CMC Faint Pointing Grid available at the ING

This note provides a brief description of a pointing grid of standard stars available for use with the Isaac Newton Group telescopes at the Roque de Los Muchachos Observatory on the island of La Palma. The stars have magnitudes in the range 10 to 12 in V, and the grid is intended for use with CCD autoguiders on the WHT and INT. The grid stars listed in TN85 caused saturation. A list of the stars is given in the table. This version refers to CMS generation 3 of SYSTEM.CAT. for the Alpha TCS

Star Positions The grid stars were selected at approximately 1 hour intervals in Right Ascension and 15 degrees in Declination, with alternate hour zones offset in declination. The positions are all given to equinox J2000.0, and epoch for each is given in the table. All star positions given in these tables are extracted from astrometric catalogues . The majority of the stars were selected from the CMC catalogue. When there were no suitable stars in the CMC catalogue, the Hipparcos catalogue was searched. There is less choice using Hipparcos, as most of the stars are too bright, so some of the stars are furthur from their ideal grid position than they were in the previous grids. Each star was checked on the STScI Digitised Sky Survey to ensure that there is no other star of brighter or similar magnitude within 2 arcminutes. The stars were also checked on the US Naval Observatory Catalogue on their www page, and the B and R magnitudes were noted. In cases where a star was not included in the USNO catalogue the APM catalogue was used. Stars with very extreme colours were rejected. In a few cases it was not possible to find a colour, so the star was was checked on the red and blue sky sky survey, to check that it did not appear unusual. The visual magnitude is that given in the astrometric catalogue.

Names The name given to stars in the column **LP name** in the tables can be entered directly at the control console of any one of the ING telescopes and it will automatically set at the required position. The catalogues do not have to be read in explicitly, but are accessed automatically by typing `GOCAT` followed by the object name (eg `FT13+22`) given that an object of the same name does not exist in the user's own catalogue.

Usage As the stars have magnitudes approximately 10th or 11th. this grid should not be used until a good pointing model has been developed, since there is otherwise a significant risk of misidentification.

Acknowledgements I would like to thank Peter Bunclark for pointing out that this fainter grid would be useful.

