Table 4: Observed linear polarization values for various field stars in CB3

Sr.#	RA(2000)	DEC(2000)	$p(\%)$	$E_p(\%)$	θ	m
1	0:28:48.8	56:39:19	1.145	0.039	62.0	12.08
2	0:28:52.6	56:39:26	1.903	0.509	68.2	15.94
3	0:28:33.4	56:39:33	2.258	0.243	69.9	15.46
4	0:28:43.4	56:39:46	1.714	0.390	64.6	15.81
5	0:28:45.9	56:39:51	1.203	0.071	63.4	13.72
6	0:28:33.9	56:39:54	0.600	0.035	73.2	11.13
7	0:28:47.1	56:40: 7	1.182	0.055	64.5	13.07
8	0:28:57.1	56:40:10	1.131	0.303	63.0	15.35
9	0:28:56.2	56:40:13	0.736	0.043	69.7	12.13
10	0:28:39.3	56:40: 9	2.221	0.615	45.7	16.27
11	0:28:42.5	56:40:10	0.474	0.056	19.5	13.87
12	0:29: 1.8	56:40:38	0.990	0.132	54.5	14.30
13	0:28:43.3	56:40:39	1.669	0.749	28.5	16.45
14	0:28:58.3	56:41: 4	2.148	0.424	84.7	15.93
15	0:29: 7.8	56:41:12	1.582	0.102	67.9	13.67
16	0:28:39.0	56:41:19	0.846	0.185	73.2	14.60
17	0:28:55.8	56:41:36	0.987	0.156	81.6	14.72
18	0:28:51.3	56:41:42	1.642	0.036	74.6	12.85
19	0:28:49.0	56:41:45	2.586	0.104	76.9	13.34
20	0:28:40.2	56:41:48	2.031	0.090	106.0	13.46
21	0:28:46.1	56:41:50	0.515	0.036	69.9	12.86
22	0:28:22.8	56:42:15	2.817	0.889	75.7	16.39
23	0:28:28.9	56:42:34	2.095	0.338	73.1	15.91
24	0:29: 8.1	56:42:46	1.068	0.111	60.4	14.31
25	0:28:57.9	56:42:48	2.144	0.063	58.1	14.15
26	0:28:24.5	56:42:47	0.830	0.068	72.3	13.37
27	0:28:43.5	56:42:52	0.917	0.042	66.3	13.31
28	0:28:58.6	56:43:18	1.014	0.029	59.9	12.87
29	0:28:43.7	56:43:18	0.951	0.202	71.2	14.66
30	0:29: 3.0	56:43:42	1.037	0.046	61.3	13.72
31	0:28:32.1	56:44:13	1.449	0.034	48.6	12.49

Table 5: Observed linear polarization values for various field stars in CB25

Sr.#	RA(2000)	DEC(2000)	$p(\%)$	$E_p(\%)$	θ	m
1	4:59:20.2	52: 1: 5	2.791	0.208	153.8	14.47
2	4:58:54.4	52: 1:12	2.452	0.322	150.3	15.72
3	4:59:13.5	52: 1:15	1.983	0.270	154.7	15.55
4	4:58:55.2	52: 2:14	1.689	0.247	160.9	14.08
5	4:59: 4.8	52: 2:32	2.478	0.304	148.3	15.61
6	4:59:21.8	52: 2:35	3.120	0.489	150.9	15.98
7	4:59:13.0	52: 3:19	3.246	0.395	150.7	16.00
8	4:59:20.1	52: 3:26	3.033	0.165	149.5	14.81
9	4:58:49.4	52: 4: 8	2.932	0.069	147.3	12.69
10	4:59:13.1	52: 4:24	2.614	0.472	147.8	16.01
11	4:58:50.9	52: 4:39	0.693	0.104	167.2	14.01
12	4:58:47.8	52: 4:41	1.812	0.461	150.6	16.16
13	4:58:45.2	52: 4:55	2.313	0.437	160.2	15.83
14	4:59:21.1	52: 5:10	2.969	0.264	150.7	15.82
15	4:58:50.5	52: 5: 8	2.269	0.061	152.2	13.98
16	4:58:58.7	52: 5:10	2.417	0.313	143.8	15.78
17	4:58:56.6	52: 5:18	1.729	0.458	144.4	16.36
18	4:59:12.0	52: 5:33	1.794	0.676	150.9	16.41
19	4:58:54.5	52: 5:55	1.998	0.169	146.3	14.86
20	4:58:49.1	52: 5:58	3.858	0.444	147.3	16.70
21	4:59: 2.5	52: 6: 1	1.263	0.707	141.0	16.62

