

جدول (ملحق 1) الاسعار الاسبوعية للنفط الخام العراقي بالدولار للسنوات 2003-2017

السنوات	السعر	السنوات	السعر	السنوات	السعر	السنوات	السعر
Jan 2003	30.35	Jan 2004	31.3	Jan 2005	42.75	Jan 2006	52.40
	30.25		31.10		42.97		62.50
	31.00		31.81		43.20		62.48
	31.40		31.37		42.96		62.46
Feb 2003	32.95	Feb 2004	31.43	Feb 2005	44.90	Feb 2006	59.60
	32.80		31.32		44.70		59.8
	32.87		31.30		44.70		59.75
	32.69		31.36		44.98		59.65
Mar 2003	30.61	Mar 2004	33.57	Mar 2005	50.94	Mar 2006	60.90
	30.10		33.47		50.96		60.96
	30.00		33.87		50.98		60.92
	29.73		33.77		50.88		60.94
Apr 2003	25.81	Apr 2004	33.61	Apr 2005	50.64	Apr 2006	67.95
	25.76		33.51		50.66		67.98
	24.15		33.97		50.68		67.98
	26.52		33.87		50.58		67.97
May 2003	26.00	May 2004	36.95	May 2005	47.94	May 2006	68.70
	26.05		37.95		47.72		68.66
	26.07		37.42		47.75		68.72
	26.06		37.92		47.91		68.64
Jun 2003	27.90	Jun 2004	35.94	Jun 2005	53.80	Jun 2006	68.10
	27.90		35.14		53.98		68.48
	29.93		35.50		53.86		68.15
	27.95		35.58		53.92		68.43
Jul 2003	28.50	Jul 2004	37.93	Jul 2005	56.17	Jul 2006	72.65
	28.68		37.92		56.57		72.25
	28.60		37.91		56.12		72.46
	28.58		37.80		56.62		72.44
Aug 2003	29.60	Aug 2004	41.95	Aug 2005	61.78	Aug 2006	71.90
	29.76		42.21		61.97		71.72
	29.70		42.01		61.90		71.80
	29.66		42.09		61.91		71.82
Sep 2003	26.90	Sep 2004	40.95	Sep 2005	61.58	Sep 2006	62.00
	26.86		41.95		61.77		62.18
	26.91		41.90		61.7		62.18
	26.85		41.60		61.71		62.12
Oct 2003	29.17	Oct 2004	46.35	Oct 2005	58.01	Oct 2006	57.85
	28.95		46.97		58.29		57.97
	29.06		46.98		58.21		57.84
	29.05		47.22		58.25		57.98
Nov 2003	29.10	Nov 2004	42.08	Nov 2005	55.00	Nov 2006	58.10
	29.06		42.18		55.04		58.18
	29.10		42.09		55.04		58.04
	29.22		42.17		55.07		58.24
Dec 2003	29.89	Dec 2004	39.01	Dec 2005	56.40	Dec 2006	60.99
	29.98		39.05		56.53		61.05
	29.99		39.04		56.39		60.97
	29.99		39.06		56.50		60.95