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CMC Faint Pointing Grid

WHT Name	α	δ	Eq	μ_α	μ_δ	Ep	m_v	B − R
	h m s	° ′ ″		s/yr	″/yr			
FT01+82	01 18 45·749	+82 07 22·63	J2000·0	0·0299	−0·022	1992·84	10·9	−0·6
FT03+82	03 11 01·374	+81 37 04·44	J2000·0	0·0127	−0·030	1990·26	11·7	−0·8
FT05+82	05 13 17·101	+82 06 52·99	J2000·0	−0·0011	−0·006	1988·08	10·7	0·1
FT07+82	06 47 44·660	+82 17 52·98	J2000·0	0·0062	−0·004	1989·99	11·4	−1·1
FT09+82	09 26 42·957	+82 58 32·91	J2000·0	0·0075	−0·009	1989·20	10·9	−0·2
FT11+82	11 01 02·765	+81 50 32·36	J2000·0	−0·0005	−0·003	1987·99	11·2	−0·9
FT13+82	13 15 38·332	+82 55 58·20	J2000·0	0·0070	−0·004	1987·00	10·3	−0·8
FT15+82	15 03 04·406	+81 32 44·55	J2000·0	−0·0006	0·017	1992·48	10·5	−1·2
FT17+82	17 03 25·327	+82 59 28·05	J2000·0	−0·0013	0·001	1990·94	10·4	−1·0
FT19+82	18 49 00·459	+83 11 19·25	J2000·0	−0·0037	0·004	1987·11	10·5	−0·2
FT21+82	21 10 40·641	+82 17 31·24	J2000·0	0·0017	−0·015	1988·60	10·6	−1·5
FT23+82	23 14 21·623	+81 45 35·86	J2000·0	0·0041	−0·017	1992·84	10·6	
FT00+75	23 55 09·816	+74 57 31·89	J2000·0	0·0085	−0·007	1992·61	12·1	−1·3
FT02+75	02 12 00·379	+75 01 24·30	J2000·0	0·0106	−0·006	1988·80	11·8	−1·5
FT04+75	03 52 17·673	+74 33 56·78	J2000·0	−0·0003	−0·003	1994·97	12·3	−0·1
FT06+75	06 03 51·263	+78 35 08·21	J2000·0	0·0026	−0·028	1988·91	11·2	−1·1
FT08+75	07 49 45·866	+74 06 39·20	J2000·0	−0·0047	−0·020	1991·98	11·2	−0·5
FT10+75	10 12 57·725	+72 39 05·96	J2000·0	−0·0095	−0·029	1991·43	11·6	−1·0
FT12+75	12 00 23·650	+75 49 57·87	J2000·0	−0·0122	−0·002	1993·32	11·4	−1·5
FT14+75	13 52 12·820	+75 09 55·07	J2000·0	−0·0027	−0·012	1994·07	10·7	−0·7
FT16+75	15 47 09·021	+75 16 48·38	J2000·0	−0·0019	0·000	1984·52	11·1	−1·2
FT18+75	18 00 09·785	+75 25 50·57	J2000·0	0·0033	0·030	1989·38	10·8	−0·9
FT20+75	19 52 30·118	+74 47 55·92	J2000·0	0·0039	0·035	1989·73	11·4	−0·9
FT22+75	21 46 43·583	+77 41 29·87	J2000·0	−0·0041	−0·011	1993·59	11·0	−0·7
FT01+67	01 09 49·072	+69 25 26·85	J2000·0	0·0088	−0·004	1990·92	11·2	−1·0
FT03+67	03 05 40·638	+66 50 45·07	J2000·0	0·0009	−0·010	1991·53	10·7	−0·8
FT05+67	04 57 34·853	+66 33 55·30	J2000·0	−0·0013	−0·002	1991·66	10·9	−0·2
FT07+67	06 54 01·489	+68 45 56·58	J2000·0	−0·0011	−0·002	1992·14	11·6	−1·1
FT09+67	08 56 58·346	+68 00 12·65	J2000·0	−0·0050	−0·022	1990·13	11·4	−1·2
FT11+67	10 52 33·118	+66 57 44·63	J2000·0	0·0051	−0·011	1989·24	11·9	−0·4
FT13+67	13 04 53·667	+67 54 20·18	J2000·0	0·0007	0·003	1995·12	10·8	−1·5
FT15+67	15 05 29·305	+67 05 40·19	J2000·0	−0·0187	−0·037	1991·18	11·4	−1·4
FT17+67	16 55 25·614	+67 14 22·33	J2000·0	−0·0063	−0·013	1990·48	11·9	−1·0
FT19+67	18 59 28·065	+68 00 33·54	J2000·0	0·0020	−0·004	1989·70	11·0	−0·3
FT21+67	20 57 14·140	+67 41 16·88	J2000·0	−0·0058	−0·006	1990·54	11·6	−1·1
FT23+67	22 58 19·404	+65 01 46·42	J2000·0	−0·00076	0·0046	1991·25	10·7	0·2
FT00+60	00 07 03·403	+60 06 06·31	J2000·0	0·0031	0·001	1989·92	11·7	−0·8
FT02+60	02 04 47·678	+59 51 43·84	J2000·0	−0·0013	−0·006	1992·39	11·1	−1·8
FT04+60	03 54 48·005	+61 38 46·69	J2000·0	−0·0007	0·001	1991·97	11·0	−1·9
FT06+60	06 06 44·619	+59 22 55·77	J2000·0	0·0011	−0·010	1990·99	11·6	−1·5
FT08+60	08 05 39·940	+60 03 52·69	J2000·0	−0·0006	−0·003	1991·63	12·1	−0·5
FT10+60	09 56 09·680	+59 57 20·81	J2000·0	0·0013	0·009	1991·14	11·4	−0·3
FT12+60	12 09 21·118	+60 49 32·51	J2000·0	−0·0022	0·007	1991·09	11·2	−1·0
FT14+60	13 51 47·223	+60 19 09·55	J2000·0	0·0006	−0·010	1992·30	10·8	−1·1
FT16+60	16 04 02·531	+59 11 45·65	J2000·0	0·0002	−0·009	1988·95	11·4	−1·0
FT18+60	17 53 23·863	+59 19 39·14	J2000·0	−0·0019	−0·007	1991·37	11·9	−0·8
FT20+60	20 06 08·457	+61 41 44·66	J2000·0	−0·0001	0·012	1990·51	11·7	−0·4
FT22+60	21 48 10·619	+59 50 58·53	J2000·0	−0·0003	−0·010	1991·64	10·5	−1·3

