	16728.76633	458.5	58412.2173	479.3154	0.86861			
479.004	7287.15637	16789.25106	458	59065.05013	479.004	0.86096			
478.6929	7436.786	16856.43945	457.5	59522.03311	478.6929	0.85349			
478.3824	7591.25753	16930.48212	457	59734.20378	478.3824	0.8462			
478.0723	7750.78424	17011.48748	456.5	59848.44952	478.0723	0.83909			
477.7626	7915.59094	17099.53488	456	59799.48706	477.7626	0.83213			
477.4533	8085.9148	17194.68844	455.5	59685.24131	477.4533	0.82532			
477.1446	8262.00603	17297.0109	455	59440.429	477.1446	0.81864			
476.8362	8444.12874	17406.57715	454.5	59179.29587	476.8362	0.81206			
476.5283	8632.56179	17523.48679	454	58869.20028	476.5283	0.80558			
476.2208	8827.59973	17647.87547	453.5	58591.74633	476.2208	0.79918			
475.9138	9029.55379	17779.92451	453	58265.32991	475.9138	0.79285			
475.6072	9238.7529	17919.86861	452.5	57889.95104	475.6072	0.78657			
475.3011	9455.54482	18068.00162	452	57628.81791	475.3011	0.78035			
474.9954	9680.29731	18224.68033	451.5	57351.36395	474.9954	0.77418			
474.6901	9913.39939	18390.32646	451	57106.55164	474.6901	0.76807			
474.3853	10155.26263	18565.42704	450.5	56861.73933	474.3853	0.76202			
474.0808	10406.32255	18750.5334	450	56714.85195	474.0808	0.75605			
473.7769	10667.04011	18946.25905	449.5	56567.96456	473.7769	0.75016			
473.4733	10937.90317	19153.27658	449	56388.43553	473.4733	0.74437			
473.1702	11219.42818	19372.31368	448.5	56257.86897	473.1702	0.73871			
472.8675	11512.16176	19604.14851	448	56127.3024	472.8675	0.73319			
472.5653	11816.68251	19849.60434	447.5	56110.98158	472.5653	0.72784			
472.2635	12133.60272	20109.54347	447	55996.73584	472.2635	0.72268			
471.9621	12463.57023	20384.86045	446.5	55882.49009	471.9621	0.71773			
471.6611	12807.27023	20676.47462	446	55866.16927	471.6611	0.71301			
471.3606	13165.42715	20985.32173	445.5	55866.16927	471.3606	0.70854			
471.0605	13538.80645	21312.34481	445	55866.16927	471.0605	0.70434			
470.7608	13928.21637	21658.48401	444.5	55980.41502	470.7608	0.70042			
470.4615	14334.50961	22024.66558	444	56110.98158	470.4615	0.69678			
470.1627	14758.58478	22411.78962	443.5	56257.86897	470.1627	0.69344			
469.8642	15201.38771	22820.71676	443	56519.0021	469.8642	0.69037			
469.5662	15663.91236	23252.25364	442.5	56845.41851	469.5662	0.68756			
469.2687	16147.20137	23707.13696	442	57286.08067	469.2687	0.68498			
468.9715	16652.34604	24186.01626	441.5	57792.02611	468.9715	0.6826			
468.6748	17180.48566	24689.43528	441	58379.57566	468.6748	0.68036			
468.3784	17732.80587	25217.81204	440.5	59097.69177	468.3784	0.6782			
468.0825	18310.53605	25771.41766	440	59930.05363	468.0825	0.67601			
467.787	18914.94525	26350.35442	439.5	60827.69876	467.787	0.6737			
467.4919	19547.33658	26954.53316	439	61741.66472	467.4919	0.67115			
467.1973	20209.03949	27583.651	438.5	62753.55561	467.1973	0.66819			
466.903	20901.39977	28237.16968	438	63732.80485	466.903	0.66467			
466.6092	21625.76664	28914.2957	437.5	64761.01655	466.6092	0.66039			
466.3157	22383.4765	29613.96285	437	65805.54908	466.3157	0.65513			
466.0227	23175.83278	30334.81823	436.5	66784.79832	466.0227	0.64866			
465.7301	24004.0813	31075.21214	436	67617.16018	465.7301	0.6407			
465.4379	24869.38053	31833.19263	435.5	68384.23875	465.4379	0.63097			
465.1461	25772.7661	32606.50468	435	69020.75076	465.1461	0.61919			
464.8547	26715.10905	33392.59417	434.5	69494.05456	464.8547	0.60503			
464.5637	27697.06737	34188.6161	434	69804.15015	464.5637	0.58818			
464.2731	28719.03043	34991.44701	433.5	70000	464.2731	0.56833			
463.983	29781.05645	35797.70095	433	69951.03754	463.983	0.54515			
463.6932	30882.80324	36603.74932	432.5	69836.79179	463.6932	0.51836			
463.4038	32023.45324	37405.74469	432	69526.6962	463.4038	0.48767			
463.1149	33201.63426	38199.64964	431.5	69053.3924	463.1149	0.45286			
462.8263	34415.33858	38981.27201	431	68482.16367	462.8263	0.41371			
462.5381	35661.84351	39746.30808	430.5	67780.36838	462.5381	0.37008			
462.2504	36937.63813	40490.39556	430	67127.53556	462.2504	0.32191			
461.963	38238.36154	41209.17736	429.5	66409.41945	461.963	0.26918			
461.676	39558.75925	41898.3765	429	65626.02005	461.676	0.21199			
461.3894	40892.66494	42553.88122	428.5	64793.6582	461.3894	0.15052			
461.1033	42233.01491	43171.8376	428	63944.97552	461.1033	0.08506			
460.8175	43571.90244	43748.7456	427.5	63112.61366	460.8175	0.01602			
460.5321	44900.67751	44281.5532	427	62329.21427	460.5321	-0.0561			