السنوات	السعر	السنوات	السعر	السنوات	السعر	السنوات	السعر
Jan 2007	53.42	Jan 2008	90.59	Jan 2009	43.80	Jan 2010	77.01
	53.42		90.79		43.92		77.11
	53.52		90.79		43.86		77.12
	53.72		90.59		43.86		77.24
Feb 2007	57.36	Feb 2008	93.30	Feb 2009	41.80	Feb 2010	74.70
	57.46		93.31		41.81		74.82
	57.86		93.33		41.84		74.70
	57.56		93.46		41.91		74.82
Mar 2007	60.00	Mar 2008	101.80	Mar 2009	46.55	Mar 2010	79.60
	60.90		101.82		46.75		79.40
	60.90		101.88		46.60		79.15
	60.60		101.84		46.70		79.05
Apr 2007	65.00	Apr 2008	108.76	Apr 2009	50.18	Apr 2010	84.01
	65.09		108.82		50.38		84.10
	65.01		108.76		50.20		84.20
	65.08		108.70		50.36		84.41
May 2007	65.19	May 2008	122.63	May 2009	58.05	May 2010	75.60
	65.10		122.60		58.20		75.59
	65.11		122.64		58.15		75.56
	65.18		122.62		58.20		75.71
Jun 2007	68.10	Jun 2008	131.50	Jun 2009	69.05	Jun 2010	74.72
	68.28		131.53		69.20		74.74
	68.18		131.52		69.15		74.70
	68.20		131.53		69.20		74.76
Jul 2007	73.50	Jul 2008	132.80	Jul 2009	64.50	Jul 2010	74.50
	73.70		132.80		64.64		74.62
	73.55		132.86		64.62		74.60
	73.65		132.86		64.52		74.60
Aug 2007	70.13	Aug 2008	114.55	Aug 2009	71.60	Aug 2010	75.43
	70.10		114.59		71.66		75.93
	70.16		114.57		71.55		75.83
	70.13		114.57		71.74		75.73
Sep 2007	76.56	Sep 2008	99.66	Sep 2009	68.25	Sep 2010	76.15
	76.86		90.60		68.45		76.09
	76.96		99.60		68.40		76.10
	76.66		99.78		68.30		76.14
Oct 2007	81.95	Oct 2008	72.69	Oct 2009	74.00	Oct 2010	71.60
	81.95		72.67		74.08		71.84
	81.99		72.67		74.16		71.94
	81.99		72.73		74.00		71.50
Nov 2007	91.34	Nov 2008	53.97	Nov 2009	77.50	Nov 2010	84.51
	91.24		53.95		77.60		84.55
	91.24		53.97		77.65		84.63
	91.54		53.99		77.45		84.43
Dec 2007	89.40	Dec 2008	41.30	Dec 2009	74.80	Dec 2010	90.00
	89.42		41.31		74.90		90.02
	89.74		41.31		74.94		90.01
	89.52		41.48		74.88		90.01

السنوات	السعر	السنوات	السعر	السنوات	السعر	السنوات	السعر
Jan 2011	92.59	Jan 2012	107.00	Jan 2013	105.01	Jan 2014	102.01
	92.79		107.10		105.19		102.21
	92.49		107.12		105.20		102.17
	92.89		107.06		105.00		102.01
Feb 2011	97.94	Feb 2012	112.59	Feb 2013	107.64	Feb 2014	104.80
	97.88		112.79		107.62		104.86
	97.95		112.89		107.66		104.82
	97.87		112.49		107.64		104.84
Mar 2011	108.40	Mar 2012	117.99	Mar 2013	102.50	Mar 2014	104.00
	108.85		117.59		102.54		104.01
	108.70		117.95		102.40		104.07
	108.65		117.63		102.64		104.00
Apr 2011	116.10	Apr 2012	113.57	Apr 2013	98.56	Apr 2014	104.88
	116.30		113.77		98.95		104.89
	116.32		113.48		98.75		104.84
	116.24		113.86		98.85		104.87
May 2011	108.00	May 2012	104.09	May 2013	99.37	May 2014	105.70
	108.15		104.00		99.47		105.71
	108.06		104.01		99.27		105.69
	108.07		104.26		99.37		105.72
Jun 2011	105.80	Jun 2012	90.73	Jun 2013	99.74	Jun 2014	108.30
	105.90		90.63		99.64		108.31
	105.75		90.73		99.94		108.40
	105.95		90.83		99.64		108.35
Jul 2011	107.88	Jul 2012	96.65	Jul 2013	105.10	Jul 2014	105.22
	107.96		96.85		105.40		105.20
	107.86		96.90		105.48		105.21
	107.98		96.60		105.06		105.21
Aug 2011	100.20	Aug 2012	105.27	Aug 2013	108.16	Aug 2014	100.02
	100.78		105.17		108.16		100.04
	100.40		105.47		108.32		100.00
	100.56		105.18		108.00		100.14
Sep 2011	100.72	Sep 2012	105.28	Sep 2013	108.76	Sep 2014	95.80
	100.92		106.18		108.70		95.80
	100.70		106.38		108.75		95.86
	100.94		106.29		108.73		95.94
Oct 2011	99.80	Oct 2012	103.89	Oct 2013	105.40	Oct 2014	86.78
	99.90		103.73		105.60		86.82
	99.95		103.66		105.26		86.70
	99.75		103.95		105.46		86.90
Nov 2011	105.20	Nov 2012	101.01	Nov 2013	102.60	Nov 2014	76.99
	105.61		101.23		102.64		76.98
	105.10		101.40		102.88		76.97
	105.73		101.01		102.40		77.00
Dec 2011	104.15	Dec 2012	101.25	Dec 2013	105.48	Dec 2014	60.70
	104.08		101.41		105.52		60.75
	104.50		101.03		105.40		60.65
	104.19		101.03		105.53		60.70