CMC Faint Pointing Grid (contd)

WHT Name	α	δ	Eq	μ_α	μ_δ	Ep	m_v	B − R
	h m s	° ′ ″		s/yr	″/yr			
FT00+52	00 53 43·811	+52 26 01·46	J2000·0	−0·0005	0·007	1989·52	11·2	−1·2
FT03+52	03 08 16·345	+50 51 44·51	J2000·0	−0·0020	0·006	1993·58	10·8	−0·9
FT05+52	04 54 05·124	+50 39 32·17	J2000·0	0·0001	0·005	1991·83	11·4	−1·1
FT07+52	06 53 39·947	+52 27 21·04	J2000·0	−0·0002	−0·003	1995·16	11·3	−1·4
FT09+52	08 53 29·647	+52 26 28·81	J2000·0	0·0013	−0·010	1990·13	11·7	−0·6
FT11+52	10 57 49·076	+51 56 35·30	J2000·0	−0·0019	0·041	1991·07	11·3	−1·2
FT13+52	13 00 53·184	+51 46 14·70	J2000·0	−0·0005	0·013	1991·31	12·2	−0·3
FT15+52	15 02 10·017	+52 38 59·88	J2000·0	−0·0001	−0·008	1987·40	10·7	−0·7
FT17+52	17 05 17·907	+52 35 34·11	J2000·0	0·0007	−0·007	1991·35	11·1	−1·6
FT19+52	18 59 27·886	+52 45 01·59	J2000·0	−0·0002	−0·010	1991·40	11·8	−1·2
FT21+52	20 54 30·578	+52 38 17·62	J2000·0	0·0008	−0·005	1990·49	11·0	−1·5
FT23+52	23 18 44·645	+50 20 49·47	J2000·0	0·0010	−0·008	1990·54	10·1	−1·9
FT00+45	00 07 24·882	+42 18 34·19	J2000·0	0·0002	0·001	1993·60	11·4	−0·8
FT02+45	02 09 09·446	+47 49 05·55	J2000·0	0·0007	−0·001	1991·66	11·4	−2·0
FT04+45	04 00 08·532	+45 38 46·02	J2000·0	−0·0001	0·006	1992·01	11·2	−0·7
FT06+45	05 55 56·717	+46 25 09·67	J2000·0	−0·0006	0·001	1993·96	10·6	−1·9
FT08+45	08 04 32·331	+45 55 14·88	J2000·0	−0·0022	−0·023	1994·17	11·7	−0·9
FT10+45	09 59 04·843	+45 13 01·84	J2000·0	−0·0024	−0·014	1993·12	11·5	−1·3
FT12+45	12 03 11·687	+44 13 02·47	J2000·0	−0·0005	0·006	1989·38	10·7	−0·5
FT14+45	13 56 11·642	+45 43 38·17	J2000·0	−0·0003	−0·012	1994·42	11·3	−1·3
FT16+45	15 58 06·596	+44 32 48·43	J2000·0	−0·0011	0·001	1993·42	11·3	−0·2
FT18+45	18 02 31·717	+44 04 57·13	J2000·0	−0·0016	0·040	1990·51	11·4	−0·8
FT20+45	19 55 32·562	+44 00 23·23	J2000·0	−0·0012	−0·033	1992·28	10·4	0·1
FT22+45	22 00 52·192	+44 24 51·79	J2000·0	0·0006	−0·001	1991·60	10·8	−0·6