460.2471	46210.09519	44767.74244	426.5	61562.1357	460.2471	-0.13069			

459.9625	47490.51261	45205.40122	426	60827.69876	459.9625	-0.20705			
459.6783	48732.12993	45593.27561	425.5	60109.58265	459.6783	-0.2844			
459.3944	49925.26628	45930.79882	425	59277.2208	459.3944	-0.36193			
459.111	51060.65671	46218.09494	424.5	58559.10469	459.111	-0.43877			
458.828	52129.75246	46455.95789	424	57857.3094	458.828	-0.51409			
458.5453	53125.00476	46645.80787	423.5	57139.19329	458.5453	-0.58706			
458.263	54040.11187	46789.62923	423	56372.11471	458.263	-0.65695			
457.9812	54870.2117	46889.89461	422.5	55719.28188	457.9812	-0.72307			
457.6997	55612.00655	46949.48056	422	54952.20331	457.6997	-0.78489			
457.4186	56263.813	46971.57949	421.5	54234.0872	457.4186	-0.84194			
457.1378	56825.53685	46959.61226	421	53581.25437	457.1378	-0.89392			
456.8575	57298.57976	46917.14477	420.5	52928.42154	456.8575	-0.94063			
456.5775	57685.68986	46847.81084	420	52226.62625	456.5775	-0.98199			
456.298	57990.77229	46755.24313	419.5	51622.75589	456.298	-1.01802			
456.0188	58218.67659	46643.01271	419	50986.24388	456.0188	-1.04884			
455.7399	58374.97767	46514.57764	418.5	50349.73187	455.7399	-1.07464			
455.4615	58465.76411	46373.24028	418	49811.14479	455.4615	-1.09567			
455.1835	58497.4443	46222.11293	417.5	49288.87853	455.1835	-1.11223			
454.9058	58476.57701	46064.09122	417	48815.57473	454.9058	-1.12466			
454.6285	58409.72914	45901.83452	416.5	48358.59175	454.6285	-1.13331			
454.3516	58303.36048	45737.7526	416	47868.96713	454.3516	-1.13853			
454.075	58163.73309	45573.99813	415.5	47526.22989	454.075	-1.14072			
453.7989	57996.84132	45412.46404	415	47199.81348	453.7989	-1.14024			
453.5231	57808.35858	45254.78553	414.5	46873.39706	453.5231	-1.13744			
453.2476	57603.59645	45102.34593	414	46546.98065	453.2476	-1.1327			
452.9726	57387.47307	44956.28619	413.5	46285.84752	452.9726	-1.12635			
452.6979	57164.48801	44817.51763	413	45894.14782	452.6979	-1.11872			
452.4236	56938.70241	44686.73759	412.5	45567.73141	452.4236	-1.11012			
452.1497	56713.72334	44564.44795	412	45192.35253	452.1497	-1.10081			
451.8761	56492.6927	44450.97612	411.5	44784.33201	451.8761	-1.09107			
451.6029	56278.28081	44346.49854	411	44327.34903	451.6029	-1.08111			
451.3301	56072.68575	44251.06623	410.5	43821.40359	451.3301	-1.07112			
451.0576	55877.63902	44164.63201	410	43184.89158	451.0576	-1.06128			
450.7855	55694.4186	44087.07893	409.5	42646.3045	450.7855	-1.05171			
450.5138	55523.86982	44018.24911	409	41944.50921	450.5138	-1.04249			
450.2424	55366.43475	43957.97211	408.5	41307.9972	450.2424	-1.03369			
449.9714	55222.18996	43906.09201	408	40638.84355	449.9714	-1.02532			
449.7008	55090.89246	43862.4921	407.5	39904.40662	449.7008	-1.01737			
449.4305	54972.03291	43827.11651	407	39137.32805	449.4305	-1.00981			
449.1606	54864.89486	43799.98795	406.5	38419.21194	449.1606	-1.00256			
448.8911	54768.61802	43781.22114	406	37652.13336	448.8911	-0.99554			
448.6219	54682.26343	43771.0318	405.5	36934.01725	448.6219	-0.98864			
448.3531	54604.87785	43769.74118	405	36215.90114	448.3531	-0.98174			
448.0846	54535.55476	43777.77651	404.5	35497.78503	448.0846	-0.97473			
447.8165	54473.48945	43795.66755	404	34779.66892	447.8165	-0.96749			
447.5488	54418.02618	43824.03997	403.5	34077.87363	447.5488	-0.95989			
447.2814	54368.69589	43863.60582	403	33376.07834	447.2814	-0.95184			
447.0143	54325.2436	43915.1516	402.5	32706.92469	447.0143	-0.94323			
446.7477	54287.64579	43979.52429	402	32054.09186	446.7477	-0.93399			
446.4814	54256.11806	44057.6157	401.5	31401.25903	446.4814	-0.92406			
446.2154	54231.11438	44150.34548	401	30813.70949	446.2154	-0.91339			
445.9498	54213.31906	44258.64313	400.5	30111.9142	445.9498	-0.90197			
445.6845	54203.63299	44383.42936	400	29524.36465	445.6845	-0.88978			
445.4196	54203.15515	44525.59722	399.5	28936.81511	445.4196	-0.87686			
445.1551	54213.16057	44685.99341	399	28283.98228	445.1551	-0.86323			
444.8908	54235.07545	44865.40018	398.5	27696.43273	444.8908	-0.84896			
444.627	54270.45015	45064.51823	398	27059.92073	444.627	-0.83412			
444.3635	54320.93065	45283.95101	397.5	26472.37118	444.3635	-0.81882			
444.1003	54388.22894	45524.19076	397	25884.82164	444.1003	-0.80315			
443.8375	54474.09285	45785.60651	396.5	25313.59291	443.8375	-0.78724			
443.5751	54580.276	46068.43434	396	24775.00583	443.5751	-0.77123			
443.313	54708.50806	46372.76972	395.5	24301.70203	443.313	-0.75528			
