INT OBSERVING LOG (ISAAC NEWTON GROUP, LA PALMA)

```
TELESCOPE:            INT
DATE:                 20010720
TAPE NR:
OBSERVER:             P. Vreeswijk
PROGRAMME:            FSV survey
PATT/CAT REF.:        WFS1
TELESCOPE OPERATOR:   M. Azzaro
SUPPORT ASTRONOMER:   T. Augusteijn

TELESCOPE FOCUS:      44.01 mm
CALIBRATE RESULTS:    not specified

INSTRUMENT:           WFC

WFC FILTER WHEEL:     B, V, I

WEATHER:              (1st half) good
                      (2nd half) good
CLOUD COVER (%):      (1st half) 0
                      (2nd half) 0
DUST (0-2):           (1st half) 0
                      (2nd half) 0
SEEING (arcsec):      (1st half) 1.2
                      (2nd half) 1.5-2

DOME OPENED (UT):     19:30
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METEOROLOGICAL PARAMETERS

| LT | AirT | Hum% | Wspd | Gust | Wdir | Press | LocT | IntT | Mirr | LocRH | IntRH |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 21:00 | 10.6 | 8 | 43.1 | 46.5 | 22 | 771.8 | 11.1 | 13.1 | 17.1 | 7 | 8 |
| 22:00 | 10.5 | 8 | 40.9 | 48.1 | 356 | 772.1 | 10.9 | 12.2 | 16.4 | 6 | 7 |
| 23:00 | 10.3 | 8 | 40.7 | 44.7 | 4 | 772.6 | 10.8 | 12.1 | 15.3 | 7 | 8 |
| 00:00 | 10.8 | 7 | 38.4 | 43.2 | 10 | 772.9 | 11.2 | 12.6 | 15.5 | 6 | 7 |
| 01:00 | 11.3 | 6 | 38.9 | 43.7 | 35 | 772.6 | 11.7 | 12.5 | 15.2 | 5 | 6 |
| 02:00 | 11.4 | 5 | 37.4 | 43.6 | 7 | 772.2 | 11.6 | 12.1 | 14.5 | 4 | 6 |
| 03:00 | 10.6 | 5 | 41.4 | 45.8 | 18 | 771.9 | 10.9 | 12.0 | 15.1 | 4 | 5 |
| 04:00 | 11.2 | 4 | 39.9 | 43.8 | 18 | 771.6 | 11.4 | 11.8 | 14.1 | 3 | 5 |
| 05:00 | 10.4 | 5 | 39.1 | 40.2 | 12 | 771.4 | 10.2 | 11.0 | 14.6 | 5 | 6 |
| 06:00 | 10.5 | 6 | 39.0 | 40.1 | 8 | 771.3 | 10.6 | 11.3 | 14.4 | 5 | 6 |

```
SUNSET(UT)            20:18
EVENING TWILIGHT(UT)  21:41
MORNING TWILIGHT(UT)  04:56
SUNRISE(UT)           06:19
MOON'S QUARTER (1-4)  1
DISK % OF ILLUM.      0
DARK TIME             07:15
TWILIGHT TIME         02:46
MOONRISE(UT)          No Moon all night
MOONSET(UT)           No Moon all night

TIME LOST(WEATHER):   00:00
TIME LOST(TECHNICAL): 00:12
TIME LOST(OTHER):     00:00
```

| Run no. | Object name | RA | Dec. | Equinox | AM | PA | UT | Exp. T. | Filter | Psys Channel | Binning | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 267977 | Bias frame | 0:00:00.00 | +00:00:00.0 | J2000.00 | 1.000 | 180.0 | 13:26:08.4 | 0.0 | g | Sloan | 1 x 1 | |
| 267978 | Bias | 0:00:00.00 | +00:00:00.0 | J2000.00 | 4.546 | 180.0 | 14:58:09.4 | 0.0 | Halpha Narrow-ban | | 1 x 1 | Light in Dome |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 267979 | Bias | 0:00:00.00 | +00:00:00.0 | J2000.00 | 4.546 | 180.0 | 15:50:15.8 | 0.0 | U | RGO | 1 x 1 |
