Relative Abundances			36Ar [V]	%1σ	37Ar [V]	%1σ	38Ar [V]	%1σ	39Ar [V]	%1σ	40Ar [V]	%1σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ
13M0100A	1.25 W		0.3728697	0.409	0.000522	2002.223	0.0690101	0.454	0.00027	259.567	115.0266	0.132	115.02663 ± 0.00000	782.92 ± 0.00	3.22	0.00	0.00 ± 0.00
13M0100B	2.00 W		0.0544942	0.448	0.017984	5.341	0.0115750	0.782	0.04826	0.773	16.7371	0.100	9.71454 ± 3.17638	80.95 ± 25.88	2.80	0.03	1.15 ± 0.12
13M0100C	2.50 W		0.1735529	0.425	0.268320	0.953	0.0422337	0.357	0.78609	0.126	56.7302	0.052	6.27883 ± 0.58140	52.73 ± 4.81	8.70	0.46	1.26 ± 0.02
13M0100D	3.25 W		0.5722510	0.410	1.176711	0.995	0.1487663	0.354	3.13762	0.244	196.5231	0.173	8.21273 ± 0.50956	68.67 ± 4.18	13.11	1.83	1.15 ± 0.02
13M0100E	4.00 W		0.8758054	0.429	2.542844	0.623	0.2495966	0.278	6.63128	0.152	320.9658	0.087	9.00210 ± 0.35838	75.13 ± 2.93	18.59	3.87	1.12 ± 0.01
13M0100F	4.50 W		0.6909964	0.437	3.112809	0.620	0.2287277	0.302	7.79329	0.152	264.2378	0.165	7.46642 ± 0.26346	62.53 ± 2.17	22.01	4.55	1.08 ± 0.01
13M0100G	5.00 W		0.5496439	0.441	3.208707	0.671	0.2020304	0.301	7.87448	0.174	214.9312	0.186	6.48793 ± 0.21556	54.46 ± 1.78	23.76	4.60	1.05 ± 0.01
13M0100H	5.50 W		0.5103879	0.416	3.357101	0.624	0.1989698	0.275	8.11850	0.144	203.7941	0.153	6.36623 ± 0.17909	53.45 ± 1.48	25.35	4.74	1.04 ± 0.01
13M0100I	6.00 W		0.4473774	0.468	3.414130	0.816	0.1887947	0.345	8.20041	0.134	183.6852	0.114	6.14505 ± 0.16488	51.62 ± 1.37	27.43	4.79	1.03 ± 0.02
13M0100J	6.50 W		0.0263984	0.474	0.602446	0.601	0.0300958	0.363	1.99395	0.113	18.2400	0.051	5.21882 ± 0.04124	43.94 ± 0.34	57.04	1.16	1.42 ± 0.02
13M0100K	7.25 W		0.0185567	0.527	1.068127	0.613	0.0466749	0.300	3.46796	0.102	23.2108	0.026	5.11965 ± 0.02050	43.11 ± 0.17	76.48	2.03	1.40 ± 0.02
13M0100L	8.25 W		0.0173118	0.665	1.606133	0.558	0.0708810	0.295	5.40385	0.110	32.3477	0.068	5.05299 ± 0.01894	42.56 ± 0.16	84.39	3.16	1.45 ± 0.02