FT01+37	00 57 17·763	+38 02 22·61	J2000·0	−0·0008	−0·004	1994·52	11·1	−1·6
FT03+37	02 56 15·769	+38 27 30·75	J2000·0	0·0005	−0·006	1988·02	11·0	−0·9
FT05+37	05 03 54·270	+37 40 18·00	J2000·0	−0·0003	0·005	1994·05	11·7	−0·8
FT07+37	06 59 25·939	+37 24 44·35	J2000·0	0·0005	−0·001	1994·95	11·7	−0·6
FT09+37	08 49 07·202	+37 04 55·73	J2000·0	0·0015	−0·009	1991·03	11·5	−0·2
FT11+37	10 56 51·031	+37 56 08·84	J2000·0	−0·0008	−0·011	1989·90	11·3	
FT13+37	13 01 03·958	+37 08 33·09	J2000·0	−0·0016	−0·003	1990·11	11·2	−0·6
FT15+37	14 58 15·521	+38 04 29·47	J2000·0	0·0005	−0·003	1992·30	11·0	
FT17+37	17 01 54·490	+37 23 40·31	J2000·0	−0·0010	−0·005	1990·76	10·9	−1·8
FT19+37	19 02 44·206	+38 15 46·54	J2000·0	−0·0022	−0·027	1989·45	11·5	−0·9
FT21+37	21 07 26·154	+39 10 57·75	J2000·0	0·0006	0·006	1990·52	11·0	−1·1
FT23+37	22 57 37·698	+37 01 35·01	J2000·0	−0·0002	−0·015	1993·56	11·6	−0·3
FT00+30	23 56 11·738	+29 10 40·21	J2000·0	0·0007	0·000	1993·49	11·2	−0·1
FT02+30	02 00 51·977	+29 40 22·66	J2000·0	0·0011	−0·012	1991·22	11·3	−1·2
FT04+30	04 03 02·289	+34 37 31·86	J2000·0	0·0110	−0·003	1991·25	10·4	−0·1
FT06+30	05 58 15·904	+29 08 54·30	J2000·0	0·0000	−0·008	1994·81	10·6	
FT08+30	08 02 42·239	+29 33 06·19	J2000·0	−0·0017	−0·022	1989·15	11·0	−0·1
FT10+30	10 00 51·097	+30 35 17·60	J2000·0	−0·0006	−0·007	1991·21	11·6	0·3
FT12+30	12 01 32·201	+30 09 06·94	J2000·0	0·0038	−0·009	1994·27	11·1	−0·9
FT14+30	13 57 54·101	+29 57 39·52	J2000·0	−0·0007	0·012	1989·75	11·0	−0·3
FT16+30	16 00 56·730	+29 35 33·07	J2000·0	0·0002	0·009	1991·37	11·5	−0·2
FT18+30	18 00 12·099	+29 18 10·79	J2000·0	−0·0003	−0·015	1991·54	11·8	−0·3
FT20+30	20 04 22·032	+30 11 47·14	J2000·0	0·0003	−0·002	1987·03	10·6	−0·8
FT22+30	22 04 50·498	+32 32 39·45	J2000·0	−0·0011	−0·028	1992·97	11·5	−0·3

CMC Faint Pointing Grid (contd)