السنوات	السعر	السنوات	السعر	السنوات	السعر	السنوات	السعر
Jan 2015	47.05	Jan 2016	29.58	Jan 2017	53.59	Jan 2018	
	47.17		29.68		53.69		
	47.19		29.88		53.69		
	47.03		29.98		53.39		
Feb 2015	54.70	Feb 2016	31.06	Feb 2017	54.35	Feb 2018	
	54.88		31.03		54.15		
	54.71		31.01		54.35		
	54.87		31.00		54.55		
Mar 2015	52.83	Mar 2016	37.39	Mar 2017	50.90	Mar 2018	
	52.85		37.26		50.95		
	52.88		37.58		50.95		
	52.76		37.33		50.80		
Apr 2015	57.60	Apr 2016	40.65	Apr 2017	52.05	Apr 2018	
	57.88		40.65		52.17		
	57.68		40.85		52.12		
	57.00		40.85		52.40		
May 2015	62.51	May 2016	45.94	May 2017	49.69	May 2018	
	62.50		45.93		49.99		
	62.41		45.95		49.89		
	62.62		45.94		49.89		
Jun 2015	61.31	Jun 2016	47.69	Jun 2017	46.27	Jun 2018	
	61.21		47.59		46.07		
	61.11		47.70		46.27		
	61.61		47.78		46.07		
Jul 2015	54.34	Jul 2016	44.10	Jul 2017	47.76	Jul 2018	
	54.14		44.16		47.76		
	54.24		44.01		47.56		
	54.64		44.26		47.56		
Aug 2015	45.89	Aug 2016	44.80	Aug 2017	49.94	Aug 2018	
	45.79		44.90		49.98		
	45.69		44.96		49.97		
	45.39		44.88		49.87		
Sep 2015	46.28	Sep 2016	45.09	Sep 2017	52.97	Sep 2018	
	46.38		45.01		52.93		
	46.18		45.02		52.98		
	46.28		45.02		42.92		
Oct 2015	46.96	Oct 2016	49.29	Oct 2017	54.89	Oct 2018	
	46.98		49.31		54.91		
	46.96		49.27		54.92		
	46.96		49.29		54.96		
Nov 2015	43.01	Nov 2016	45.19	Nov 2017	59.90	Nov 2018	
	43.05		45.27		59.92		
	43.16		45.29		59.93		
	43.22		45.15		59.97		
Dec 2015	36.37	Dec 2016	52.62	Dec 2017	61.12	Dec 2018	
	36.37		52.82		61.17		
	36.67		52.82		61.13		
	36.67		52.22		61.34		

جدول (ملحق 2) معاملات دالة الارتباط الذاتي (ACF) لسلسلة اسعار النفط الاسبوعية الاصلية