13M0100M	9.00 W		0.0559146	0.994	3.930465	0.464	0.5196317	0.253	40.44014	0.152	220.0734	0.189	5.03595 ± 0.02695	42.42 ± 0.22	92.53	23.62	4.42 ± 0.04
13M0100N	10.00 W		0.0194297	1.659	2.975158	0.463	0.3585863	0.268	28.68551	0.179	146.1062	0.153	4.89847 ± 0.02449	41.27 ± 0.20	96.17	16.76	4.15 ± 0.04
13M0100O	11.00 W	4	0.0055988	2.343	1.633715	0.462	0.1992525	0.250	16.25422	0.129	79.7238	0.055	4.80900 ± 0.01441	40.53 ± 0.12	98.04	9.50	4.28 ± 0.04
13M0100P	13.00 W	4	0.0035603	2.105	1.076049	0.458	0.1173372	0.238	9.54367	0.127	46.6488	0.097	4.78460 ± 0.01623	40.32 ± 0.14	97.88	5.58	3.81 ± 0.04
13M0100Q	16.00 W	4	0.0033311	1.435	3.186306	0.528	0.1054934	0.218	8.59710	0.114	41.9648	0.057	4.79496 ± 0.01294	40.41 ± 0.11	98.21	5.02	1.16 ± 0.01
13M0100R	20.00 W	4	0.0057255	1.803	6.114232	0.545	0.1730085	0.249	14.21905	0.113	69.6002	0.056	4.80891 ± 0.01314	40.52 ± 0.11	98.21	8.30	1.00 ± 0.01
		Σ	4.4032057	0.156	39.291760	0.174	2.9606656	0.081	171.19510	0.053	2250.5467	0.043					

Information on Analysis and Constants Used in Calculations

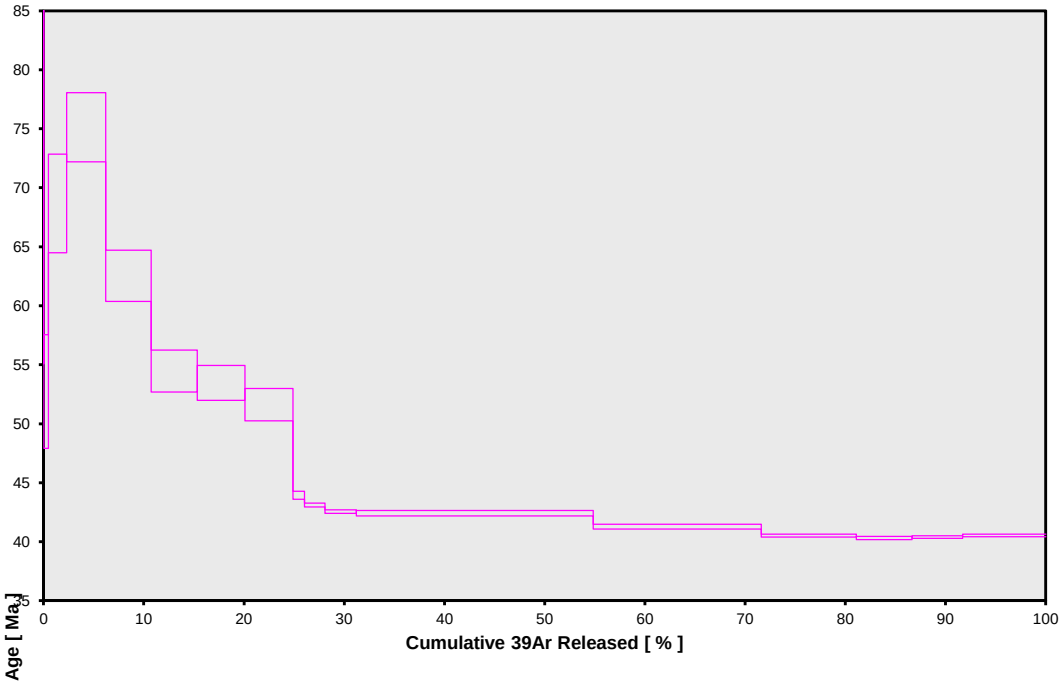
Sample = VU97C-A6
Material = groundmass
Location = Eocene
Analyst = Klaudia Kuiper
Project = VU97
Mass Discrimination Law = LIN
Irradiation = VU97
J = 0,00472390 ± 0,00000472
Fish Canyon = 28,201 ± 0,023 Ma
IGSN = Undefined
Preferred Age = Undefined
Classification = Undefined
Experiment Type = Undefined
Extraction Method = Undefined
Heating = 45 sec
Isolation = 5,00 min
Instrument = MAP215-50
Lithology = Undefined
Lat-Lon = Undefined - Undefined
Feature = Undefined

Age Equations = Conventional
Negative Intensities = Forced Zero
Decay Constant 40K = 5,543 ± 0,010 E-10 1/a
Decay Constant 39Ar = 2,940 ± 0,029 E-07 1/h
Decay Constant 37Ar = 8,240 ± 0,009 E-04 1/h
Decay Constant 36Cl = 2,300 ± 0,016 E-06 1/a
Atmospheric Ratio 40/36(a) = 298,56 ± 0,30
Atmospheric Ratio 38/36(a) = 0,1880 ± 0,0005