WHT Name	α	δ	Eq	μ_α	μ_δ	Ep	m_v	B − R
	h m s	° ′ ″		s/yr	″/yr			
FT01+22	00 51 21·742	+20 55 56·17	J2000·0	−0·0003	0·006	1991·78	11·6	−0·2
FT03+22	02 56 11·553	+23 23 28·46	J2000·0	0·0005	−0·009	1990·71	11·3	−1·1
FT05+22	05 04 24·046	+20 20 19·94	J2000·0	0·0002	−0·008	1993·33	11·2	−0·6
FT07+22	07 07 49·143	+22 34 04·61	J2000·0	−0·0002	−0·008	1993·10	11·1	−2·2
FT09+22	09 00 37·100	+23 20 31·25	J2000·0	0·0001	0·008	1991·06	11·6	−0·6
FT11+22	11 01 43·171	+22 15 38·40	J2000·0	−0·0004	−0·002	1990·20	11·0	−1·8
FT13+22	12 56 54·740	+23 04 25·08	J2000·0	−0·0009	0·026	1989·12	11·1	−0·6
FT15+22	14 58 48·413	+22 58 38·72	J2000·0	0·0003	−0·005	1992·18	11·5	−1·0
FT17+22	17 03 24·759	+21 31 36·97	J2000·0	−0·0002	0·009	1990·54	11·3	−0·4
FT19+22	19 00 34·784	+22 34 54·20	J2000·0	−0·0004	0·000	1990·50	11·0	−0·6
FT21+22	21 00 24·400	+22 41 19·23	J2000·0	0·0001	−0·002	1990·69	11·2	−1·0
FT23+22	23 09 12·136	+22 38 50·73	J2000·0	−0·0009	−0·010	1991·74	11·4	−0·4
FT00+15	00 01 03·309	+15 49 32·41	J2000·0	0·0009	0·005	1990·98	11·9	0·1
FT02+15	02 01 54·060	+15 58 45·90	J2000·0	0·0020	−0·023	1991·86	11·3	−0·9
FT04+15	04 05 02·237	+14 40 40·87	J2000·0	−0·0001	−0·009	1990·81	11·5	0·1
FT06+15	05 52 56·947	+12 28 21·36	J2000·0	0·0005	−0·010	1993·08	11·4	−0·5
FT08+15	08 01 6·858	+14 20 20·16	J2000·0	−0·0003	−0·010	1994·12	11·6	−1·7
FT10+15	10 00 53·814	+13 52 06·73	J2000·0	−0·0002	−0·008	1993·26	11·2	−0·5
FT12+15	11 59 45·564	+14 59 29·03	J2000·0	0·0006	−0·002	1989·10	11·2	−0·4
FT14+15	13 57 47·756	+14 26 23·45	J2000·0	−0·0030	−0·024	1992·38	10·9	
FT16+15	15 56 44·602	+15 23 28·84	J2000·0	−0·0008	−0·001	1991·26	11·8	0·0
FT18+15	17 56 30·446	+14 31 51·41	J2000·0	−0·0005	0·003	1990·62	11·8	−1·1
FT20+15	19 56 04·736	+11 37 13·81	J2000·0	0·0000	−0·018	1991·62	11·0	
FT22+15	22 04 03·254	+15 41 30·98	J2000·0	0·0002	−0·009	1990·48	11·4	−1·8
FT01+07	00 56 29·709	+06 42 10·96	J2000·0	−0·0008	−0·007	1993·83	11·6	−0·9
FT03+07	03 00 11·686	+07 24 40·06	J2000·0	0·0002	−0·005	1990·86	11·8	−2·0
FT05+07	04 57 06·966	+08 37 54·70	J2000·0	−0·0003	−0·009	1991·02	11·2	−1·7
FT07+07	06 57 27·610	+06 51 10·12	J2000·0	−0·0008	−0·006	1991·98	11·7	−1·3
FT09+07	08 59 15·634	+07 36 16·62	J2000·0	−0·0011	0·003	1991·98	11·1	−0·5
FT11+07	11 00 48·981	+07 06 43·20	J2000·0	−0·0008	−0·001	1990·19	11·6	−1·8
FT13+07	13 00 57·599	+07 17 30·47	J2000·0	−0·0003	−0·004	1988·90	10·9	−0·6
FT15+07	15 03 40·918	+07 15 53·21	J2000·0	−0·0003	−0·012	1994·14	12·5	−0·6
FT17+07	16 56 36·168	+07 02 34·25	J2000·0	−0·0004	−0·019	1994·55	10·7	−1·3
FT19+07	19 01 36·469	+08 19 49·36	J2000·0	0·0008	0·007	1989·16	11·4	−1·0
FT21+07	21 02 07·824	+06 50 44·13	J2000·0	−0·0016	−0·019	1991·54	11·2	−1·4
FT23+07	22 59 22·494	+07 19 00·19	J2000·0	−0·0010	−0·010	1988·81	11·0	−0·7
FT00+00	23 57 25·410	+00 54 58·32	J2000·0	0·0049	0·000	1987·83	11·5	−0·7
FT02+00	02 00 05·931	+00 53 00·67	J2000·0	−0·0009	−0·014	1989·77	11·5	−1·6
FT04+00	04 07 30·164	−02 15 44·00	J2000·0	0·0006	0·001	1992·54	11·2	−2·0
FT06+00	05 56 23·218	−00 25 25·91	J2000·0	−0·0011	−0·038	1994·85	11·4	
FT08+00	07 42 16·244	+01 33 02·10	J2000·0	−0·0009	−0·006	1990·93	10·8	−0·3
FT10+00	09 57 52·501	−00 47 36·33	J2000·0	−0·0002	0·009	1994·11	12·4	−0·9
FT12+00	11 58 49·236	−00 53 52·95	J2000·0	0·0000	−0·012	1992·10	11·7	−0·7
FT14+00	14 01 43·392	−00 14 37·11	J2000·0	−0·0010	−0·020	1994·15	11·3	−1·1
FT16+00	16 03 41·844	+00 35 56·80	J2000·0	−0·0001	−0·006	1993·35	11·8	−1·4
FT18+00	18 00 36·546	−00 35 08·02	J2000·0	−0·0008	−0·017	1994·55	10·9	−0·9
FT20+00	19 58 01·071	−00 07 59·14	J2000·0	0·0002	0·000	1994·56	12·0	−1·7
FT22+00	22 01 46·903	−00 04 07·88	J2000·0	0·0000	0·001	1994·74	11·8	−1·6