| 267980 | Bias | 0:00:00.00 | +00:00:00.0 | J2000.00 | 4.546 | 180.0 | 15:50:56.3 | 0.0 | U | RGO | 1 x 1 |
| 267981 | Bias | 0:00:00.00 | +00:00:00.0 | J2000.00 | 4.546 | 180.0 | 15:51:35.5 | 0.0 | U | RGO | 1 x 1 |
| 267982 | Bias | 0:00:00.00 | +00:00:00.0 | J2000.00 | 4.546 | 180.0 | 15:52:14.6 | 0.0 | U | RGO | 1 x 1 |
| 267983 | Bias | 0:00:00.00 | +00:00:00.0 | J2000.00 | 4.546 | 180.0 | 15:52:53.6 | 0.0 | U | RGO | 1 x 1 |
| 267984 | Bias | 0:00:00.00 | +00:00:00.0 | J2000.00 | 4.546 | 180.0 | 15:53:32.8 | 0.0 | U | RGO | 1 x 1 |
| 267985 | Bias | 0:00:00.00 | +00:00:00.0 | J2000.00 | 4.546 | 180.0 | 15:54:11.7 | 0.0 | U | RGO | 1 x 1 |
| 267986 | Bias | 0:00:00.00 | +00:00:00.0 | J2000.00 | 4.546 | 180.0 | 15:54:50.8 | 0.0 | U | RGO | 1 x 1 |
| 267987 | Bias | 0:00:00.00 | +00:00:00.0 | J2000.00 | 4.546 | 180.0 | 15:55:29.8 | 0.0 | U | RGO | 1 x 1 |
| 267988 | Bias | 0:00:00.00 | +00:00:00.0 | J2000.00 | 4.546 | 180.0 | 15:56:08.9 | 0.0 | U | RGO | 1 x 1 |
| 267989 | Flat field | 15:02:00.00 | +29:55:00.0 | J2000.00 | 1.002 | 180.0 | 20:35:07.5 | 3.0 | B | Harris | 1 x 1 |
| 267990 | Flat field | 15:02:01.53 | +29:55:20.1 | J2000.00 | 1.003 | 180.0 | 20:36:40.6 | 3.8 | B | Harris | 1 x 1 |
| 267991 | Flat field | 15:01:58.46 | +29:54:40.0 | J2000.00 | 1.003 | 180.0 | 20:38:12.5 | 6.3 | B | Harris | 1 x 1 |
| 267992 | Flat field | 15:01:56.92 | +29:54:19.9 | J2000.00 | 1.003 | 180.0 | 20:39:39.8 | 9.0 | B | Harris | 1 x 1 |
| 267993 | Flat field | 15:02:03.07 | +29:55:39.9 | J2000.00 | 1.004 | 180.0 | 20:40:59.6 | 12.6 | B | Harris | 1 x 1 |
| 267994 | Flat field | 15:02:03.07 | +29:55:39.9 | J2000.00 | 1.004 | 180.0 | 20:42:33.0 | 22.4 | V | Harris | 1 x 1 |
| 267995 | Flat field | 15:02:00.00 | +29:55:00.0 | J2000.00 | 1.005 | 180.0 | 20:44:05.2 | 31.6 | V | Harris | 1 x 1 |
| 267996 | Flat field | 15:01:56.92 | +29:54:20.0 | J2000.00 | 1.006 | 180.0 | 20:45:45.8 | 47.2 | V | Harris | 1 x 1 |
| 267997 | Flat field | 15:02:00.00 | +29:55:00.0 | J2000.00 | 1.007 | 180.0 | 20:47:58.8 | 42.9 | I | INT-WFC | 1 x 1 |
| 267998 | Flat field | 15:02:01.53 | +29:55:19.9 | J2000.00 | 1.007 | 180.0 | 20:49:51.2 | 60.9 | I | INT-WFC | 1 x 1 |
| 267999 | Flat field | 15:01:58.46 | +29:54:40.0 | J2000.00 | 1.009 | 180.0 | 20:52:02.8 | 89.7 | I | INT-WFC | 1 x 1 |
| 268000 | Flat field | 15:01:56.92 | +29:54:19.9 | J2000.00 | 1.010 | 180.0 | 20:54:42.6 | 143.3 | I | INT-WFC | 1 x 1 |
| 268001 | Flat field | 15:02:03.07 | +29:55:39.9 | J2000.00 | 1.013 | 180.0 | 20:58:03.2 | 299.8 | I | INT-WFC | 1 x 1 |