Production Ratio 39/37(ca) = 0,000733 ± 0,000035
Production Ratio 38/37(ca) = 0,000111 ± 0,000036
Production Ratio 36/37(ca) = 0,000265 ± 0,000008
Production Ratio 40/39(k) = 0,001340 ± 0,000787
Production Ratio 38/39(k) = 0,011391 ± 0,000031
Production Ratio 36/38(cl) = 316,00 ± 15,80
Scaling Ratio K/Ca = 0,430

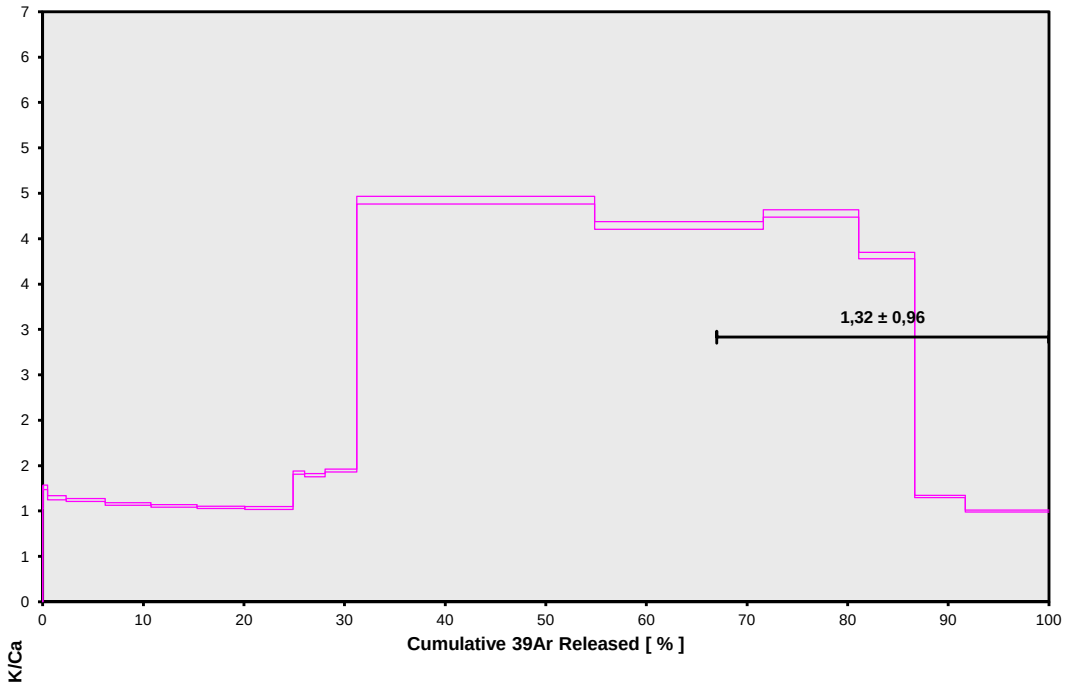
Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD	39Ar(k) (%,n)	K/Ca ± 2σ
Age Plateau		4.80031 ± 0.01115 ± 0.23%	40.45 ± 0.12 ± 0.30%	2.53 6%	28.40 4	1.32 ± 0.96
		Minimal External Error ± 0.19		2.63	2σ Confidence Limit	
		Analytical Error ± 0.09		1.5916	Error Magnification	
Total Fusion Age		5.48484 ± 0.02763 ± 0.50%	46.15 ± 0.25 ± 0.54%		18	1.87 ± 0.01
		Minimal External Error ± 0.30				
		Analytical Error ± 0.23				
Normal Isochron	72.27 ± 558.24 ± 772.48%	4.86960 ± 0.17098 ± 3.51%	41.03 ± 1.43 ± 3.48%	3.13 4%	28.40 4	
No Convergence		Minimal External Error ± 1.43		3.00	2σ Confidence Limit	
		Analytical Error ± 1.42		1.7689	Error Magnification	
				100	Number of Iterations	
				0.0000135100	Convergence	
Inverse Isochron	87.47 ± 121.38 ± 138.77%	4.86502 ± 0.17118 ± 3.52%	40.99 ± 1.43 ± 3.48%	3.13 4%	28.40 4	
Error Chron		Minimal External Error ± 1.44		3.00	2σ Confidence Limit	
		Analytical Error ± 1.43		1.7699	Error Magnification	
				11	Number of Iterations	
				0.0000009013	Convergence	
				0%	Spreading Factor	

Procedure Blanks		36Ar [V]	1σ	37Ar [V]	1σ	38Ar [V]	1σ	39Ar [V]	1σ	40Ar [V]	1σ
13M0100A	1.25 W	0.0051858	0.0000329	0.0003822	0.0000160	0.0009237	0.0000294	0.0002838	0.0000917	1.4636025	0.0010937
13M0100B	2.00 W	0.0043874	0.0000314	0.0004344	0.0000147	0.0007691	0.0000259	0.0000430	0.0000615	1.2362395	0.0005399
13M0100C	2.50 W	0.0005021	0.0000201	0.0004519	0.0000170	0.0001034	0.0000118	0.0003130	0.0000483	0.1062469	0.0005895
13M0100D	3.25 W	0.0005021	0.0000201	0.0004519	0.0000170	0.0001034	0.0000118	0.0003130	0.0000483	0.1062469	0.0005895