CMC Faint Pointing Grid (contd)

WHT Name	α	δ	Eq	μ_α	μ_δ	Ep	m_v	B − R
	h m s	° ′ ″		s/yr	″/yr			
FT01−07	00 50 19·159	−09 26 29·77	J2000·0	−0·0001	−0·010	1993·84	11·1	−1·1
FT03−07	02 51 28·726	−02 23 22·81	J2000·0	0·00729	0·0792	1991·25	11·1	1·5
FT05−07	04 51 32·221	−09 14 16·03	J2000·0	0·0000	−0·003	1993·83	12·1	−1·2
FT07−07	06 59 02·145	−07 42 14·41	J2000·0	−0·0010	−0·009	1994·84	12·1	−0·2
FT09−07	08 51 13·947	−06 47 48·92	J2000·0	−0·0012	−0·007	1992·63	11·7	−1·7
FT11−07	11 03 51·791	−05 05 54·42	J2000·0	−0·01983	−0·0927	1991·25	11·5	1·2
FT13−07	12 58 54·557	−07 24 33·71	J2000·0	−0·0007	0·001	1992·08	11·7	−0·8
FT15−07	15 01 51·286	−08 06 04·65	J2000·0	0·0009	−0·004	1992·39	11·1	−0·4
FT17−07	17 00 16·297	−07 20 06·07	J2000·0	−0·0002	−0·011	1994·12	12·1	−1·5
FT19−07	18 50 08·274	−09 19 42·69	J2000·0	0·0001	0·000	1993·65	11·4	−2·0
FT21−07	21 07 19·890	−07 13 50·64	J2000·0	0·0002	−0·006	1993·49	11·4	−1·4
FT23−07	23 03 18·554	−07 14 27·90	J2000·0	0·0016	−0·024	1993·58	11·8	−1·0
FT00−15	00 01 36·677	−15 52 25·17	J2000·0	−0·0004	−0·005	1994·70	12·1	−0·4
FT02−15	02 02 52·009	−14 05 33·35	J2000·0	−0·0012	−0·001	1992·81	11·8	−0·3
FT04−15	04 02 25·059	−15 18 19·20	J2000·0	0·0003	0·005	1993·76	11·1	−0·9
FT06−15	06 06 52·694	−17 27 40·72	J2000·0	−0·0002	−0·011	1992·94	11·7	−1·0
FT08−15	08 06 57·751	−17 38 40·59	J2000·0	−0·0007	−0·005	1991·78	11·0	−1·2
FT10−15	10 02 39·665	−14 54 37·72	J2000·0	−0·0001	−0·005	1994·01	12·8	−0·5
FT12−15	11 59 03·460	−14 11 56·01	J2000·0	0·0003	0·017	1994·19	13·1	−0·4
FT14−15	13 59 00·006	−14 52 00·39	J2000·0	−0·0002	−0·007	1994·14	11·8	−0·5
FT16−15	16 03 25·491	−15 55 29·28	J2000·0	0·0009	−0·019	1991·48	11·3	−1·7
FT18−15	17 51 28·268	−11 46 02·80	J2000·0	−0·0002	−0·006	1992·34	11·8	−1·4
FT20−15	20 08 40·394	−18 12 42·73	J2000·0	0·0002	−0·006	1992·36	11·5	−1·9
