

21:15:34 FocusMax Version 3.2.1
21:15:34 System is c8_st8_cfw10_f10
21:15:35 RoboFocus Control Program is connected
21:15:35 CCDSoft V 5.1.7.0 is the Imaging Software
21:15:49 PinPoint is not connected
21:15:49 Warning - NOVAS-COM Vector Astrometry Engine is not connected
21:15:49 and is required with telescope use. Please download from
21:15:49 DC3 ASCOM Download Library at
21:15:49 <http://ascom-standards.org/downloads.html>
21:20:07
21:20:07 System: c8_st8_cfw10_f10
21:20:07 ** Beginning Focus run **
21:20:07 LS: -0.354353 RS: 0.354219 PID: 0.98 NFHFD: 15
21:20:07 Move direction: Out
21:20:07 Filter number = 0
21:20:07 Focus Start HFD: 25
21:20:16 Target star found at X = 770, Y = 517
21:20:16 Focus exposures will be 1.00 sec
21:20:22 Position , HFD , Mean Best Focus , X , Y , Flux
21:20:22 11466 , 3.48 , 0 , 768 , 514 , 155782
21:20:33 11405 , 22.12 , 0 , 767 , 498 , 163744
21:20:33 On correct side of focus
21:20:33 Moving to start HFD
21:20:41 11397 , 25.08 , 0 , 768 , 496 , 162388
21:20:41 Move to Near Focus HFD
21:20:49 11425 , 15.58 , 0 , 767 , 493 , 167283
21:20:49 ** Starting Near Focus **
21:20:49 Position , HFD , Mean Best Focus , X , Y , Flux
21:20:49 11425 , 15.58 , 11468 , 767 , 493 , 167283
21:20:55 11425 , 15.48 , 11468 , 767 , 494 , 162148
21:20:58 11425 , 15.14 , 11468 , 768 , 494 , 161344
21:21:04 11425 , 15.25 , 11468 , 767 , 494 , 162412
21:21:10 11425 , 15.13 , 11468 , 767 , 494 , 161595
21:21:10 Best Focus is: 11468
21:21:18 11468 , 3.50 , 11468 , 766 , 491 , 160656
21:21:18 Focusing Completed
21:21:19 Focus time = 72 sec
22:41:11
22:41:11 System: c8_st8_cfw10_f10
22:41:11 ** Beginning Focus run **
22:41:11 LS: -0.354353 RS: 0.354219 PID: 0.98 NFHFD: 15
22:41:11 Move direction: Out
22:41:11 Temperature = 582.0
22:41:11 Filter number = 1
22:41:11 Focus Start HFD: 25
22:41:21 Target star found at X = 757, Y = 518
22:41:21 Focus exposures will be 1.00 sec
22:41:27 Position , HFD , Mean Best Focus , X , Y , Flux
22:41:27 11468 , 3.60 , 0 , 757 , 518 , 162992
22:41:39 11408 , 20.59 , 0 , 757 , 514 , 173897
22:41:39 On correct side of focus
22:41:39 Moving to start HFD
22:42:08 11396 , 25.68 , 0 , 757 , 511 , 157295
22:42:08 Move to Near Focus HFD
22:42:16 11426 , 15.70 , 0 , 754 , 502 , 171202
22:42:16 ** Starting Near Focus **
22:42:16 Position , HFD , Mean Best Focus , X , Y , Flux
22:42:16 11426 , 15.70 , 11470 , 754 , 502 , 171202
22:42:23 11426 , 16.01 , 11470 , 755 , 503 , 169504
22:42:27 11426 , 15.94 , 11470 , 754 , 502 , 167452
22:42:31 11426 , 15.54 , 11470 , 754 , 502 , 173136
22:42:34 11426 , 15.33 , 11470 , 753 , 502 , 161759
22:42:34 Best Focus is: 11470
22:42:44 11470 , 3.53 , 11470 , 753 , 499 , 156325
22:42:45 Focusing Completed
22:42:45 Focus time = 94 sec
22:42:53 Single Exp. HFD: 3.28 @ 11470 X: 752 Y: 500 Flux: 166897
22:42:57 Single Exp. HFD: 3.66 @ 11470 X: 751 Y: 500 Flux: 165324

22:43:03 Single Exp. HFD: 3.64 @ 11470 X: 750 Y: 499 Flux: 164195
22:43:08 Single Exp. HFD: 3.58 @ 11470 X: 751 Y: 500 Flux: 157714
22:43:12 Single Exp. HFD: 3.46 @ 11470 X: 751 Y: 499 Flux: 164982
22:50:52