13M0100E	4.00 W	0.0005021	0.0000201	0.0004519	0.0000170	0.0001034	0.0000118	0.0003130	0.0000483	0.1062469	0.0005895
13M0100F	4.50 W	0.0011119	0.0000681	0.0005759	0.0000200	0.0002402	0.0000267	0.0040775	0.0000924	0.2116034	0.0011741
13M0100G	5.00 W	0.0011119	0.0000681	0.0005759	0.0000200	0.0002402	0.0000267	0.0040775	0.0000924	0.2116034	0.0011741
13M0100H	5.50 W	0.0011119	0.0000681	0.0005759	0.0000200	0.0002402	0.0000267	0.0040775	0.0000924	0.2116034	0.0011741
13M0100I	6.00 W	0.0011119	0.0000681	0.0005759	0.0000200	0.0002402	0.0000267	0.0040775	0.0000924	0.2116034	0.0011741
13M0100J	6.50 W	0.0005429	0.0000057	0.0004529	0.0000151	0.0001575	0.0000137	0.0007487	0.0000482	0.1158030	0.0010811
13M0100K	7.25 W	0.0005429	0.0000057	0.0004529	0.0000151	0.0001575	0.0000137	0.0007487	0.0000482	0.1158030	0.0010811
13M0100L	8.25 W	0.0005429	0.0000057	0.0004529	0.0000151	0.0001575	0.0000137	0.0007487	0.0000482	0.1158030	0.0010811
13M0100M	9.00 W	0.0006609	0.0000159	0.0005391	0.0000148	0.0001435	0.0000232	0.0018200	0.0000558	0.1444201	0.0006846
13M0100N	10.00 W	0.0006609	0.0000159	0.0005391	0.0000148	0.0001435	0.0000232	0.0018200	0.0000558	0.1444201	0.0006846
13M0100O	11.00 W	0.0006609	0.0000159	0.0005391	0.0000148	0.0001435	0.0000232	0.0018200	0.0000558	0.1444201	0.0006846
13M0100P	13.00 W	0.0006609	0.0000159	0.0005391	0.0000148	0.0001435	0.0000232	0.0018200	0.0000558	0.1444201	0.0006846
13M0100Q	16.00 W	0.0004248	0.0000148	0.0003869	0.0000138	0.0000816	0.0000104	0.0005081	0.0000230	0.0940541	0.0001853
13M0100R	20.00 W	0.0004248	0.0000148	0.0003869	0.0000138	0.0000816	0.0000104	0.0005081	0.0000230	0.0940541	0.0001853

Sample Parameters
13M0100A
13M0100B
13M0100C
13M0100D
13M0100E
13M0100F
13M0100G
13M0100H
13M0100I
13M0100J
13M0100K
13M0100L
13M0100M
13M0100N
13M0100O
13M0100P
13M0100Q
13M0100R

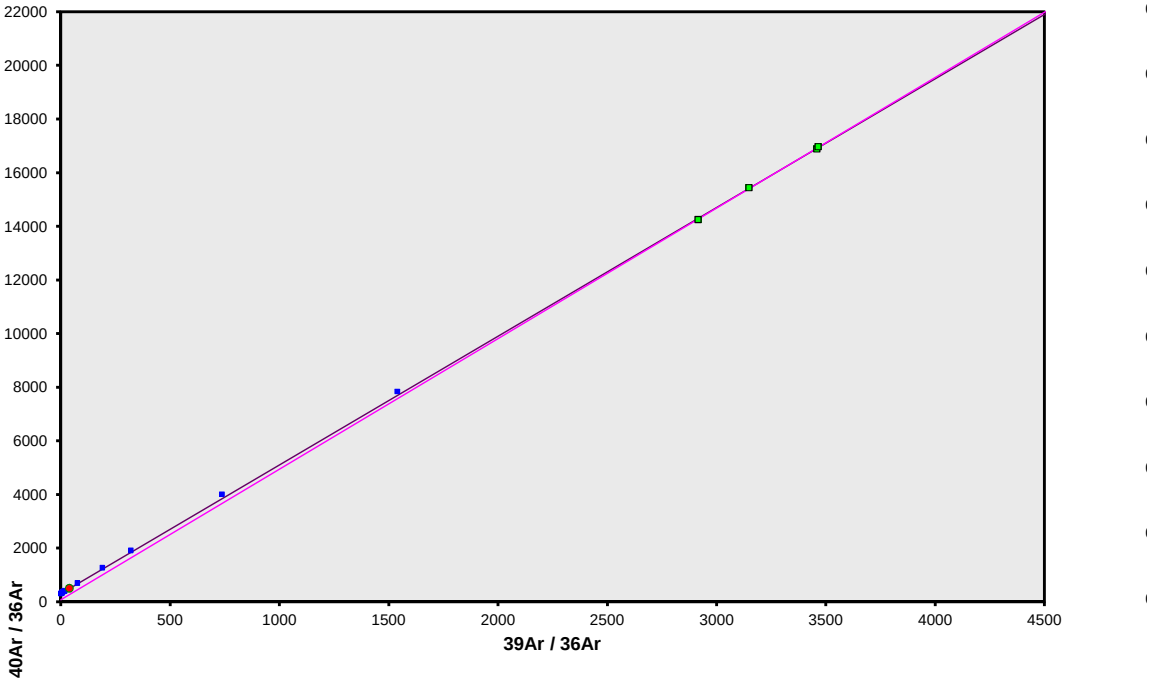