FT22−15	21 55 25·335	−16 05 58·39	J2000·0	0·0005	0·013	1990·97	11·5	−0·3
FT01−22	01 10 57·858	−22 12 28·80	J2000·0	0·0014	0·001	1993·89	11·8	−0·7
FT03−22	02 57 47·535	−22 06 00·35	J2000·0	0·0006	−0·001	1991·98	11·9	−0·8
FT05−22	05 03 35·601	−22 32 26·73	J2000·0	0·0009	0·010	1992·93	11·6	−0·7
FT07−22	06 58 09·648	−22 47 34·51	J2000·0	−0·0025	0·011	1994·17	11·2	−0·1
FT09−22	09 03 06·902	−23 05 42·96	J2000·0	−0·0011	0·004	1994·12	11·7	−1·3
FT11−22	11 03 41·771	−22 08 50·73	J2000·0	−0·0025	0·006	1991·13	11·9	−1·0
FT13−22	12 58 54·895	−23 10 14·99	J2000·0	−0·0010	−0·011	1994·71	11·6	−0·9
FT15−22	14 55 42·554	−23 46 32·00	J2000·0	−0·0009	−0·021	1993·24	11·4	−1·5
FT17−22	16 51 07·259	−22 48 04·95	J2000·0	−0·0003	0·001	1990·88	11·6	−1·0
FT19−22	18 52 17·193	−24 21 09·31	J2000·0	0·0000	−0·010	1992·64	11·0	−0·9
FT21−22	20 59 50·460	−22 12 58·34	J2000·0	−0·0018	−0·011	1992·61	12·2	−2·0
FT23−22	22 58 01·384	−21 54 27·64	J2000·0	0·0015	−0·023	1991·68	11·1	−0·8
FT00−30	00 02 28·369	−30 54 45·76	J2000·0	−0·0008	−0·009	1994·68	11·6	−1·7
FT02−30	01 59 35·147	−29 57 01·85	J2000·0	0·0012	−0·013	1993·79	12·0	−0·2
FT04−30	03 56 20·423	−29 09 45·72	J2000·0	0·0006	0·000	1992·77	11·0	−0·9
FT06−30	06 01 50·692	−30 29 37·04	J2000·0	−0·0004	0·001	1992·04	11·2	−0·4
FT08−30	08 03 28·497	−28 44 20·74	J2000·0	−0·0008	0·005	1993·17	10·9	−1·0
FT10−30	09 56 17·481	−29 55 21·26	J2000·0	0·0000	0·001	1994·95	11·0	−0·1
FT12−30	12 07 32·282	−26 08 12·42	J2000·0	−0·0003	0·001	1993·32	11·5	−0·3
FT14−30	13 56 34·732	−30 53 56·76	J2000·0	−0·0003	0·005	1993·30	11·6	−1·0
FT16−30	15 53 20·241	−28 47 22·37	J2000·0	0·0005	−0·016	1993·44	10·8	−1·6
FT18−30	18 13 05·670	−27 24 38·72	J2000·0	0·0003	−0·002	1991·77	10·9	−0·2
FT20−30	20 01 09·699	−30 11 09·25	J2000·0	0·0002	−0·007	1994·12	10·4	−1·4
FT22−30	22 01 30·370	−29 59 02·29	J2000·0	0·0009	0·018	1992·72	11·8	−0·9