22:50:52 System: c8_st8_cfw10_f10
22:50:52 ** Beginning Focus run **
22:50:52 LS: -0.354353 RS: 0.354219 PID: 0.98 NFHFD: 15
22:50:52 Move direction: Out
22:50:52 Temperature = 584.0
22:50:52 Filter number = 1
22:50:52 Focus Start HFD: 25
22:51:01 Target star found at X = 756, Y = 506
22:51:01 Focus exposures will be 1.00 sec
22:51:08 Position , HFD , Mean Best Focus , X , Y , Flux
22:51:08 11470 , 3.47 , 0 , 750 , 508 , 160543
22:51:19 11409 , 21.01 , 0 , 750 , 509 , 168570
22:51:19 On correct side of focus
22:51:19 Moving to start HFD
22:51:29 11398 , 25.90 , 0 , 750 , 505 , 164302
22:51:29 Move to Near Focus HFD
22:51:37 11429 , 15.48 , 0 , 749 , 501 , 165059
22:51:37 ** Starting Near Focus **
22:51:37 Position , HFD , Mean Best Focus , X , Y , Flux
22:51:37 11429 , 15.48 , 11472 , 749 , 501 , 165059
22:51:44 11429 , 14.42 , 11471 , 748 , 502 , 163856
22:51:51 11429 , 14.67 , 11470 , 747 , 501 , 167366
22:51:58 11429 , 15.07 , 11471 , 747 , 501 , 158434
22:52:01 11429 , 14.98 , 11471 , 747 , 501 , 161379
22:52:01 Best Focus is: 11471
22:52:10 11471 , 3.53 , 11471 , 746 , 498 , 163364
22:52:11 Focusing Completed
22:52:11 Focus time = 80 sec
22:52:19 Single Exp. HFD: 3.74 @ 11471 X: 745 Y: 499 Flux: 167602
22:52:23 Single Exp. HFD: 3.69 @ 11471 X: 744 Y: 498 Flux: 170683
22:52:28 Single Exp. HFD: 3.56 @ 11471 X: 743 Y: 498 Flux: 167135
22:52:33 Single Exp. HFD: 3.72 @ 11471 X: 743 Y: 498 Flux: 163147
22:52:38 Single Exp. HFD: 3.48 @ 11471 X: 743 Y: 498 Flux: 162850
23:28:44
23:28:44 System: c8_st8_cfw10_f10
23:28:44 ** Beginning Focus run **
23:28:44 LS: -0.354353 RS: 0.354219 PID: 0.98 NFHFD: 15
23:28:44 Move direction: Out
23:28:44 Temperature = 582.0
23:28:44 Filter number = 2
23:28:44 Focus Start HFD: 25
23:28:53 Target star found at X = 755, Y = 504
23:28:53 Focus exposures will be 1.00 sec
23:29:00 Position , HFD , Mean Best Focus , X , Y , Flux
23:29:00 11471 , 3.14 , 0 , 749 , 505 , 246266
23:29:12 11409 , 21.44 , 0 , 750 , 500 , 255742
23:29:12 On correct side of focus
23:29:12 Moving to start HFD
23:29:21 11399 , 25.60 , 0 , 749 , 498 , 254159
23:29:21 Move to Near Focus HFD
23:29:29 11429 , 14.66 , 0 , 750 , 495 , 258912
23:29:29 ** Starting Near Focus **
23:29:29 Position , HFD , Mean Best Focus , X , Y , Flux
23:29:29 11429 , 14.66 , 11470 , 750 , 495 , 258912
23:29:36 11429 , 14.73 , 11470 , 749 , 495 , 246596
23:29:43 11429 , 14.74 , 11470 , 748 , 495 , 251885
23:29:50 11429 , 14.27 , 11470 , 747 , 495 , 255154
23:29:57 11429 , 14.63 , 11470 , 747 , 494 , 248438
23:29:57 Best Focus is: 11470
23:30:05 11470 , 3.06 , 11470 , 746 , 491 , 253298
23:30:06 Focusing Completed
23:30:06 Focus time = 83 sec
23:30:14 Single Exp. HFD: 3.13 @ 11470 X: 745 Y: 491 Flux: 249422
23:30:19 Single Exp. HFD: 3.04 @ 11470 X: 744 Y: 491 Flux: 246914

23:30:24 Single Exp. HFD: 3.18 @ 11470 X: 744 Y: 491 Flux: 249367
23:30:29 Single Exp. HFD: 3.02 @ 11470 X: 744 Y: 490 Flux: 243638
23:30:34 Single Exp. HFD: 3.11 @ 11470 X: 743 Y: 490 Flux: 252817
00:05:36
00:05:36 System: c8_st8_cfw10_f10
00:05:36 ** Beginning Focus run **