443.0512	54860.46605	46698.56206	395	23779.43577	443.0512	-0.73953			
442.7898	55037.74665	47045.61092	394.5	23257.1695	442.7898	-0.72414			
442.5287	55241.83991	47413.56372	394	22751.22406	442.5287	-0.7093			
442.268	55474.10423	47801.91428	393.5	22294.24108	442.268	-0.69516			
442.0076	55735.74236	48210.00161	393	21837.2581	442.0076	-0.68189			
441.7475	56027.77809	48637.00868	392.5	21380.27512	441.7475	-0.66966			
441.4878	56351.03308	49081.96063	392	20939.61296	441.4878	-0.65863			

441.2285	56706.10316	49543.72251	391.5	20482.62998	441.2285	-0.64896			
440.9695	57093.33352	50020.99663	391	20090.93029	440.9695	-0.6408			
440.7108	57512.79223	50512.3202	390.5	19633.94731	440.7108	-0.63429			
440.4524	57964.2419	51016.06382	390	19193.28515	440.4524	-0.62955			
440.1944	58447.1096	51530.43178	389.5	18785.26463	440.1944	-0.6267			
439.9368	58960.45596	52053.4651	389	18328.28165	439.9368	-0.62582			
439.6794	59502.94464	52583.04802	388.5	17887.61949	439.6794	-0.62699			
439.4225	60072.81439	53116.91845	388	17479.59897	439.4225	-0.63025			
439.1658	60667.85624	53652.68259	387.5	17022.61599	439.1658	-0.63563			
438.9095	61285.39879	54187.83345	387	16630.9163	438.9095	-0.64309			
438.6535	61922.30452	54719.77262	386.5	16173.93332	438.6535	-0.6526			
438.3979	62574.97987	55245.83447	386	15782.23362	438.3979	-0.66407			
438.1425	63239.40111	55763.3117	385.5	15390.53392	438.1425	-0.67739			
437.8876	63911.15688	56269.48113	385	14949.87176	437.8876	-0.69239			
437.6329	64585.50718	56761.62896	384.5	14558.17207	437.6329	-0.7089			
437.3786	65257.45715	57237.07488	384	14215.43483	437.3786	-0.7267			
437.1246	65921.84259	57693.19498	383.5	13774.77267	437.1246	-0.74557			
436.8709	66573.4232	58127.44357	383	13399.3938	436.8709	-0.76527			
436.6176	67206.97882	58537.37455	382.5	13072.97738	436.6176	-0.78553			
436.3646	67817.40382	58920.6628	382	12730.24015	436.3646	-0.80611			
436.1119	68399.79513	59275.12638	381.5	12420.14456	436.1119	-0.82676			
435.8596	68949.53045	59598.74965	381	12077.40732	435.8596	-0.84725			
435.6076	69462.33435	59889.70736	380.5	11767.31173	435.6076	-0.86735			
435.3559	69934.33147	60146.38927	380	11538.82024	435.3559	-0.88686			
435.1045	70362.08709	60367.42439	379.5	11310.32875	435.1045	-0.90559			
434.8535	70742.63667	60551.70384	379	11098.15808	434.8535	-0.92337			
434.6028	71073.50616	60698.4012	378.5	10820.70413	434.6028	-0.94006			
434.3524	71352.72502	60806.98906	378	10510.60853	434.3524	-0.95552			
434.1023	71578.8335	60877.25107	377.5	10233.15458	434.1023	-0.96964			
433.8526	71750.88513	60909.28861	377	9923.05899	433.8526	-0.98233			
433.6032	71868.44469	60903.52167	376.5	9645.60504	433.6032	-0.9935			
433.3541	71931.58136	60860.68372	376	9384.4719	433.3541	-1.0031			
433.1053	71940.85638	60781.81049	375.5	9123.33877	433.1053	-1.01109			
432.8568	71897.30482	60668.22272	375	8862.20564	432.8568	-1.01744			
432.6087	71802.4108	60521.50336	374.5	8601.07251	432.6087	-1.02213			
432.3609	71658.07631	60343.46945	374	8405.22266	432.3609	-1.02518			
432.1134	71466.58372	60136.13963	373.5	8160.41035	432.1134	-1.02662			
431.8662	71230.55272	59901.69813	373	7899.27722	431.8662	-1.02648			
431.6193	70952.89243	59642.45637	372.5	7703.42737	431.6193	-1.02481			
431.3728	70636.74949	59360.81347	372	7507.57752	431.3728	-1.02168			
431.1265	70285.45339	59059.217	371.5	7295.40685	431.1265	-1.01718			
430.8806	69902.45973	58740.12517	371	7050.59454	430.8806	-1.01139			
430.635	69491.29298	58405.97151	370.5	6920.02798	430.635	-1.00441			
430.3897	69055.48967	58059.13298	370	6724.17813	430.3897	-0.99635			
430.1447	68598.54365	57701.90208	369.5	6512.00746	430.1447	-0.98731			
429.9001	68123.85475	57336.46337	369	6332.47843	429.9001	-0.97742			
429.6557	67634.68222	56964.87449	368.5	6201.91187	429.6557	-0.96676			
429.4117	67134.1044	56589.05176	368	6022.38284	429.4117	-0.95546			
429.1679	66624.98536	56210.76002	367.5	5875.49545	429.1679	-0.9436			
428.9245	66109.94949	55831.60653	367	5744.92889	428.9245	-0.93129			
428.6814	65591.36413	55453.03842	366.5	5565.39986	428.6814	-0.91861			
428.4386	65071.33024	55076.34337	366	5385.87083	428.4386	-0.90562			
428.1961	64551.68066	54702.65302	365.5	5271.62509	428.1961	-0.89239			
427.9539	64033.98522	54332.94878	365	5206.3418	427.9539	-0.87898			
427.7121	63519.56157	53968.06967	364.5	5075.77524	427.7121	-0.86543			
427.4705	63009.49087	53608.72193	364	4945.20867	427.4705	-0.85178			