| 268002 | Focus run | 15:39:09.39 | -00:12:28.9 | J2000.00 | 1.147 | 180.0 | 21:16:18.9 | 10.2 | V | Harris | 1 x 1 |
| 268003 | Focus run | 15:39:09.40 | -00:12:28.8 | J2000.00 | 1.151 | 180.0 | 21:25:04.6 | 10.1 | V | Harris | 1 x 1 ap verkeerd |
| 268004 | 107-599 V | 15:39:09.40 | -00:14:28.9 | J2000.00 | 1.156 | 180.0 | 21:30:38.3 | 10.1 | V | Harris | 1 x 1 ap verkeerd |
| 268005 | 107-599 B | 15:39:09.39 | -00:14:28.9 | J2000.00 | 1.158 | 180.0 | 21:32:28.4 | 25.1 | B | Harris | 1 x 1 ap verkeerd |
| 268006 | 107-599 I | 15:39:09.39 | -00:14:29.0 | J2000.00 | 1.159 | 180.0 | 21:33:58.7 | 10.1 | I | INT-WFC | 1 x 1 |
| 268007 | 107-599 I | 15:39:09.40 | -00:14:29.0 | J2000.00 | 1.161 | 180.0 | 21:35:50.0 | 10.1 | I | INT-WFC | 1 x 1 |
| 268008 | 107-599 B | 15:39:09.40 | -00:14:29.0 | J2000.00 | 1.162 | 180.0 | 21:37:34.5 | 25.1 | B | Harris | 1 x 1 |
| 268010 | 107-599 V | 15:39:09.40 | -00:14:29.0 | J2000.00 | 1.164 | 180.0 | 21:39:37.5 | 10.1 | V | Harris | 1 x 1 |
| 268011 | 107-484 V | 15:40:16.80 | -00:21:15.0 | J2000.00 | 1.167 | 180.0 | 21:41:56.6 | 10.1 | V | Harris | 1 x 1 |
| 268012 | 107-484 B | 15:40:16.80 | -00:21:14.9 | J2000.00 | 1.168 | 180.0 | 21:43:21.2 | 10.1 | B | Harris | 1 x 1 |
| 268013 | 107-484 I | 15:40:16.80 | -00:21:15.0 | J2000.00 | 1.170 | 180.0 | 21:44:48.5 | 10.1 | I | INT-WFC | 1 x 1 B-->V? |
| 268014 | f_63 V | 17:23:15.00 | +27:29:59.9 | J2000.00 | 1.016 | 180.0 | 21:49:38.6 | 599.0 | B | Harris | 1 x 1 I-->B? |
| 268015 | f_63 B | 17:23:15.00 | +27:30:00.0 | J2000.00 | 1.009 | 180.0 | 22:00:38.8 | 599.4 | I | INT-WFC | 1 x 1 |
| 268017 | f_63 I | 17:23:14.99 | +27:29:59.9 | J2000.00 | 1.003 | 180.0 | 22:15:23.1 | 899.2 | I | INT-WFC | 1 x 1 |
| 268019 | f_63 V | 17:23:14.99 | +27:29:59.9 | J2000.00 | 1.001 | 180.0 | 22:40:55.6 | 598.9 | V | Harris | 1 x 1 B-->V? |
| 268020 | f_64 V | 17:25:44.99 | +27:29:59.9 | J2000.00 | 1.002 | 180.0 | 22:53:28.9 | 599.4 | B | Harris | 1 x 1 I-->B? |
| 268021 | f_64 B | 17:25:45.00 | +27:30:00.0 | J2000.00 | 1.006 | 180.0 | 23:04:48.9 | 599.4 | I | INT-WFC | 1 x 1 590in I,216in V |
| 268022 | f_64 I | 17:25:45.00 | +27:29:59.7 | J2000.00 | 1.013 | 180.0 | 23:16:09.1 | 805.8 | V | Harris | 1 x 1 |
| 268023 | f_64 V | 17:25:45.00 | +27:30:00.1 | J2000.00 | 1.022 | 180.0 | 23:30:54.9 | 599.4 | V | Harris | 1 x 1 B-->V? |
| 268024 | f_65 V | 17:28:14.99 | +27:29:59.8 | J2000.00 | 1.031 | 180.0 | 23:42:55.2 | 599.5 | B | Harris | 1 x 1 V-->B? |
| 268025 | f_65 B | 17:28:15.00 | +27:29:59.9 | J2000.00 | 1.043 | 180.0 | 23:54:14.9 | 599.5 | V | Harris | 1 x 1 |