Date: 06/13/19 Time: 00:37

Sample: 1 720

Included observations: 720

Autocorrelation	Partial Correlation	AC	PAC	Q-Stat	Prob	
. *****	. *****	1	0.971	0.971	681.75	0.000
. *****	. .	2	0.943	-0.007	1324.9	0.000
. *****	. .	3	0.916	0.026	1933.6	0.000
. *****	. .	4	0.890	-0.020	2508.3	0.000
. *****	*** .	5	0.843	-0.362	3025.1	0.000
. *****	* .	6	0.794	-0.093	3483.8	0.000
. *****	. .	7	0.747	-0.020	3890.3	0.000
. *****	. .	8	0.700	-0.017	4248.2	0.000
. *****	. *	9	0.656	0.161	4563.1	0.000
. ****	. .	10	0.612	0.019	4837.2	0.000
. ****	. .	11	0.567	-0.042	5073.1	0.000
. ****	. .	12	0.523	-0.044	5273.7	0.000
. ****	. **	13	0.496	0.241	5454.5	0.000
. ***	. .	14	0.470	-0.007	5616.9	0.000
. ***	. .	15	0.442	-0.017	5760.7	0.000
. ***	. .	16	0.414	-0.022	5887.1	0.000
. ***	. .	17	0.400	0.054	6005.7	0.000
. ***	. .	18	0.389	-0.009	6117.7	0.000
. ***	. .	19	0.376	-0.011	6222.3	0.000
. ***	. .	20	0.362	-0.015	6319.6	0.000
. ***	. .	21	0.354	0.010	6412.8	0.000
. **	. .	22	0.346	-0.030	6502.0	0.000
. **	. .	23	0.339	0.005	6587.6	0.000
. **	. .	24	0.331	-0.024	6669.2	0.000
. **	. .	25	0.323	0.068	6747.0	0.000
. **	. .	26	0.315	0.013	6821.5	0.000
. **	. .	27	0.307	-0.042	6892.3	0.000
. **	. .	28	0.299	-0.016	6959.7	0.000
. **	. .	29	0.288	-0.016	7021.9	0.000
. **	. .	30	0.275	-0.025	7079.0	0.000
. **	. .	31	0.263	0.002	7131.3	0.000
. **	. .	32	0.251	-0.025	7179.0	0.000
. **	. .	33	0.237	0.036	7221.6	0.000
. **	. .	34	0.224	0.003	7259.5	0.000
. *	. .	35	0.210	-0.018	7292.9	0.000
. *	. .	36	0.196	-0.017	7322.0	0.000
. *	. .	37	0.183	0.038	7347.5	0.000
. *	. .	38	0.170	-0.015	7369.6	0.000
. *	. .	39	0.157	-0.012	7388.5	0.000
. *	. .	40	0.145	-0.009	7404.6	0.000
. *	* .	41	0.131	-0.077	7417.7	0.000
. *	. .	42	0.117	-0.012	7428.2	0.000
. *	. .	43	0.103	-0.026	7436.3	0.000
. *	. .	44	0.088	-0.034	7442.3	0.000
. .	. .	45	0.073	0.002	7446.4	0.000
. .	. .	46	0.057	-0.007	7448.9	0.000
. .	. .	47	0.041	-0.020	7450.2	0.000
. .	. .	48	0.026	0.007	7450.7	0.000
. .	. .	49	0.010	-0.000	7450.7	0.000
. .	. .	50	-0.006	-0.020	7450.8	0.000

جدول (ملحق 3) سلسلة البواقي الناتجة عن مطابقة النموذج المقدر ARFIMA لسلسلة
مشاهدات اسعار النفط الخام الاسبوعية