427.2292	62504.63695	53255.49002	363.5	4863.60457	427.2292	-0.83804			
426.9883	62005.66802	52908.84889	363	4798.32129	426.9883	-0.82424			
426.7476	61513.07986	52569.17711	362.5	4684.07554	426.7476	-0.81038			
426.5073	61027.21983	52236.7707	362	4569.8298	426.5073	-0.79648			
426.2672	60548.31099	51911.85722	361.5	4569.8298	426.2672	-0.78252			
426.0275	60076.47596	51594.60984	361	4455.58405	426.0275	-0.76852			
425.7881	59611.76019	51285.16103	360.5	4390.30077	425.7881	-0.75445			
425.5489	59154.15454	50983.61559	360	4390.30077	425.5489	-0.74031			
425.3101	58703.61667	50690.06258	359.5	4325.01749	425.3101	-0.72609			
425.0716	58260.09136	50404.58607	359	4259.7342	425.0716	-0.71177			
424.8333	57823.52917	50127.27445	358.5	4276.05502	424.8333	-0.69734			
424.5954	57393.90325	49858.22809	358	4276.05502	424.5954	-0.68279			
424.3578	56971.22407	49597.56543	357.5	4259.7342	424.3578	-0.66811			

424.1204	56555.55144	49345.4273	357	4210.77174	424.1204	-0.65329			
423.8834	56147.00399	49101.9796	356.5	4210.77174	423.8834	-0.63833			
423.6467	55745.76561	48867.41434	356	4161.80928	423.6467	-0.62323			
423.4102	55352.08915	48641.949	355.5	4178.1301	423.4102	-0.60799			
423.1741	54966.2972	48425.82447	355	4129.16764	423.1741	-0.59261			
422.9382	54588.78033	48219.30156	354.5	4178.1301	422.9382	-0.57712			
422.7027	54219.99292	48022.65631	354	4145.48846	422.7027	-0.56152			
422.4674	53860.4469	47836.17422	353.5	4227.09256	422.4674	-0.54584			
422.2325	53510.70353	47660.14358	353	4292.37585	422.2325	-0.5301			
421.9978	53171.36361	47494.8481	352.5	4276.05502	421.9978	-0.51433			
421.7634	52843.05627	47340.55896	352	4194.45092	421.7634	-0.49857			
421.5294	52526.42653	47197.5265	351.5	4292.37585	421.5294	-0.48284			
421.2956	52222.12185	47065.97163	351	4259.7342	421.2956	-0.46718			
421.0621	51930.77792	46946.0772	350.5	4292.37585	421.0621	-0.45165			
420.8289	51653.00383	46837.97946	350	4308.69667	420.8289	-0.43628			
420.596	51389.36678	46741.75988			420.596	-0.42111			
420.3633	51140.37671	46657.43744			420.3633	-0.40619			
420.131	50906.47087	46584.96174			420.131	-0.39156			
419.8989	50687.99867	46524.20689			419.8989	-0.37727			
419.6672	50485.20725	46474.96656			419.6672	-0.36336			
419.4357	50298.22791	46436.95011			419.4357	-0.34986			
419.2045	50127.06405	46409.77977			419.2045	-0.33681			
418.9736	49971.58084	46392.98907			418.9736	-0.32425			
418.743	49831.49736	46386.02215			418.743	-0.31218			
418.5127	49706.38126	46388.23413			418.5127	-0.30065			
418.2827	49595.64653	46398.89221			418.2827	-0.28965			
418.0529	49498.55436	46417.17771			418.0529	-0.27919			
417.8234	49414.2172	46442.18878			417.8234	-0.26929			
417.5943	49341.60585	46472.94391			417.5943	-0.25992			
417.3654	49279.55919	46508.38644			417.3654	-0.25109			
417.1367	49226.79627	46547.38988			417.1367	-0.24277			
416.9084	49181.93025	46588.76448			416.9084	-0.23496			
416.6803	49143.48364	46631.26491			416.6803	-0.22763			
416.4526	49109.90444	46673.59933			416.4526	-0.22075			
416.2251	49079.58287	46714.43965			416.2251	-0.2143			
415.9979	49050.86833	46752.43321			415.9979	-0.20825			
415.7709	49022.08653	46786.21544			415.7709	-0.20259			
415.5443	48991.55662	46814.42354			415.5443	-0.19726			
415.3179	48957.60839	46835.71077			415.3179	-0.19226			
415.0918	48918.59948	46848.76114			415.0918	-0.18754			
414.866	48872.93248	46852.30417			414.866	-0.18308			
414.6404	48819.07189	46845.12937			414.6404	-0.17885			
414.4151	48755.56059	46826.10021			414.4151	-0.17482			
414.1901	48681.03568	46794.16729			414.1901	-0.17096			
413.9654	48594.24321	46748.3804			413.9654	-0.16725			
413.741	48494.05156	46687.89927			413.741	-0.16365			
413.5168	48379.46316	46612.00273			413.5168	-0.16014			
413.2929	48249.62428	46520.09612			413.2929	-0.15671			
413.0693	48103.83276	46411.71668			413.0693	-0.15332			
412.8459	47941.5434	46286.537			412.8459	-0.14996			
412.6229	47762.37126	46144.3663			412.6229	-0.1466			
412.4001	47566.09238	45985.14977			412.4001	-0.14324			
412.1775	47352.6423	45808.96602			412.1775	-0.13987			
411.9553	47122.11214	45616.02285			411.9553	-0.13646			
411.7333	46874.7423	45406.65149			411.7333	-0.13302			
411.5116	46610.91407	45181.29958			411.5116	-0.12953			
411.2901	46331.13921	44940.52302			411.2901	-0.126			
411.0689	46036.04783	44684.97676			411.0689	-0.12242			
410.848	45726.37503	44415.40482			410.848	-0.11878			