| 268026 | f_65 I | 17:28:15.00 | +27:29:59.7 | J2000.00 | 1.061 | 180.0 | 00:05:34.9 | 884.4 | I | INT-WFC | 1 x 1 |
| 268027 | f_64 I | 17:25:45.00 | +27:29:59.9 | J2000.00 | 1.101 | 180.0 | 00:26:30.7 | 899.0 | I | INT-WFC | 1 x 1 |
| 268028 | f_66 V | 17:28:14.99 | +26:55:59.8 | J2000.00 | 1.128 | 180.0 | 00:44:26.5 | 599.5 | V | Harris | 1 x 1 |
| 268029 | f_66 B | 17:28:14.99 | +26:56:00.0 | J2000.00 | 1.156 | 180.0 | 00:55:44.9 | 599.5 | B | Harris | 1 x 1 |
| 268030 | f_66 I | 17:28:15.00 | +26:56:00.0 | J2000.00 | 1.194 | 180.0 | 01:07:03.7 | 899.1 | I | INT-WFC | 1 x 1 |
| 268031 | f_68 V | 22:00:00.00 | +27:39:59.9 | J2000.00 | 1.088 | 180.0 | 01:25:28.2 | 599.5 | V | Harris | 1 x 1 |
| 268032 | f_68 B | 22:00:00.00 | +27:40:00.0 | J2000.00 | 1.069 | 180.0 | 01:36:47.8 | 599.5 | B | Harris | 1 x 1 |
| 268033 | f_68 I | 21:59:59.99 | +27:39:59.9 | J2000.00 | 1.050 | 180.0 | 01:48:07.3 | 899.3 | I | INT-WFC | 1 x 1 |
| 268034 | f_69 V | 22:02:30.00 | +27:39:59.9 | J2000.00 | 1.035 | 180.0 | 02:05:44.5 | 599.6 | V | Harris | 1 x 1 |
| 268035 | f_69 B | 22:02:30.00 | +27:40:00.0 | J2000.00 | 1.024 | 180.0 | 02:17:04.3 | 599.4 | B | Harris | 1 x 1 |
| 268036 | f_69 I | 22:02:29.99 | +27:39:59.9 | J2000.00 | 1.014 | 180.0 | 02:28:24.0 | 899.0 | I | INT-WFC | 1 x 1 |
| 268039 | f_69 V | 22:02:30.00 | +27:39:59.8 | J2000.00 | 1.004 | 180.0 | 02:50:03.5 | 599.6 | V | Harris | 1 x 1 |
| 268040 | f_70 V | 22:04:59.99 | +27:40:00.0 | J2000.00 | 1.002 | 180.0 | 03:02:37.5 | 598.9 | V | Harris | 1 x 1 |
| 268041 | f_70 B | 22:04:59.99 | +27:40:00.1 | J2000.00 | 1.000 | 180.0 | 03:13:56.6 | 599.6 | B | Harris | 1 x 1 |
| 268042 | f_70 I | 22:04:59.99 | +27:39:59.8 | J2000.00 | 1.001 | 180.0 | 03:25:15.6 | 899.1 | I | INT-WFC | 1 x 1 |
| 268043 | f_70 V | 22:05:00.00 | +27:40:00.0 | J2000.00 | 1.005 | 180.0 | 03:42:15.9 | 599.3 | V | Harris | 1 x 1 |
| 268044 | f_71 V | 22:05:00.00 | +27:06:00.1 | J2000.00 | 1.012 | 180.0 | 03:55:13.4 | 599.5 | V | Harris | 1 x 1 |
| 268045 | f_71 B | 22:04:59.99 | +27:06:00.1 | J2000.00 | 1.020 | 180.0 | 04:06:32.5 | 599.4 | B | Harris | 1 x 1 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 268046 | f_71 | I | 22:05:00.00 | +27:05:59.9 | J2000.00 | 1.033 | 180.0 | 04:17:52.0 | 899.2 | I | INT-WFC | 1 x 1 |
| 268048 | 113-372 | V | 21:42:02.00 | +00:28:39.0 | J2000.00 | 1.250 | 180.0 | 04:37:01.1 | 10.1 | V | Harris | 1 x 1 |
| 268049 | 113-372 | B | 21:42:02.00 | +00:28:39.0 | J2000.00 | 1.254 | 180.0 | 04:38:14.4 | 25.1 | B | Harris | 1 x 1 |
| 268050 | 113-372 | I | 21:42:02.00 | +00:28:39.0 | J2000.00 | 1.257 | 180.0 | 04:39:41.2 | 10.1 | I | INT-WFC | 1 x 1 |