t	ϵ_t	t	ϵ_t	t	ϵ_t	t	ϵ_t	t	ϵ_t
1	-	51	0.602383	101	1.806576	151	-0.13795	201	2.400463
2	-0.08167	52	-0.46466	102	-0.06372	152	-0.05585	202	1.172195
3	0.757158	53	-0.10102	103	-0.14435	153	1.344368	203	0.024223
4	0.490042	54	-0.19369	104	0.142407	154	0.331192	204	-0.46273
5	1.567478	55	-0.08918	105	5.892181	155	0.05645	205	4.205177
6	-0.05609	56	0.02635	106	0.608257	156	0.069946	206	0.479057
7	-0.09142	57	2.204693	107	-0.28244	157	7.073124	207	-0.30116
8	-0.33671	58	0.139538	108	-0.54394	158	0.883949	208	-0.25773
9	-2.23491	59	0.292702	109	-0.6431	159	-0.20863	209	-0.14665
10	-0.82818	60	-0.20555	110	-0.29749	160	-0.40907	210	-0.26539
11	-0.11603	61	-0.31948	111	-0.16292	161	0.376236	211	-0.12008
12	-0.13509	62	-0.24098	112	-0.2017	162	-0.21124	212	0.010704
13	-3.77891	63	0.368004	113	-2.70046	163	-0.13026	213	2.915894
14	-0.30972	64	-0.09193	114	-0.51759	164	-0.19758	214	0.524506
15	-1.28779	65	3.031178	115	0.147381	165	-0.60851	215	-0.1618
16	2.609859	66	1.306973	116	0.410751	166	0.318413	216	-0.14394
17	0.184092	67	-0.57353	117	6.161125	167	-0.21976	217	5.179482
18	0.306257	68	0.168842	118	1.051872	168	0.344017	218	0.718605
19	0.219992	69	-2.17662	119	-0.17043	169	4.377121	219	-0.37811
20	0.13673	70	-1.2231	120	-0.22244	170	0.204536	220	-0.28658
21	1.947102	71	0.196827	121	2.001705	171	0.121285	221	-3.81895
22	0.284487	72	0.182735	122	0.460896	172	-0.13683	222	-0.63827
23	2.013432	73	2.458004	123	-0.62371	173	-0.65095	223	0.077873
24	-1.83978	74	0.335079	124	0.209644	174	-0.29446	224	0.170181
25	0.161217	75	-0.04161	125	5.041012	175	0.085632	225	6.656555
26	0.116657	76	-0.21656	126	0.643936	176	0.124184	226	1.239777
27	-0.12316	77	4.039684	127	-0.34711	177	-9.68642	227	0.068169
28	-0.0835	78	0.650749	128	-0.40501	178	-0.76225	228	-0.56372
29	0.976902	79	-0.39009	129	-0.67297	179	0.604408	229	4.992134
30	0.246683	80	-0.267	130	-0.09018	180	0.803982	230	0.40921
31	-0.10178	81	-1.41566	131	-0.18603	181	-3.46359	231	-0.27499
32	-0.13406	82	0.660736	132	-0.05879	182	0.340145	232	-0.3922
33	-2.84269	83	-0.03938	133	-3.70622	183	0.641552	233	9.031082
34	-0.39799	84	-0.36364	134	-0.09491	184	0.898613	234	0.72654
35	0.133104	85	4.668079	135	0.177239	185	0.807945	235	-0.52903
36	0.127266	86	1.130936	136	0.372906	186	0.650902	236	-0.40105
37	2.489923	87	-0.11381	137	-2.91064	187	0.315895	237	-2.69387
38	0.182535	88	-0.09707	138	-0.01834	188	0.547817	238	-0.65183
39	0.101204	89	-5.43461	139	0.411396	189	3.078281	239	0.126984
40	-0.06444	90	-0.72596	140	0.49807	190	0.625149	240	-0.19149
41	-0.02445	91	-0.04305	141	1.760723	191	0.029991	241	1.112442
42	-0.0967	92	0.312443	142	0.644291	192	-0.03039	242	0.436432
43	-0.01204	93	-2.8818	143	0.128601	193	-7.5338	243	0.132042
44	0.09223	94	-0.06618	144	0.261868	194	-0.8119	244	-0.10587
45	0.662653	95	0.338352	145	-3.94407	195	0.477943	245	2.799576
46	0.145933	96	0.418922	146	9.782307	196	0.822044	246	0.457687
47	-0.02397	97	4.050186	147	1.410126	197	4.247253	247	0.083618
48	-0.05961	98	0.924912	148	-0.03297	198	0.989044	248	0.137947
49	1.255613	99	0.335007	149	-3.17893	199	0.643013	249	8.389839
50	-0.09709	100	-0.29171	150	-0.43156	200	-0.20534	250	1.020241