410.6274	45402.94669	44132.62945			410.6274	-0.1151			
410.407	45066.66475	43837.53979			410.407	-0.11137			
410.1869	44718.49251	43531.07992			410.1869	-0.10759			
409.967	44359.44013	43214.23674			409.967	-0.10376			
409.7474	43990.55062	42888.02762			409.7474	-0.0999			
409.5281	43612.88648	42553.48828			409.5281	-0.09599			
409.3091	43227.51702	42211.66088			409.3091	-0.09204			
409.0903	42835.50653	41863.58267			409.0903	-0.08806			
408.8718	42437.90324	41510.27531			408.8718	-0.08405			
408.6535	42035.72926	41152.73503			408.6535	-0.08001			

408.4355	41629.97145	40791.92377			408.4355	-0.07593			
408.2178	41221.57346	40428.76143			408.2178	-0.07183			
408.0003	40811.42883	40064.11935			408.0003	-0.06771			
407.7831	40400.37545	39698.815			407.7831	-0.06357			
407.5661	39989.1913	39333.60807			407.5661	-0.0594			
407.3495	39578.59149	38969.19773			407.3495	-0.05522			
407.133	39169.22665	38606.22131			407.133	-0.05101			
406.9169	38761.68268	38245.25412			406.9169	-0.04679			
406.701	38356.48167	37886.8103			406.701	-0.04256			
406.4853	37954.08397	37531.34485			406.4853	-0.0383			
406.2699	37554.89124	37179.25631			406.2699	-0.03404			
406.0548	37159.25041	36830.89039			406.0548	-0.02975			
405.8399	36767.45824	36486.54399			405.8399	-0.02545			
405.6253	36379.76642	36146.4698			405.6253	-0.02114			
405.4109	35996.38701	35810.88112			405.4109	-0.01681			
405.1968	35617.49795	35479.95685			405.1968	-0.01246			
404.983	35243.24873	35153.84644			404.983	-0.0081			
404.7694	34873.76574	34832.67482			404.7694	-0.00372			
404.5561	34509.15755	34516.54699			404.5561	6.69536E-4			
404.343	34149.51971	34205.55234			404.343	0.00508			
404.1301	33794.9391	33899.7686			404.1301	0.0095			
403.9176	33445.49783	33599.26526			403.9176	0.01393			
403.7052	33101.27647	33304.10656			403.7052	0.01838			
403.4932	32762.35667	33014.35394			403.4932	0.02283			
403.2813	32428.82305	32730.06787			403.2813	0.02729			
403.0698	32100.76454	32451.30923			403.0698	0.03176			
402.8585	31778.27493	32178.14003			402.8585	0.03623			
402.6474	31461.45285	31910.62367			402.6474	0.0407			
402.4366	31150.40119	31648.8246			402.4366	0.04516			
402.226	30845.22592	31392.80754			402.226	0.04961			
402.0157	30546.03449	31142.63628			402.0157	0.05406			
401.8056	30252.93375	30898.3721			401.8056	0.05848			
401.5958	29966.02756	30660.07184			401.5958	0.06289			
401.3862	29685.41409	30427.78582			401.3862	0.06726			
401.1769	29411.18293	30201.55546			401.1769	0.07161			
400.9678	29143.41205	29981.41088			400.9678	0.07593			
400.759	28882.16473	29767.36836			400.759	0.08021			
400.5504	28627.48661	29559.42781			400.5504	0.08444			
400.3421	28379.40283	29357.5703			400.3421	0.08863			
400.134	28137.91543	29161.75563			400.134	0.09277			
399.9261	27903.00105	28971.92015			399.9261	0.09685			
399.7185	27674.60898	28787.9747			399.7185	0.10088			
399.5112	27452.6596	28609.80283			399.5112	0.10485			
399.3041	27237.04325	28437.25945			399.3041	0.10875			
399.0972	27027.61943	28270.16969			399.0972	0.11258			
398.8906	26824.21655	28108.32831			398.8906	0.11635			
398.6842	26626.63195	27951.49942			398.6842	0.12004			
398.478	26434.63244	27799.41678			398.478	0.12366			
398.2721	26247.95519	27651.78449			398.2721	0.1272			
398.0665	26066.30901	27508.27822			398.0665	0.13065			
397.861	25889.37599	27368.5468			397.861	0.13402			
397.6559	25716.81359	27232.21442			397.6559	0.13731			
397.4509	25548.25698	27098.88311			397.4509	0.1405			
397.2462	25383.32175	26968.13571			397.2462	0.1436			
397.0417	25221.60693	26839.5391			397.0417	0.1466			
396.8375	25062.69827	26712.64781			396.8375	0.1495			
396.6335	24906.17171	26587.0078			396.6335	0.1523			
396.4298	24751.59711	26462.1605			396.4298	0.15499			
396.2263	24598.54203	26337.64689			396.2263	0.15758			
396.023	24446.57565	26213.0117			396.023	0.16005			
395.82	24295.27268	26087.80759			395.82	0.16242			
395.6172	24144.21732	25961.59923			395.6172	0.16467			
395.4146	23993.00703	25833.96726			395.4146	0.1668			
395.2123	23841.25627	25704.51207			395.2123	0.16882			
395.0102	23688.59998	25572.85736			395.0102	0.17073			
394.8083	23534.69685	25438.65343			394.8083	0.17251			
394.6067	23379.23222	25301.58012			394.6067	0.17418			
394.4053	23221.92071	25161.34952			394.4053	0.17573			
394.2041	23062.50834	25017.7082			394.2041	0.17716			

394.0032	22900.77434	24870.43916			394.0032	0.17847			
393.8025	22736.53244	24719.3633			393.8025	0.17966			
