

ROSA Observations Summary - February 2012

1 Summary of Filters Used

ROSA:

DAS 1: G band (4305Å)

DAS 2: Continuum (4170Å)

DAS 3: Ca II K core (3933.7Å)

DAS 5: UBF tuned to Na I D₁ (5895.940Å) with 1/4Å Waveplate

Hard Cam:

H α Core (6562.8Å)

IBIS:

Calcium IR Triplet (8542Å) Andor 1

Whitelight (8300Å) Andor 2

2 Observations 15th February 2012

Pointing: N10.8, E40.6

Start Time: 17:13 UT

Stop Time: 18:12 UT

Scin: 0.3 @ start

AR 11420

Camera	Exposure Time	Divider	Frames Per Second
DAS 1	15ms	1	30.3
DAS 2	15ms	1	30.3
DAS 3	250ms	8	3.78
DAS 5	200ms	7	4.32
H α	100ms	n/a	9.91Hz

Flats: 18:15 UT
Darks: 18:23 UT
AF Target: 18:27 UT
Grids: 18:29 UT
Dots: 18:32 UT

Notes: The H α times were off slightly for the observations but they sorted themselves out eventually. IBIS 70 ms frame rate.

3 Observations 18th February 2012

3.1 AR 11420

Pointing: N10.2, E0.8
Start: 15:04 UT
Stop: 16:05 UT
Scin: 0.4 @ start
IBIS reduced to 60ms exposure.

Camera	Exposure Time	Divider	Frames Per Second
DAS 1	15ms	1	30.3
DAS 2	15ms	1	30.3
DAS 3	250ms	8	3.78
DAS 5	180ms	6	5.05
H α	50ms	n/a	19.646Hz

3.2 AR11 422

Pointing: N12, E0.1

Start: 16:13 UT

Stop: 17:05 UT

Exposure Times same as earlier.

Flats: 17:08(clouds), 17:09 (clouds), 17:11 (clouds), 17:12 (clouds), 17:17 (only 4 files in Ca K). Last 2 flats files are the best and most consistent.

Darks: 17:20 UT

AF Targets: 17:26 UT

Grids: 17:37 UT

Dots: 17:36 UT

Flats again at 18:08 and 18:52 (probably the best.)

4 Observations 19th february 2012

4.1 AR 11422

Pointing: N17.9, E8.7

Start: 15:03 UT

Stop: 16:33 UT

Flats: 16:35 UT

Darks: 16:42 UT

Camera	Exposure Time	Divider	Frames Per Second
DAS1	12ms	1	30.3
DAS2	12ms	1	30.3
DAS3	230ms	8	3.78
DAS5	150ms	5	6.06
H α	50ms	n/a	19.646Hz

4.2 AR 11420

Pointing: N10.7, W11.8

Start: 16:58 UT

Stop: 18:37 UT

Flats: 18:38 UT

Darks: 18:46 UT

AF Targets: 18:51 UT

Grids: 18:53 UT

Dots: 18:57 UT

Extra H α darks taken @ 19:01 UT as I forgot to close the shutter on the camera previously.

Camera	Exposure Time	Divider	Frames Per Second
DAS 1	14ms	1	30.3
DAS 2	14ms	1	30.3
DAS 3	230ms	8	3.78
DAS 5	190ms	6	5.05
H α	50ms	n/a	19.646Hz

5 Observations 21st February 2012

5.1 Quiet Sun Region

Pointing: 0, 0 (S7.1,W0 after calibration)

Start: 14:56 UT

Stop: 15:53 UT

Flats: 15:54 UT

Darks (DAS 1 - DAS 5): 16:06 UT

Darks (H α): 16:04.52 UT (temperature was rising, had to wait)

Camera	Exposure Time	Divider	Frames Per Second
DAS 1	20ms	1	30.3
DAS 2	17ms	1	30.3
DAS 3	280ms	9	3.36
DAS 5	220ms	7	4.32
H α	100ms	n/a	9.9Hz

5.2 AR 11422

Pointing: N15.6, W18.2

Start: 16:34 UT

Stop: 18:17 UT

Flats: 18:19 UT (ignore first in DAS1-5 as its too small)

Darks: 18:26 UT

Dots: 18:34 UT

Grids: 18:35 UT

Camera	Exposure Time	Divider	Frames Per Second
DAS 1	15ms	1	30.3
DAS 2	13ms	1	30.3
DAS 3	170ms	6	5.05
DAS 5	200ms	7	4.32
H α	50ms	n/a	19.646Hz