Table 6: Observed linear polarization values for various field stars in CB39

Sr.#	RA(2000)	DEC(2000)	$p(\%)$	$E_p(\%)$	θ	m
1	6: 1:59.2	16:27:56	2.275	0.605	162.3	16.22
2	6: 1:58.3	16:27:59	1.730	0.645	134.6	16.09
3	6: 1:56.9	16:28:19	2.624	0.052	156.6	13.84
4	6: 1:57.4	16:28:29	2.041	0.346	159.7	15.33
5	6: 1:55.4	16:28:44	1.897	0.196	155.1	14.71
6	6: 1:51.0	16:29: 7	2.113	0.875	149.3	16.07
7	6: 1:46.9	16:29:10	0.958	0.418	160.6	15.79
8	6: 2: 4.7	16:29:25	1.728	0.371	141.6	16.27
9	6: 1:52.4	16:29:41	2.908	0.050	157.7	13.38
10	6: 2: 7.6	16:29:55	2.326	0.121	166.1	13.97
11	6: 1:50.0	16:30: 8	1.921	0.415	164.3	15.46
12	6: 2:10.2	16:30:31	2.291	0.464	163.0	16.05
13	6: 1:47.4	16:30:56	1.092	0.039	167.0	12.88
14	6: 2: 5.8	16:31:41	1.937	0.227	152.6	14.63
15	6: 1:53.2	16:31:42	2.667	0.603	171.1	15.46
16	6: 1:48.1	16:31:51	1.172	0.032	162.5	13.06
17	6: 1:49.8	16:32: 0	1.862	0.223	178.0	14.84
18	6: 2: 9.9	16:32:27	1.924	0.160	165.4	14.70
19	6: 2:11.8	16:32:29	2.555	0.887	164.6	16.43
20	6: 1:49.2	16:32:41	1.593	0.038	165.2	12.92
21	6: 2: 1.7	16:33: 1	1.264	0.051	138.3	13.58

Table 7: Observed linear polarization values for various field stars in CB52

Sr.#	RA(2000)	DEC(2000)	$p(\%)$	$E_p(\%)$	θ	m
1	6:48:52.1	-16:56:50	0.451	0.073	96.8	12.38
2	6:48:53.3	-16:56: 0	1.457	0.853	95.0	16.45
3	6:48:40.1	-16:56: 9	0.462	0.552	45.2	15.14
4	6:48:43.0	-16:55:58	1.908	0.325	149.7	15.77
5	6:48:56.9	-16:54:40	2.695	1.449	24.1	16.70
6	6:48:32.1	-16:54:29	0.226	0.170	43.6	13.94
7	6:48:39.1	-16:54: 7	1.416	0.117	152.8	12.88
8	6:48:35.6	-16:53:52	1.180	0.804	137.2	15.68
9	6:48:56.9	-16:53:29	3.286	1.114	12.8	16.26
10	6:48:57.3	-16:53:12	0.948	0.064	52.6	13.70
11	6:48:53.9	-16:53: 7	2.192	0.557	146.2	15.39
12	6:48:53.8	-16:52: 8	1.145	1.149	81.0	16.13
13	6:48:51.2	-16:51:36	1.121	0.891	140.8	15.72
14	6:48:34.8	-16:51:10	0.472	1.012	24.4	15.48
15	6:48:34.8	-16:50:44	0.209	0.365	34.9	15.64
16	6:48:54.5	-16:50:25	1.207	0.431	7.9	15.81