CMC Faint Pointing Grid (contd)

WHT Name	α	δ	Eq	μ_α	μ_δ	Ep	m_v	B − R
	h m s	° ′ ″		s/yr	″/yr			
FT01−37	00 57 46·988	−37 00 41·81	J2000·0	0·0015	−0·006	1992·71	11·5	−1·5
FT03−37	02 56 37·825	−37 12 21·35	J2000·0	0·0001	0·003	1992·96	11·7	−0·9
FT05−37	04 56 11·797	−37 22 34·47	J2000·0	−0·0011	0·004	1992·92	11·9	−0·1
FT07−37	07 01 03·441	−37 43 31·23	J2000·0	−0·0001	−0·001	1994·71	11·8	
FT09−37	09 06 46·607	−39 49 47·12	J2000·0	−0·0013	0·004	1993·28	11·3	−0·4
FT11−37	11 08 18·792	−38 11 07·05	J2000·0	−0·0001	−0·013	1993·29	11·2	
FT13−37	13 03 51·249	−38 08 8·53	J2000·0	−0·0004	−0·023	1993·43	11·0	
FT15−37	15 04 09·511	−38 49 10·32	J2000·0	−0·0010	−0·001	1993·48	11·6	−0·3
FT17−37	17 09 18·667	−39 34 52·60	J2000·0	0·0006	−0·004	1991·55	11·2	
FT19−37	19 04 24·982	−38 23 15·35	J2000·0	−0·0002	−0·015	1991·64	11·5	−1·5
FT21−37	21 04 03·185	−38 06 59·42	J2000·0	−0·0017	−0·004	1992·69	11·5	
FT23−37	22 58 11·219	−38 00 12·43	J2000·0	0·0008	0·009	1991·75	11·9	−1·3
FT00−45	00 03 25·649	−46 49 51·49	J2000·0	−0·00018	0·0022	1991·25	11·1	0·0
FT02−45	01 52 18·511	−39 49 25·13	J2000·0	−0·0012	−0·004	1992·89	11·4	−1·5
FT04−45	03 56 19·340	−39 16 00·17	J2000·0	−0·0009	−0·022	1992·85	11·7	−0·9
FT06−45	06 01 33·255	−46 39 55·71	J2000·0	0·00031	0·00304	1991·25	11·1	
FT08−45	07 51 47·811	−38 22 56·76	J2000·0	−0·00033	0·00268	1991·25	11·1	0·4
FT10−45	09 53 06·645	−42 16 51·18	J2000·0	−0·00018	0·0211	1991·25	11·79	0·6
FT12−45	11 56 07·464	−43 38 23·45	J2000·0	−0·00144	0·0077	1991·25	11·4	−1·5
FT14−45	13 55 18·781	−43 17 34·86	J2000·0	−0·0013	−0·011	1991·25	11·3	−1·3
FT16−45	16 00 42·218	−44 26 33·97	J2000·0	0·0001	−0·002	1990·47	10·3	−1·0
FT18−45	18 02 52·755	−42 05 51·59	J2000·0	−0·00682	−0·1072	1991·25	10·6	0·6
FT20−45	19 49 51·924	−40 18 53·15	J2000·0	0·0000	−0·005	1991·85	11·5	−1·8
FT22−45	22 09 00·174	−39 04 26·05	J2000·0	0·0027	−0·013	1993·66	11·9	−1·4