	Sample	Material	Location	Analyst	Standard (in Ma)	%1σ	J	%1σ	MDF
1.25 W	VU97C-A6	groundmass	Eocene	Klaudia Kuiper	28.201	0.08	0.0047239	0.1	1.008729
2.00 W	VU97C-A6	groundmass	Eocene	Klaudia Kuiper	28.201	0.08	0.0047239	0.1	1.008729
2.50 W	VU97C-A6	groundmass	Eocene	Klaudia Kuiper	28.201	0.08	0.0047239	0.1	1.008729
3.25 W	VU97C-A6	groundmass	Eocene	Klaudia Kuiper	28.201	0.08	0.0047239	0.1	1.008729
4.00 W	VU97C-A6	groundmass	Eocene	Klaudia Kuiper	28.201	0.08	0.0047239	0.1	1.008729
4.50 W	VU97C-A6	groundmass	Eocene	Klaudia Kuiper	28.201	0.08	0.0047239	0.1	1.008729
5.00 W	VU97C-A6	groundmass	Eocene	Klaudia Kuiper	28.201	0.08	0.0047239	0.1	1.008729
5.50 W	VU97C-A6	groundmass	Eocene	Klaudia Kuiper	28.201	0.08	0.0047239	0.1	1.008729
6.00 W	VU97C-A6	groundmass	Eocene	Klaudia Kuiper	28.201	0.08	0.0047239	0.1	1.008729
6.50 W	VU97C-A6	groundmass	Eocene	Klaudia Kuiper	28.201	0.08	0.0047239	0.1	1.008729
7.25 W	VU97C-A6	groundmass	Eocene	Klaudia Kuiper	28.201	0.08	0.0047239	0.1	1.008729
8.25 W	VU97C-A6	groundmass	Eocene	Klaudia Kuiper	28.201	0.08	0.0047239	0.1	1.008729
9.00 W	VU97C-A6	groundmass	Eocene	Klaudia Kuiper	28.201	0.08	0.0047239	0.1	1.008729
10.00 W	VU97C-A6	groundmass	Eocene	Klaudia Kuiper	28.201	0.08	0.0047239	0.1	1.008729
11.00 W	VU97C-A6	groundmass	Eocene	Klaudia Kuiper	28.201	0.08	0.0047239	0.1	1.008729
13.00 W	VU97C-A6	groundmass	Eocene	Klaudia Kuiper	28.201	0.08	0.0047239	0.1	1.008729
16.00 W	VU97C-A6	groundmass	Eocene	Klaudia Kuiper	28.201	0.08	0.0047239	0.1	1.008729
20.00 W	VU97C-A6	groundmass	Eocene	Klaudia Kuiper	28.201	0.08	0.0047239	0.1	1.008729



%1σ	Volume Ratio	Sensitivity (mol/volt)	Day	Month	Year	Hour	Min	Resist	Irradiation	Project	Experiment	Nmb	Standard Name
0.1	1	3.3E-18	19	FEB	2013	20	53	100	VU97	VU97	13m0100	01	Fish Canyon
0.1	1	3.3E-18	20	FEB	2013	11	46	10	VU97	VU97	13m0100	01	Fish Canyon
0.1	1	3.3E-18	28	FEB	2013	10	21	10	VU97	VU97	13m0100	01	Fish Canyon