| 268051 | 113-372 | I | 21:42:02.00 | +00:28:39.0 | J2000.00 | 1.262 | 180.0 | 04:41:24.0 | 10.1 | I | INT-WFC | 1 x 1 |
| 268052 | 113-372 | B | 21:42:02.00 | +00:28:39.0 | J2000.00 | 1.265 | 180.0 | 04:42:30.6 | 24.6 | B | Harris | 1 x 1 |
| 268053 | 113-372 | V | 21:42:02.00 | +00:28:39.0 | J2000.00 | 1.269 | 180.0 | 04:43:57.5 | 10.1 | V | Harris | 1 x 1 |
| 268054 | 92-348 | V | 0:55:33.40 | +00:43:33.0 | J2000.00 | 1.213 | 180.0 | 04:46:42.3 | 10.1 | V | Harris | 1 x 1 |
| 268055 | 92-348 | B | 0:55:33.40 | +00:43:33.0 | J2000.00 | 1.210 | 180.0 | 04:47:54.9 | 25.1 | B | Harris | 1 x 1 |
| 268056 | 92-348 | I | 0:55:33.40 | +00:43:33.0 | J2000.00 | 1.207 | 180.0 | 04:49:28.2 | 10.1 | I | INT-WFC | 1 x 1 |
| 268057 | 92-348 | V | 0:55:33.40 | +00:43:33.0 | J2000.00 | 1.202 | 180.0 | 04:52:13.5 | 20.1 | V | Harris | 1 x 1 |
| 268058 | 92-348 | B | 0:55:33.40 | +00:43:33.0 | J2000.00 | 1.199 | 180.0 | 04:53:44.0 | 50.0 | B | Harris | 1 x 1 |
| 268059 | 92-348 | I | 0:55:33.40 | +00:43:32.9 | J2000.00 | 1.196 | 180.0 | 04:55:44.8 | 20.1 | I | INT-WFC | 1 x 1 |
| 268060 | f_71 | V | 22:05:00.00 | +27:05:59.9 | J2000.00 | 1.107 | 180.0 | 05:10:24.3 | 599.6 | V | Harris | 1 1 x 1 |
| 268061 | f_68 | V | 22:00:00.00 | +27:40:00.0 | J2000.00 | 1.150 | 180.0 | 05:26:02.4 | 499.6 | V | Harris | 1 1 x 1 |
| 268062 | Flat field | | 2:58:00.00 | -00:06:00.0 | J2000.00 | 1.452 | 180.0 | 05:38:33.9 | 229.7 | I | INT-WFC | 1 1 x 1 |
| 268063 | Flat field | | 2:58:01.33 | -00:05:40.0 | J2000.00 | 1.428 | 180.0 | 05:44:42.6 | 80.7 | I | INT-WFC | 1 1 x 1 |
| 268064 | Flat field | | 2:57:58.66 | -00:06:19.9 | J2000.00 | 1.417 | 180.0 | 05:47:24.4 | 50.2 | I | INT-WFC | 1 1 x 1 |
| 268065 | Flat field | | 2:58:00.00 | -00:06:00.0 | J2000.00 | 1.408 | 180.0 | 05:49:34.7 | 34.4 | V | Harris | 1 1 x 1 |
| 268066 | Flat field | | 2:58:01.33 | -00:05:40.0 | J2000.00 | 1.400 | 180.0 | 05:51:29.0 | 23.0 | V | Harris | 1 1 x 1 |
| 268067 | Flat field | | 2:57:58.66 | -00:06:20.0 | J2000.00 | 1.393 | 180.0 | 05:53:11.2 | 15.5 | V | Harris | 1 1 x 1 |
| 268068 | Flat field | | 2:58:00.00 | -00:05:59.9 | J2000.00 | 1.386 | 180.0 | 05:54:50.0 | 8.2 | B | Harris | 1 1 x 1 |
| 268069 | Flat field | | 2:58:01.33 | -00:05:40.0 | J2000.00 | 1.380 | 180.0 | 05:56:19.9 | 5.8 | B | Harris | 1 1 x 1 |
| 268070 | Flat field | | 2:57:58.66 | -00:06:20.0 | J2000.00 | 1.375 | 180.0 | 05:57:40.9 | 4.4 | B | Harris | 1 1 x 1 |
| 268071 | Sky background | | 2:58:02.66 | -00:05:19.9 | J2000.00 | 1.367 | 180.0 | 05:59:28.2 | 3.1 | B | Harris | 1 1 x 1 |