Table 8: Observed linear polarization values for various field stars in CB54A

Sr.#	RA(2000)	DEC(2000)	$p(\%)$	$E_p(\%)$	θ	m
1	7: 4: 6.9	-16:24:48	0.105	0.027	153.6	11.41
2	7: 4:27.4	-16:24:33	0.304	0.023	140.4	11.05
3	7: 4: 3.8	-16:23:28	0.215	0.086	115.5	12.24
4	7: 4: 8.9	-16:23:13	0.824	0.196	126.5	15.24
5	7: 4: 8.7	-16:23: 1	0.203	0.131	154.2	14.60
6	7: 4:27.7	-16:22:53	0.957	0.270	123.3	14.20
7	7: 4:13.3	-16:22:43	1.019	0.214	177.5	13.97
8	7: 4:25.9	-16:22:22	1.526	0.592	58.8	15.82
9	7: 4: 6.9	-16:22:23	0.913	0.206	96.1	14.14
10	7: 4:25.2	-16:21:40	0.865	0.176	108.3	14.32
11	7: 4:13.8	-16:21:32	1.306	0.421	146.7	15.74
12	7: 4:12.4	-16:21:27	0.203	0.029	148.4	12.79
13	7: 4:24.5	-16:21:20	0.787	0.195	78.2	14.80
14	7: 4:17.9	-16:21:16	0.885	0.321	132.2	14.77
15	7: 4:27.5	-16:21: 5	0.475	0.239	76.8	14.67
16	7: 4:19.5	-16:20:45	0.378	0.356	117.2	15.61
17	7: 4: 6.5	-16:20:34	1.494	0.126	74.5	14.12
18	7: 4: 9.9	-16:20:30	1.091	0.515	100.3	16.02
19	7: 4:19.9	-16:20:23	0.758	0.391	91.2	16.23
20	7: 4:10.1	-16:20:11	0.877	0.550	146.6	15.93
21	7: 4: 5.7	-16:20: 9	3.635	0.610	50.2	16.71
22	7: 4: 6.8	-16:20: 7	0.374	0.090	102.9	12.24
23	7: 4:26.7	-16:19:50	0.764	0.570	108.7	16.12
24	7: 4: 5.4	-16:19:46	1.167	0.766	73.8	16.71
25	7: 4: 9.3	-16:19:39	0.450	0.323	123.1	15.46
26	7: 4:22.5	-16:19:28	0.206	0.243	154.3	14.85
27	7: 4: 8.4	-16:19:18	0.546	0.123	116.5	12.56

Table 9: Observed linear polarization values for various field stars in CB54B

Sr.#	RA(2000)	DEC(2000)	$p(\%)$	$E_p(\%)$	θ	m
1	7: 4:21.7	-16:29:36	0.571	0.098	128.2	14.32
2	7: 4: 0.5	-16:29:30	0.396	0.027	111.8	11.08
3	7: 4:22.9	-16:29:17	1.446	0.113	174.4	14.74
4	7: 4:11.1	-16:28:43	0.531	0.097	141.4	14.21
5	7: 4: 9.2	-16:28:40	1.628	0.511	164.4	15.94
6	7: 4: 2.0	-16:28:37	0.549	0.133	80.6	14.29
7	7: 4:20.3	-16:28:31	0.234	0.047	147.0	12.64
8	7: 4:16.9	-16:28:23	1.102	0.303	164.8	15.28
9	7: 4: 4.8	-16:27:53	0.624	0.051	135.1	13.71
10	7: 4:17.6	-16:27:48	1.022	0.171	138.7	15.15
11	7: 4:10.1	-16:27:41	1.141	0.236	130.6	15.09
12	7: 4: 1.8	-16:27:13	0.936	0.137	119.2	14.45
13	7: 4:22.4	-16:26:46	0.671	0.112	113.0	13.64
14	7: 4: 5.4	-16:26:33	2.062	0.474	140.6	15.90
15	7: 4: 9.9	-16:26:20	0.678	0.161	115.2	14.04
16	7: 4: 3.0	-16:26: 2	0.131	0.061	157.5	13.19
17	7: 4:18.7	-16:25:56	0.292	0.088	92.4	13.79
18	7: 4:24.9	-16:25:54	3.130	0.292	164.3	15.26
19	7: 4:19.4	-16:25:38	1.142	0.336	137.8	15.52
20	7: 4: 8.1	-16:25: 2	0.501	0.034	120.0	12.22
21	7: 4: 6.6	-16:24:47	0.123	0.042	153.4	11.50