0.1	1	3.3E-18	28	FEB	2013	11	16	100	VU97	VU97	13m0100	01	Fish Canyon
0.1	1	3.3E-18	28	FEB	2013	12	13	100	VU97	VU97	13m0100	01	Fish Canyon
0.1	1	3.3E-18	28	FEB	2013	14	5	100	VU97	VU97	13m0100	01	Fish Canyon
0.1	1	3.3E-18	28	FEB	2013	15	0	100	VU97	VU97	13m0100	01	Fish Canyon
0.1	1	3.3E-18	28	FEB	2013	15	57	100	VU97	VU97	13m0100	01	Fish Canyon
0.1	1	3.3E-18	28	FEB	2013	16	55	100	VU97	VU97	13m0100	01	Fish Canyon
0.1	1	3.3E-18	1	MAR	2013	10	36	10	VU97	VU97	13m0100	01	Fish Canyon
0.1	1	3.3E-18	1	MAR	2013	11	33	10	VU97	VU97	13m0100	01	Fish Canyon
0.1	1	3.3E-18	1	MAR	2013	12	30	10	VU97	VU97	13m0100	01	Fish Canyon
0.1	1	3.3E-18	3	JAN	2013	14	24	100	VU97	VU97	13m0100	01	Fish Canyon
0.1	1	3.3E-18	3	JAN	2013	15	20	100	VU97	VU97	13m0100	01	Fish Canyon
0.1	1	3.3E-18	3	JAN	2013	16	15	10	VU97	VU97	13m0100	01	Fish Canyon
0.1	1	3.3E-18	3	JAN	2013	17	11	10	VU97	VU97	13m0100	01	Fish Canyon
0.1	1	3.3E-18	3	MAR	2013	11	27	10	VU97	VU97	13m0100	01	Fish Canyon
0.1	1	3.3E-18	3	MAR	2013	12	23	10	VU97	VU97	13m0100	01	Fish Canyon

Irradiation Constants
13M0100A
13M0100B
13M0100C
13M0100D
13M0100E
13M0100F
13M0100G
13M0100H
13M0100I
13M0100J
13M0100K
13M0100L
13M0100M
13M0100N
13M0100O
13M0100P
13M0100Q
13M0100R



	40/36(a)	%1σ	40/36(c)	%1σ	38/36(a)	%1σ	38/36(c)	%1σ	39/37(ca)	%1σ	38/37(ca)	%1σ	36/37(ca)	%1σ	40/39(k)	%1σ	38/39(k)	%1σ	36/38(cl)	%1σ	K/Ca	%1σ	K/Cl	%1σ	Ca/Cl	%1σ
1.25 W	298.56	0.1	0.018	35	0.188	0.24	1.493	3	0.000733	4.72	0.0001105	32.55	0.000265	2.96	0.00134	58.7	0.011391	0.27	0	0	0.43	0	0	0	0	0
2.00 W	298.56	0.1	0.018	35	0.188	0.24	1.493	3	0.000733	4.72	0.0001105	32.55	0.000265	2.96	0.00134	58.7	0.011391	0.27	0	0	0.43	0	0	0	0	0
2.50 W	298.56	0.1	0.018	35	0.188	0.24	1.493	3	0.000733	4.72	0.0001105	32.55	0.000265	2.96	0.00134	58.7	0.011391	0.27	0	0	0.43	0	0	0	0	0
3.25 W	298.56	0.1	0.018	35	0.188	0.24	1.493	3	0.000733	4.72	0.0001105	32.55	0.000265	2.96	0.00134	58.7	0.011391	0.27	0	0	0.43	0	0	0	0	0