393.602	22569.63175	24564.34042			393.602	0.18073			
393.4018	22399.95723	24405.26984			393.4018	0.1817			
393.2018	22227.42973	24242.09045			393.2018	0.18254			
393.002	22052.00559	24074.78034			393.002	0.18328			
392.8025	21873.67592	23903.35595			392.8025	0.1839			
392.6032	21692.46547	23727.87077			392.6032	0.18442			
392.4041	21508.43108	23548.4137			392.4041	0.18484			
392.2052	21321.65989	23365.10695			392.2052	0.18515			
392.0066	21132.26714	23178.10374			392.0066	0.18537			
391.8082	20940.39372	22987.58562			391.8082	0.18549			
391.6101	20746.20351	22793.7596			391.6101	0.18552			
391.4121	20549.8805	22596.85516			391.4121	0.18547			
391.2144	20351.62588	22397.12097			391.2144	0.18534			
391.0169	20151.65496	22194.82168			391.0169	0.18513			
390.8197	19950.1942	21990.23463			390.8197	0.18484			
390.6226	19747.47825	21783.64652			390.6226	0.18449			
390.4258	19543.74708	21575.35028			390.4258	0.18408			
390.2293	19339.24328	21365.64197			390.2293	0.18361			
390.0329	19134.20946	21154.81788			390.0329	0.18308			
389.8368	18928.88592	20943.17182			389.8368	0.18251			
389.6409	18723.50844	20730.99265			389.6409	0.18189			
389.4452	18518.3064	20518.562			389.4452	0.18124			
389.2497	18313.50106	20306.1523			389.2497	0.18055			
389.0545	18109.30418	20094.02506			389.0545	0.17983			
388.8595	17905.9168	19882.42942			388.8595	0.17909			
388.6647	17703.52841	19671.60094			388.6647	0.17832			
388.4701	17502.31622	19461.76077			388.4701	0.17754			
388.2758	17302.44479	19253.11498			388.2758	0.17674			
388.0816	17104.06578	19045.85419			388.0816	0.17594			
387.8877	16907.31799	18840.15351			387.8877	0.17513			
387.694	16712.3275	18636.17259			387.694	0.17431			
387.5006	16519.20802	18434.05595			387.5006	0.1735			
387.3073	16328.06134	18233.93348			387.3073	0.17269			
387.1143	16138.97796	18035.9211			387.1143	0.17188			
386.9215	15952.0377	17840.12149			386.9215	0.17107			
386.7289	15767.31051	17646.62502			386.7289	0.17028			
386.5365	15584.85726	17455.51065			386.5365	0.16949			
386.3444	15404.73054	17266.84696			386.3444	0.16872			
386.1524	15226.97552	17080.69312			386.1524	0.16796			
385.9607	15051.63075	16897.09988			385.9607	0.16721			
385.7692	14878.72897	16716.11055			385.7692	0.16648			
385.5779	14708.29782	16537.76188			385.5779	0.16576			
385.3869	14540.36054	16362.08486			385.3869	0.16506			
385.196	14374.93654	16189.10551			385.196	0.16438			
385.0054	14212.04194	16018.84546			385.0054	0.16371			
384.8149	14051.68993	15851.32255			384.8149	0.16306			
384.6247	13893.89111	15686.5512			384.6247	0.16243			
384.4347	13738.65372	15524.54278			384.4347	0.16181			
384.2449	13585.98371	15365.30576			384.2449	0.16122			
384.0554	13435.88484	15208.84588			384.0554	0.16064			
383.866	13288.35857	15055.16605			383.866	0.16009			
383.6769	13143.40403	14904.26638			383.6769	0.15955			
383.4879	13001.0178	14756.1439			383.4879	0.15903			
383.2992	12861.19374	14610.79236			383.2992	0.15853			
383.1107	12723.92274	14468.20194			383.1107	0.15804			
382.9224	12589.19249	14328.35892			382.9224	0.15758			
382.7343	12456.98716	14191.24526			382.7343	0.15714			
382.5465	12327.28717	14056.83831			382.5465	0.15671			
382.3588	12200.0689	13925.11037			382.3588	0.1563			
382.1713	12075.30442	13796.02837			382.1713	0.15591			
381.9841	11952.96129	13669.55352			381.9841	0.15554			
381.797	11833.00234	13545.64105			381.797	0.15518			
381.6102	11715.3855	13424.23996			381.6102	0.15483			
381.4236	11600.06368	13305.29287			381.4236	0.15451			
381.2372	11486.98473	13188.73589			381.2372	0.15419			
381.051	11376.09136	13074.49863			381.051	0.15389			
380.865	11267.32125	12962.50427			380.865	0.1536			

380.6792	11160.60711	12852.66967			380.6792	0.15331			
380.4936	11055.87685	12744.90564			380.4936	0.15304			
380.3082	10953.05383	12639.11721			380.3082	0.15277			
380.1231	10852.05716	12535.20408			380.1231	0.15251			
379.9381	10752.80204	12433.06106			379.9381	0.15224			
379.7533	10655.20022	12332.57862			379.7533	0.15198			
379.5688	10559.16045	12233.64354			379.5688	0.15172			
379.3844	10464.58905	12136.13955			379.3844	0.15145			
379.2003	10371.39048	12039.94809			379.2003	0.15118			
379.0163	10279.46796	11944.94907			379.0163	0.1509			
378.8326	10188.72411	11851.02172			378.8326	0.15062			
378.6491	10099.06163	11758.04539			378.6491	0.15032			
378.4657	10010.38402	11665.90045			378.4657	0.15			
378.2826	9922.59622	11574.46914			378.2826	0.14967			
