INT OBSERVING LOG (ISAAC NEWTON GROUP, LA PALMA)

```
TELESCOPE:            INT
DATE:                 20000909
TAPE NR:              INTD4493
OBSERVER:             Mike Irwin & Annette Ferguson
PROGRAMME:            Survey of M31 Halo and outer disk
PATT/CAT REF.:        P8
TELESCOPE OPERATOR:   N/A
SUPPORT ASTRONOMER:   N/A

TELESCOPE FOCUS:      46.15 mm
CALIBRATE RESULTS:    HI 37.5 +/- 3.94, DI -58,48 +/- 1.32, HC  62.01 +/- 2.84, Sky sigma 3.50

INSTRUMENT:           WFC

WFC FILTER WHEEL:     g,V,r,i,z,Ha

WEATHER:              (1st half) Goodr
                      (2nd half) Good
CLOUD COVER (%):      (1st half) 0%
                      (2nd half) 0%
DUST (0-2):           (1st half) 0
                      (2nd half) 0
SEEING (arcsec):      (1st half) 0.7
                      (2nd half) 0.8

DOME OPENED (UT):     20:00
```

METEOROLOGICAL PARAMETERS

UT	AirT	Hum%	Wspd	Gust	Wdir	Press	LocT	IntT	Mirr	LocRH	IntRH
20:00	18.0	26	5.1	5.9	261	772.6	18.0	19.8	18.2	24	31
21:00	16.6	25	6.9	7.2	237	772.9	16.7	18.3	18.1	24	23
22:00	16.4	26	4.1	6.0	153	773.7	17.0	17.7	18.0	24	24
23:00	16.6	22	8.4	8.8	170	773.9	17.1	17.7	17.9	20	20
00:00	16.1	28	11.0	11.5	234	773.9	16.0	17.0	18.1	27	25
01:00	15.9	29	12.1	13.3	232	773.7	16.0	16.7	17.9	28	27
02:00	16.4	25	11.8	15.1	160	773.4	16.8	16.8	17.7	23	25
03:00	15.5	31	12.7	14.0	232	772.9	15.7	16.6	17.8	30	28
04:00	15.3	32	17.0	17.8	234	772.6	15.3	15.9	17.7	31	31
05:00	15.4	33	16.4	17.7	213	772.5	15.6	15.9	17.5	32	32
06:00	15.3	37	17.3	18.8	233	772.6	15.2	16.0	17.5	36	35

```
SUNSET(UT)            19:32
EVENING TWILIGHT(UT)  20:44
MORNING TWILIGHT(UT)  05:34
SUNRISE(UT)           06:47
MOON'S QUARTER (1-4)  2
DISK % OF ILLUM.      87
DARK TIME             08:50
TWILIGHT TIME         02:25
MOONRISE(UT)          No moonrise within sunset-sunrise
MOONSET(UT)           03:52

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

COMMENTS:
  Photometric night; moon bright for first half. Excellent seeing all
  night.
```

Run no.	Object name	RA	Dec.	Equinox	AM	PA	UT	Exp. T.	Filter	Psys Channel	Binning	Comments
229047	Bias frame	12:00:00.00	+20:00:00.0	J2000.00	1.028	180.0	13:11:31.5	0.0	r	Sloan	1 x 1	
229048	Bias frame	11:59:59.99	+20:00:00.0	J2000.00	1.027	180.0	13:13:04.7	0.0	r	Sloan	1 x 1	
229049	Bias frame	0:00:00.00	+00:00:00.0	J2000.00	1.000	180.0	16:50:23.2	0.0	r	Sloan	1 x 1	
229050	Bias frame	0:00:00.00	+00:00:00.0	J2000.00	1.000	180.0	16:51:02.4	0.0	r	Sloan	1 x 1	
229051	Bias frame	0:00:00.00	+00:00:00.0	J2000.00	1.000	180.0	16:51:41.7	0.0	r	Sloan	1 x 1	
229052	Bias frame	0:00:00.00	+00:00:00.0	J2000.00	1.000	180.0	16:52:20.8	0.0	r	Sloan	1 x 1	
229053	Bias frame	0:00:00.00	+00:00:00.0	J2000.00	1.000	180.0	16:52:60.0	0.0	r	Sloan	1 x 1	