4.00 W	298.56	0.1	0.018	35	0.188	0.24	1.493	3	0.000733	4.72	0.0001105	32.55	0.000265	2.96	0.00134	58.7	0.011391	0.27	0	0	0.43	0	0	0	0	0
4.50 W	298.56	0.1	0.018	35	0.188	0.24	1.493	3	0.000733	4.72	0.0001105	32.55	0.000265	2.96	0.00134	58.7	0.011391	0.27	0	0	0.43	0	0	0	0	0
5.00 W	298.56	0.1	0.018	35	0.188	0.24	1.493	3	0.000733	4.72	0.0001105	32.55	0.000265	2.96	0.00134	58.7	0.011391	0.27	0	0	0.43	0	0	0	0	0
5.50 W	298.56	0.1	0.018	35	0.188	0.24	1.493	3	0.000733	4.72	0.0001105	32.55	0.000265	2.96	0.00134	58.7	0.011391	0.27	0	0	0.43	0	0	0	0	0
6.00 W	298.56	0.1	0.018	35	0.188	0.24	1.493	3	0.000733	4.72	0.0001105	32.55	0.000265	2.96	0.00134	58.7	0.011391	0.27	0	0	0.43	0	0	0	0	0
6.50 W	298.56	0.1	0.018	35	0.188	0.24	1.493	3	0.000733	4.72	0.0001105	32.55	0.000265	2.96	0.00134	58.7	0.011391	0.27	0	0	0.43	0	0	0	0	0
7.25 W	298.56	0.1	0.018	35	0.188	0.24	1.493	3	0.000733	4.72	0.0001105	32.55	0.000265	2.96	0.00134	58.7	0.011391	0.27	0	0	0.43	0	0	0	0	0
8.25 W	298.56	0.1	0.018	35	0.188	0.24	1.493	3	0.000733	4.72	0.0001105	32.55	0.000265	2.96	0.00134	58.7	0.011391	0.27	0	0	0.43	0	0	0	0	0
9.00 W	298.56	0.1	0.018	35	0.188	0.24	1.493	3	0.000733	4.72	0.0001105	32.55	0.000265	2.96	0.00134	58.7	0.011391	0.27	0	0	0.43	0	0	0	0	0
10.00 W	298.56	0.1	0.018	35	0.188	0.24	1.493	3	0.000733	4.72	0.0001105	32.55	0.000265	2.96	0.00134	58.7	0.011391	0.27	0	0	0.43	0	0	0	0	0
11.00 W	298.56	0.1	0.018	35	0.188	0.24	1.493	3	0.000733	4.72	0.0001105	32.55	0.000265	2.96	0.00134	58.7	0.011391	0.27	0	0	0.43	0	0	0	0	0
13.00 W	298.56	0.1	0.018	35	0.188	0.24	1.493	3	0.000733	4.72	0.0001105	32.55	0.000265	2.96	0.00134	58.7	0.011391	0.27	0	0	0.43	0	0	0	0	0
16.00 W	298.56	0.1	0.018	35	0.188	0.24	1.493	3	0.000733	4.72	0.0001105	32.55	0.000265	2.96	0.00134	58.7	0.011391	0.27	0	0	0.43	0	0	0	0	0
20.00 W	298.56	0.1	0.018	35	0.188	0.24	1.493	3	0.000733	4.72	0.0001105	32.55	0.000265	2.96	0.00134	58.7	0.011391	0.27	0	0	0.43	0	0	0	0	0