378.0997	9835.60528	11483.6364			378.0997	0.14932			
377.9169	9749.3211	11393.29078			377.9169	0.14896			
377.7344	9663.65699	11303.32517			377.7344	0.14857			
377.5521	9578.53033	11213.63764			377.5521	0.14815			
377.37	9493.8631	11124.1321			377.37	0.14771			
377.1881	9409.58242	11034.71901			377.1881	0.14725			
377.0063	9325.621	10945.31592			377.0063	0.14676			
376.8248	9241.91752	10855.84805			376.8248	0.14623			
376.6435	9158.417	10766.24866			376.6435	0.14568			
376.4624	9075.07097	10676.45945			376.4624	0.1451			
376.2814	8991.83775	10586.43081			376.2814	0.14448			
376.1007	8908.68246	10496.12197			376.1007	0.14383			
375.9202	8825.57711	10405.50112			375.9202	0.14315			
375.7399	8742.50055	10314.54534			375.7399	0.14244			
375.5597	8659.43833	10223.24053			375.5597	0.14169			
375.3798	8576.38256	10131.5812			375.3798	0.14091			
375.2001	8493.33168	10039.57018			375.2001	0.1401			
375.0205	8410.29014	9947.21829			375.0205	0.13926			
374.8412	8327.26806	9854.54387			374.8412	0.13838			
374.662	8244.28089	9761.57237			374.662	0.13748			
374.4831	8161.34891	9668.33571			374.4831	0.13654			
374.3043	8078.4968	9574.87179			374.3043	0.13558			
374.1258	7995.75318	9481.22383			374.1258	0.13459			
373.9474	7913.15003	9387.4397			373.9474	0.13358			
373.7692	7830.72227	9293.57131			373.7692	0.13254			
373.5912	7748.50715	9199.67387			373.5912	0.13149			
373.4134	7666.54384	9105.80527			373.4134	0.13041			
373.2359	7584.87285	9012.0254			373.2359	0.12931			
373.0585	7503.53557	8918.39548			373.0585	0.1282			
372.8813	7422.57386	8824.97749			372.8813	0.12707			
372.7042	7342.02953	8731.83354			372.7042	0.12593			
372.5274	7261.94403	8639.02535			372.5274	0.12477			
372.3508	7182.35801	8546.61374			372.3508	0.12361			
372.1744	7103.31103	8454.65817			372.1744	0.12244			
371.9981	7024.84128	8363.21633			371.9981	0.12127			
371.8221	6946.9853	8272.34379			371.8221	0.12009			
371.6462	6869.77779	8182.09368			371.6462	0.11891			
371.4705	6793.25145	8092.51645			371.4705	0.11772			
371.295	6717.43687	8003.65966			371.295	0.11654			
371.1197	6642.36238	7915.56783			371.1197	0.11536			
370.9446	6568.05408	7828.28234			370.9446	0.11419			
370.7697	6494.53572	7741.84135			370.7697	0.11301			
370.595	6421.82878	7656.27983			370.595	0.11185			
370.4204	6349.95245	7571.62951			370.4204	0.11069			
370.2461	6278.92368	7487.919			370.2461	0.10954			
370.0719	6208.75728	7405.17381			370.0719	0.1084			
369.898	6139.46596	7323.4165			369.898	0.10727			
369.7242	6071.06045	7242.66677			369.7242	0.10616			
369.5506	6003.54959	7162.94161			369.5506	0.10505			
369.3772	5936.94044	7084.25546			369.3772	0.10395			
369.2039	5871.23842	7006.62033			369.2039	0.10287			
369.0309	5806.44736	6930.04599			369.0309	0.10181			
368.858	5742.5697	6854.5401			368.858	0.10075			
368.6854	5679.60652	6780.10839			368.6854	0.09971			
368.5129	5617.55767	6706.75474			368.5129	0.09869			

368.3406	5556.42189	6634.48138			368.3406	0.09768			
368.1685	5496.19686	6563.28898			368.1685	0.09669			
367.9965	5436.87931	6493.17674			367.9965	0.09571			
367.8248	5378.46506	6424.14252			367.8248	0.09475			
367.6532	5320.94909	6356.18289			367.6532	0.0938			
367.4818	5264.3256	6289.29322			367.4818	0.09287			
367.3106	5208.58802	6223.46769			367.3106	0.09196			
367.1396	5153.72908	6158.69939			367.1396	0.09106			
366.9688	5099.74079	6094.98029			366.9688	0.09018			
366.7981	5046.61446	6032.30128			366.7981	0.08931			
366.6277	4994.34071	5970.65219			366.6277	0.08846			
366.4574	4942.90951	5910.02176			366.4574	0.08763			
366.2873	4892.31009	5850.39767			366.2873	0.08681			
366.1174	4842.531	5791.76652			366.1174	0.08601			
365.9476	4793.5601	5734.11381			365.9476	0.08522			
365.778	4745.38452	5677.42392			365.778	0.08445			
365.6087	4697.99066	5621.68017			365.6087	0.08369			
365.4395	4651.36423	5566.86473			365.4395	0.08295			
365.2704	4605.4902	5512.9587			365.2704	0.08222			
365.1016	4560.35283	5459.94205			365.1016	0.08151			
364.9329	4515.93571	5407.79371			364.9329	0.08081			
364.7644	4472.22173	5356.49155			364.7644	0.08012			
364.5961	4429.19316	5306.01243			364.5961	0.07945			
364.428	4386.83164	5256.33226			364.428	0.07878			
364.2601	4345.11827	5207.42606			364.2601	0.07813			
364.0923	4304.03363	5159.268			364.0923	0.07749			
363.9247	4263.55785	5111.83155			363.9247	0.07686			
363.7573	4223.6707	5065.08951			363.7573	0.07624			
363.59	4184.35163	5019.01414			363.59	0.07563			