Table 10: Observed linear polarization values for various field stars in CB58

Sr.#	RA(2000)	DEC(2000)	$p(\%)$	$E_p(\%)$	θ	m
1	7:18: 6.1	-23:40:40	2.368	1.088	93.4	15.78
2	7:18: 2.2	-23:40: 7	1.859	0.447	152.5	15.32
3	7:18: 1.8	-23:40: 6	0.890	0.258	139.8	14.10
4	7:17:57.5	-23:39:45	0.773	0.336	46.6	15.18
5	7:17:56.2	-23:39:38	2.495	0.920	118.2	16.25
6	7:17:59.0	-23:39:29	0.902	0.198	125.3	13.29
7	7:18: 1.2	-23:39: 3	1.136	0.577	109.6	15.46
8	7:18:14.3	-23:39: 6	3.500	1.159	70.7	16.36
9	7:18: 0.5	-23:38:59	3.026	1.140	105.6	15.77
10	7:18:21.6	-23:38:51	1.786	0.241	57.2	14.37
11	7:17:54.5	-23:38:39	0.614	0.238	140.9	14.33
12	7:17:57.3	-23:38:32	1.818	0.275	136.2	15.47
13	7:17:53.7	-23:38:24	1.404	0.502	113.2	15.29
14	7:17:53.3	-23:38:21	4.926	1.785	159.7	16.35
15	7:18:20.6	-23:38:13	2.159	0.925	18.4	15.57
16	7:18:16.0	-23:37:41	0.205	0.053	28.1	12.03
17	7:17:59.4	-23:37:32	0.111	0.043	101.6	12.07
18	7:18: 7.1	-23:37:34	4.079	1.200	169.2	16.66
19	7:17:57.7	-23:37:21	0.998	0.344	89.1	15.29
20	7:18: 5.1	-23:37: 4	2.214	0.441	156.7	15.50
21	7:18: 2.7	-23:37: 3	1.229	0.442	118.8	15.57
22	7:18: 1.2	-23:36:56	4.164	1.995	46.8	16.70
23	7:17:55.6	-23:36:40	0.810	0.185	103.9	13.33
24	7:18:19.9	-23:36:26	0.212	0.087	136.5	13.39
25	7:18: 7.2	-23:36:13	0.111	0.048	48.8	12.23
26	7:17:57.3	-23:36: 0	0.697	0.310	107.1	14.36
27	7:18:10.3	-23:35:45	0.357	0.126	9.3	13.42
28	7:17:60.0	-23:35:31	1.789	0.433	123.2	15.21
29	7:18:15.1	-23:35:19	5.772	2.576	104.3	16.77

Table 11: Observed linear polarization values for various field stars in CB62

Sr.#	RA(2000)	DEC(2000)	$p(\%)$	$E_p(\%)$	θ	m
1	13:30:32.2	79:20:23	0.223	0.118	164.7	16.83
2	13:29:23.5	79:19:39	0.664	0.355	43.9	17.34
3	13:30:15.3	79:20:35	0.404	0.249	54.3	14.22
4	13:30:38.9	79:21:49	1.849	0.991	105.1	17.40
5	13:29:10.0	79:20:38	1.186	0.685	132.5	17.37
6	13:30:52.4	79:22:13	0.196	0.126	54.5	13.80
7	13:30:56.8	79:22:41	0.200	0.104	55.4	16.47
8	13:30:29.8	79:22:49	0.125	0.065	99.8	16.60
9	13:30:20.2	79:23:51	0.387	0.203	69.3	17.08
10	13:30:53.9	79:24:46	2.590	1.296	173.4	17.20
11	13:28:51.7	79:23:18	0.149	0.076	62.3	14.01
12	13:30:18.8	79:24:02	0.157	0.101	7.2	16.65
13	13:30:14.0	79:24:16	0.962	0.498	36.9	17.18

Table 12: Observed linear polarization values for various field stars in CB246

Sr.#	RA(2000)	DEC(2000)	$p(\%)$	$E_p(\%)$	θ	m
1	23:56:49.1	58:31:29	0.699	0.200	57.9	11.05
2	23:56:26.0	58:32:21	3.719	0.284	90.7	15.50
3	23:56:36.2	58:32:34	0.597	0.051	66.4	11.98
4	23:56:51.9	58:33:53	2.265	0.641	55.7	16.12
5	23:57: 5.4	58:34:16	2.773	0.625	64.5	16.00
6	23:56:57.9	58:34:25	2.282	0.153	49.9	14.57
7	23:56:20.2	58:35: 8	2.113	0.246	93.9	15.85
8	23:56:54.6	58:35:20	3.839	0.785	59.1	16.66
9	23:57: 2.3	58:35:25	0.879	0.353	65.3	14.79
10	23:56:24.3	58:36:26	1.844	0.184	117.2	14.98
11	23:56:53.8	58:36:33	2.314	1.107	52.4	16.72
12	23:56:53.3	58:36:45	1.600	0.185	67.1	15.21
13	23:56:55.1	58:36:49	0.756	0.298	40.3	15.35
14	23:56:41.7	58:36:48	1.263	0.125	63.6	14.88