t	ϵ_t	t	ϵ_t	t	ϵ_t	t	ϵ_t	t	ϵ_t
251	-0.18254	301	3.245251	351	-0.12495	401	-8.81381	451	0.770119
252	-0.47889	302	0.374641	352	-0.11801	402	-1.15229	452	1.284782
253	6.539558	303	-0.48369	353	-9.07869	403	0.061173	453	-12.5376
254	0.586899	304	-0.26048	354	-1.20496	404	0.491631	454	-0.77924
255	-0.46697	305	7.351196	355	0.207481	405	-1.71726	455	1.348793
256	-0.57544	306	0.714802	356	0.705513	406	0.362724	456	1.651802
257	13.53402	307	-0.60086	357	-0.40331	407	0.427742	457	7.21273
258	1.282249	308	-0.70056	358	0.401482	408	0.765106	458	1.993324
259	-0.66093	309	10.18391	359	0.409218	409	2.489159	459	0.739052
260	-0.99899	310	0.816292	360	0.459137	410	0.773735	460	0.018997
261	8.04631	311	-0.92078	361	0.093124	411	0.250992	461	8.836182
262	0.433365	312	-1.05843	362	0.381325	412	0.354965	462	1.050262
263	-0.74643	313	-5.66527	363	0.25161	413	-7.53429	463	0.112648
264	-0.79869	314	-1.15463	364	0.22644	414	-0.05102	464	-0.66856
265	0.65126	315	-0.38889	365	1.027809	415	0.262054	465	-0.30676
266	-0.25214	316	-0.20742	366	0.775322	416	0.90239	466	0.655754
267	-0.19229	317	7.050697	367	0.085388	417	0.932816	467	0.160584
268	-0.12465	318	0.869461	368	-0.03813	418	0.88372	468	-0.15598
269	-18.315	319	-0.38383	369	0.468849	419	0.367508	469	-2.46079
270	-1.89727	320	-0.30267	370	0.058212	420	0.690407	470	-0.42648
271	0.958267	321	-3.91193	371	0.072357	421	-0.68951	471	0.070549
272	1.556839	322	-0.54248	372	0.109612	422	0.345863	472	0.557297
273	-13.3945	323	-0.14587	373	-4.45604	423	0.448944	473	-2.60474
274	-9.4039	324	-0.05514	374	-0.18021	424	0.198677	474	0.173752
275	9.740883	325	5.780785	375	0.413246	425	5.797546	475	0.577988
276	3.568535	326	0.815132	376	-0.01775	426	1.364288	476	0.071938
277	-25.0226	327	-0.05807	377	13.34402	427	-0.36453	477	0.604408
278	-1.59705	328	-0.47215	378	1.830742	428	0.48127	478	0.558029
279	2.254944	329	3.180458	379	-0.1702	429	-1.57356	479	-0.02646
280	2.8722	330	0.25734	380	-0.86246	430	-0.27135	480	0.247383
281	-16.2266	331	-0.24245	381	4.900795	431	0.504234	481	4.259743
282	-0.03885	332	-0.54124	382	0.139717	432	-0.0715	482	0.889641
283	2.463654	333	-2.9591	383	-0.59419	433	2.991455	483	0.116158
284	2.654461	334	-0.39392	384	-0.62339	434	0.638619	484	-0.24623
285	-10.4233	335	0.045334	385	2.082329	435	0.155045	485	2.572655
286	0.413872	336	0.068237	386	0.131851	436	-0.01302	486	0.285088
287	1.963215	337	2.272125	387	-0.618	437	5.58094	487	-0.01286
288	2.173637	338	0.486252	388	0.043137	438	0.912705	488	-0.10169
289	4.033268	339	0.071442	389	4.869331	439	0.022247	489	-5.18426
290	1.709209	340	0.098213	390	0.357002	440	-0.62244	490	-0.52505
291	0.87537	341	-2.54736	391	-0.23101	441	5.25676	491	0.144104
292	0.600403	342	-0.1686	392	-0.44644	442	0.131722	492	0.688347
293	-1.62775	343	0.020462	393	10.21972	443	0.092415	493	-3.58279
294	0.102089	344	0.323479	394	1.430016	444	-0.57008	494	0.357033
295	0.363895	345	5.017937	395	-0.64757	445	-4.31539	495	0.381058
296	0.406773	346	0.538109	396	-0.85642	446	-0.35588	496	0.671188
297	4.925457	347	-0.29506	397	6.764938	447	-0.08771	497	1.071259
298	0.923912	348	-0.29534	398	0.537743	448	0.705025	498	0.620918
299	-0.17595	349	4.805496	399	-0.58951	449	-9.33548	499	0.184616
300	-0.1511	350	0.568947	400	-0.78736	450	-0.78663	500	0.377976