363.423	4145.57988	4973.5773			363.423	0.07502			
363.2561	4107.33453	4928.75052			363.2561	0.07443			
363.0894	4069.59465	4884.50518			363.0894	0.07384			
362.9228	4032.33934	4840.81263			362.9228	0.07325			
362.7565	3995.54786	4797.64434			362.7565	0.07268			
362.5903	3959.19969	4754.97203			362.5903	0.0721			
362.4243	3923.27469	4712.76782			362.4243	0.07153			
362.2584	3887.75313	4671.00441			362.2584	0.07097			
362.0928	3852.61584	4629.65519			362.0928	0.07041			
361.9273	3817.84428	4588.69438			361.9273	0.06984			
361.7619	3783.4206	4548.0972			361.7619	0.06929			
361.5968	3749.32777	4507.83996			361.5968	0.06873			
361.4318	3715.54965	4467.9002			361.4318	0.06817			
361.267	3682.07102	4428.2568			361.267	0.06761			
361.1024	3648.87767	4388.89008			361.1024	0.06705			
360.938	3615.95647	4349.78185			360.938	0.06649			
360.7737	3583.29535	4310.91552			360.7737	0.06593			
360.6096	3550.8834	4272.27616			360.6096	0.06536			
360.4456	3518.71086	4233.85048			360.4456	0.0648			
360.2819	3486.76912	4195.62695			360.2819	0.06423			
360.1183	3455.05075	4157.59573			360.1183	0.06366			
359.9549	3423.54944	4119.74869			359.9549	0.06308			
359.7916	3392.26006	4082.07942			359.7916	0.0625			
359.6285	3361.17853	4044.58314			359.6285	0.06192			
359.4656	3330.30188	4007.25671			359.4656	0.06134			
359.3029	3299.62813	3970.09852			359.3029	0.06075			
359.1403	3269.15628	3933.10844			359.1403	0.06016			
358.9779	3238.8862	3896.28776			358.9779	0.05957			
358.8157	3208.81864	3859.63905			358.8157	0.05897			
358.6536	3178.95509	3823.16608			358.6536	0.05837			
358.4917	3149.29773	3786.87373			358.4917	0.05777			
358.33	3119.84935	3750.76788			358.33	0.05717			
358.1684	3090.61331	3714.85523			358.1684	0.05656			
358.007	3061.5934	3679.14329			358.007	0.05595			
357.8458	3032.79379	3643.64015			357.8458	0.05535			
357.6847	3004.21896	3608.35443			357.6847	0.05474			
357.5238	2975.87364	3573.29517			357.5238	0.05413			
357.3631	2947.7627	3538.47165			357.3631	0.05352			
357.2025	2919.89108	3503.89335			357.2025	0.05291			
357.0421	2892.26378	3469.56983			357.0421	0.05231			

356.8819	2864.88572	3435.51059			356.8819	0.0517			
356.7219	2837.76177	3401.72504			356.7219	0.0511			
356.562	2810.8966	3368.22237			356.562	0.0505			
356.4022	2784.29472	3335.01152			356.4022	0.0499			
356.2427	2757.96038	3302.10107			356.2427	0.0493			
356.0833	2731.89758	3269.4992			356.0833	0.04871			
355.924	2706.11001	3237.21363			355.924	0.04812			
355.7649	2680.60102	3205.25162			355.7649	0.04754			
355.606	2655.37365	3173.61986			355.606	0.04696			
355.4473	2630.43054	3142.32453			355.4473	0.04638			
355.2887	2605.774	3111.3712			355.2887	0.04581			
355.1303	2581.40595	3080.76489			355.1303	0.04525			
354.972	2557.32796	3050.51002			354.972	0.04469			
354.8139	2533.54121	3020.61042			354.8139	0.04413			
354.656	2510.04653	2991.06933			354.656	0.04358			
354.4982	2486.8444	2961.88944			354.4982	0.04304			
354.3406	2463.93495	2933.07287			354.3406	0.04251			
354.1831	2441.31799	2904.62118			354.1831	0.04198			
354.0259	2418.99301	2876.53545			354.0259	0.04146			
353.8687	2396.9592	2848.81621			353.8687	0.04094			
353.7118	2375.21548	2821.46356			353.7118	0.04043			
353.555	2353.7605	2794.47709			353.555	0.03993			
353.3983	2332.59263	2767.85602			353.3983	0.03944			
353.2418	2311.71004	2741.59912			353.2418	0.03895			
353.0855	2291.11066	2715.70479			353.0855	0.03847			
352.9293	2270.79221	2690.17106			352.9293	0.038			
352.7733	2250.75224	2664.99563			352.7733	0.03753			
352.6175	2230.98808	2640.17589			352.6175	0.03708			
352.4618	2211.49693	2615.70891			352.4618	0.03662			
352.3063	2192.27581	2591.59148			352.3063	0.03618			
352.1509	2173.3216	2567.82013			352.1509	0.03574			
351.9957	2154.63105	2544.39113			351.9957	0.03532			
351.8406	2136.20076	2521.30052			351.8406	0.03489			
351.6857	2118.02722	2498.5441			351.6857	0.03448			
351.531	2100.10681	2476.11747			351.531	0.03407			
351.3764	2082.43579	2454.016			351.3764	0.03367			
351.222	2065.01033	2432.23488			351.222	0.03327			
351.0677	2047.82648	2410.7691			351.0677	0.03289			
350.9136	2030.88024	2389.61348			350.9136	0.0325			
350.7596	2014.16748	2368.76264			350.7596	0.03213			
350.6058	1997.68401	2348.21106			350.6058	0.03176			
350.4522	1981.42556	2327.95306			350.4522	0.0314			
350.2987	1965.3878	2307.9828			350.2987	0.03104			
350.1454	1949.56632	2288.29429			350.1454	0.03069			