Table 13: Observed linear polarization values for various field stars in CB3N

Sr.#	RA(2000)	DEC(2000)	$p(\%)$	$E_p(\%)$	θ	m
1	0:28:43.9	56:34:52	1.135	0.157	61.2	14.92
2	0:28:49.5	56:35:21	1.193	0.095	60.9	13.80
3	0:28:59.5	56:35:25	1.390	0.113	60.7	14.70
4	0:29: 8.6	56:35:37	1.104	0.189	72.3	14.85
5	0:28:59.2	56:35:42	1.355	0.083	63.7	14.24
6	0:28:59.1	56:35:50	0.932	0.229	66.3	15.15
7	0:28:42.7	56:36: 7	1.268	0.111	55.8	13.87
8	0:28:56.0	56:36:24	1.131	0.132	65.4	14.70
9	0:29: 2.9	56:36:26	1.309	0.047	66.2	13.57
10	0:29:10.8	56:36:27	1.226	0.073	62.7	13.42
11	0:28:53.7	56:36:31	1.436	0.630	60.2	16.48
12	0:28:52.7	56:36:34	0.734	0.244	67.6	15.68
13	0:29: 1.0	56:36:52	1.241	0.141	65.5	14.68
14	0:28:42.4	56:37: 6	0.854	0.091	67.5	13.66
15	0:28:27.7	56:37:12	0.800	0.103	70.3	13.83
16	0:29: 7.7	56:37:17	1.281	0.146	59.2	14.77
17	0:28:51.8	56:37:21	0.368	0.142	88.5	14.75
18	0:29: 6.7	56:37:32	1.422	0.090	73.9	13.83
19	0:28:38.3	56:37:36	1.189	0.338	63.7	15.92
20	0:28:25.2	56:37:44	1.281	0.112	73.1	14.56
21	0:28:32.7	56:38: 2	0.958	0.263	46.2	15.76
22	0:28:54.6	56:38: 5	0.968	0.356	71.8	16.04
23	0:29:10.3	56:38:42	1.456	0.074	64.8	14.07
24	0:29: 5.1	56:38:43	0.509	0.352	46.9	16.61
25	0:28:40.8	56:38:57	0.324	0.065	67.1	12.70
26	0:29: 2.7	56:39: 4	1.296	0.161	59.4	15.12
27	0:29: 7.7	56:39: 6	1.567	0.053	55.8	12.99
28	0:28:47.6	56:39:17	1.181	0.051	62.5	12.09
29	0:28:25.4	56:39:15	0.194	0.127	37.6	14.94
30	0:28:46.6	56:39:21	0.684	0.102	67.3	13.69
31	0:28:51.5	56:39:23	1.399	0.371	57.7	15.93
32	0:28:44.7	56:39:50	1.147	0.065	58.0	13.68
33	0:28:55.3	56:40:11	0.794	0.032	60.7	12.16

Table 14: Observed linear polarization values for various field stars in CB25N

Sr.#	RA(2000)	DEC(2000)	$p(\%)$	$E_p(\%)$	θ	m
1	4:58:54.0	51:57:16	3.874	0.242	152.5	15.61
2	4:59:16.2	51:57:17	2.154	0.545	162.2	16.52
3	4:59:17.6	51:57:19	2.695	0.077	160.5	14.53
4	4:58:57.2	51:57:56	3.658	0.083	155.0	12.78
5	4:58:45.3	51:58: 9	1.714	0.048	163.7	11.66
6	4:59:22.8	51:58:12	1.810	0.187	163.1	16.00
7	4:59: 5.1	51:58:20	2.821	0.875	139.2	16.25
8	4:59: 7.6	51:58:53	2.104	0.884	129.4	16.86
9	4:58:53.7	51:59: 1	3.769	0.366	145.9	16.35
10	4:59: 1.4	51:59:46	4.064	0.669	160.0	16.26
11	4:58:53.5	52: 0: 8	3.485	0.956	155.7	16.96
12	4:59:12.9	52: 0:20	1.343	0.482	155.9	16.54
13	4:58:41.8	52: 0:33	1.250	0.625	154.6	15.62
14	4:59:16.7	52: 0:36	1.967	0.190	153.8	15.36
15	4:59: 1.8	52: 0:54	2.267	0.154	149.7	14.67
16	4:59:21.1	52: 1: 1	2.412	0.233	154.1	14.68
17	4:59:14.2	52: 1:12	1.815	0.181	159.0	15.68
18	4:58:54.7	52: 1:12	1.970	0.215	148.7	15.84

Table 15: The average direction of polarization and its dispersion (stars with p $<$ 0.5% and/or ($\frac{E_p}{p} > 0.5$ have been excluded)

Cloud	$\theta_{average}$ (in degree)	σ_θ (in degree)
CB3	65.6	15.6
CB3N	63.5	6.0
CB25	151.4	5.8
CB25N	153.6	8.8
CB39	158.9	10.7
CB52	147.2	50.4
CB54A	106.1	37.5
CB54B	135.5	23.8
CB58	108.5	39.6
CB62	poor data	poor data
CB246	67.4	20.2