t	ϵ_t	t	ϵ_t	t	ϵ_t	t	ϵ_t	t	ϵ_t
501	0.650635	551	0.119095	601	-7.38395	651	-0.3367	701	2.294521
502	0.186661	552	-0.07508	602	-1.17578	652	0.186852	702	0.221748
503	0.500938	553	-3.15025	603	0.219696	653	0.544193	703	-0.19265
504	-0.07307	554	-0.3477	604	0.776428	654	0.107597	704	-0.35819
505	5.602005	555	0.204933	605	-8.36454	655	-0.03673	705	2.844193
506	1.087814	556	0.320419	606	-0.84398	656	-0.22379	706	0.094883
507	0.066536	557	-4.86099	607	0.394844	657	0.033665	707	-0.26301
508	-0.62562	558	-0.25439	608	0.376484	658	-0.22691	708	-10.4244
509	2.854301	559	0.461487	609	1.457012	659	-0.17318	709	10.51003
510	0.231819	560	0.75795	610	0.660149	660	-0.17229	710	1.500408
511	-0.0005	561	-3.74477	611	0.102081	661	4.100147	711	-0.01714
512	-0.49095	562	0.005501	612	0.220528	662	0.334614	712	-0.34097
513	0.586311	563	0.654465	613	0.753166	663	-0.37942	713	4.524181
514	-0.03114	564	0.740524	614	0.0961	664	-0.44463	714	0.198284
515	0.02652	565	-8.56567	615	-0.08886	665	-4.5337	715	-0.50665
516	-0.00018	566	-0.50073	616	-0.12508	666	-0.752	716	-0.55993
517	-3.27673	567	0.674362	617	-4.09324	667	-0.11543	717	0.626324
518	-0.08398	568	1.169594	618	-0.54892	668	-0.12076	718	-0.25068
519	-0.05746	569	-8.9948	619	0.129013	669	7.484497	719	-0.42087
520	0.530495	570	-0.38943	620	0.195755	670	1.04446	720	-0.14101
521	-2.45886	571	0.987015	621	-6.75272	671	-0.31161		
522	0.068024	572	1.189621	622	-0.72633	672	-1.18206		
523	0.676727	573	-15.2815	623	0.573124	673	0.73159		
524	0.029892	574	-0.94743	624	0.460556	674	-0.21164		
525	3.457771	575	1.237114	625	-6.74859	675	-0.40702		
526	0.78122	576	1.6861	626	-0.46252	676	-0.69082		
527	0.114418	577	-12.1924	627	0.632431	677	0.593098		
528	0.219231	578	-0.24662	628	0.657688	678	-0.36201		
529	-3.41631	579	1.49308	629	1.517687	679	-0.07614		
530	-0.09044	580	1.460098	630	0.364121	680	-0.016		
531	0.250618	581	9.021725	631	0.078203	681	-3.83842		
532	0.213265	582	2.101177	632	-0.03905	682	-0.55577		
533	3.142296	583	0.318745	633	6.29915	683	-0.01802		
534	0.715942	584	0.163147	634	0.447262	684	-0.05069		
535	0.161713	585	-2.13331	635	-0.12687	685	1.331882		
536	0.097824	586	-0.34507	636	-0.84328	686	0.332104		
537	-0.7664	587	-0.02391	637	2.671528	687	-0.04704		
538	0.004295	588	-0.10675	638	-0.17707	688	0.193714		
539	0.205818	589	4.832146	639	-0.40834	689	-2.77982		
540	0.123901	590	0.808743	640	-0.61714	690	-0.11319		
541	1.067307	591	-0.40669	641	4.50573	691	-0.06705		
542	0.304451	592	-1.11114	642	0.04797	692	0.059345		
543	0.109673	593	5.031143	643	-0.63876	693	-3.56141		
544	0.155052	594	0.286251	644	-0.75201	694	-0.56754		
545	0.965523	595	-0.5728	645	1.073666	695	0.341324		
546	0.246971	596	-0.39893	646	-0.47758	696	0.074783		
547	0.096794	597	-1.82649	647	-0.45751	697	1.882942		
548	0.125961	598	-0.70871	648	-0.43527	698	0.343346		
549	2.698006	599	-0.44125	649	-4.13333	699	-0.16875		
550	0.41835	600	0.26741	650	-0.75359	700	-0.0859		