00:05:36 LS: -0.354353 RS: 0.354219 PID: 0.98 NFHFD: 15
00:05:36 Move direction: Out
00:05:36 Temperature = 582.0
00:05:36 Filter number = 3
00:05:36 Focus Start HFD: 25
00:05:46 Target star found at X = 756, Y = 505
00:05:46 Focus exposures will be 1.00 sec
00:05:53 Position , HFD , Mean Best Focus , X , Y , Flux
00:05:53 11470 , 2.67 , 0 , 752 , 508 , 264547
00:06:05 11407 , 22.62 , 0 , 754 , 504 , 274100
00:06:05 On correct side of focus
00:06:05 Moving to start HFD
00:06:14 11400 , 25.11 , 0 , 755 , 502 , 254126
00:06:14 Move to Near Focus HFD
00:06:22 11429 , 14.89 , 0 , 756 , 500 , 242883
00:06:22 ** Starting Near Focus **
00:06:22 Position , HFD , Mean Best Focus , X , Y , Flux
00:06:22 11429 , 14.89 , 11471 , 756 , 500 , 242883
00:06:28 11429 , 14.57 , 11470 , 756 , 500 , 226595
00:06:35 11429 , 14.25 , 11470 , 756 , 501 , 235478
00:06:39 11429 , 14.50 , 11470 , 756 , 500 , 221560
00:06:42 11429 , 14.95 , 11470 , 757 , 500 , 222897
00:06:42 Best Focus is: 11470
00:06:51 11470 , 2.99 , 11470 , 757 , 498 , 197030
00:06:51 Focusing Completed
00:06:51 Focus time = 75 sec
00:06:58 Single Exp. HFD: 3.01 @ 11470 X: 757 Y: 499 Flux: 187153
00:07:02 Single Exp. HFD: 2.84 @ 11470 X: 757 Y: 499 Flux: 162730
00:07:07 Single Exp. HFD: 2.73 @ 11470 X: 757 Y: 499 Flux: 180839
00:07:12 Single Exp. HFD: 2.83 @ 11470 X: 758 Y: 499 Flux: 164687
00:07:17 Single Exp. HFD: 2.89 @ 11470 X: 757 Y: 498 Flux: 171082
00:45:09
00:45:09 System: c8_st8_cfw10_f10
00:45:09 ** Beginning Focus run **
00:45:09 LS: -0.354353 RS: 0.354219 PID: 0.98 NFHFD: 15
00:45:09 Move direction: Out
00:45:09 Temperature = 582.0
00:45:09 Filter number = 0
00:45:09 Focus Start HFD: 25
00:45:18 Target star found at X = 756, Y = 508
00:45:18 Focus exposures will be 1.00 sec
00:45:25 Position , HFD , Mean Best Focus , X , Y , Flux
00:45:25 11470 , 3.02 , 0 , 756 , 510 , 694523
00:45:37 11408 , 22.78 , 0 , 757 , 505 , 787444
00:45:37 On correct side of focus
00:45:37 Moving to start HFD
00:45:46 11402 , 25.38 , 0 , 757 , 504 , 773788
00:45:46 Move to Near Focus HFD
00:45:54 11431 , 14.79 , 0 , 758 , 501 , 789146
00:45:54 ** Starting Near Focus **
00:45:54 Position , HFD , Mean Best Focus , X , Y , Flux
00:45:54 11431 , 14.79 , 11472 , 758 , 501 , 789146
00:46:01 11431 , 14.54 , 11472 , 758 , 502 , 777538
00:46:08 11431 , 14.59 , 11472 , 758 , 502 , 781821
00:46:11 11431 , 14.24 , 11472 , 757 , 501 , 786767
00:46:18 11431 , 14.57 , 11472 , 758 , 501 , 751711
00:46:18 Best Focus is: 11472
00:46:28 11472 , 3.08 , 11472 , 757 , 499 , 725120
00:46:29 Focusing Completed
00:46:29 Focus time = 80 sec
00:46:37 Single Exp. HFD: 3.07 @ 11472 X: 757 Y: 500 Flux: 688379
00:46:41 Single Exp. HFD: 3.12 @ 11472 X: 757 Y: 499 Flux: 704380

00:46:46 Single Exp. HFD: 3.07 @ 11472 X: 757 Y: 500 Flux: 690749
00:46:51 Single Exp. HFD: 3.07 @ 11472 X: 757 Y: 499 Flux: 681530
00:46:56 Single Exp. HFD: 3.10 @ 11472 X: 758 Y: 499 Flux: 676785
01:21:26
01:21:26 System: c8_st8_cfw10_f10
01:21:26 ** Beginning Focus run **
01:21:26 LS: -0.354353 RS: 0.354219 PID: 0.98 NFHFD: 15
01:21:26 Move direction: Out
01:21:26 Temperature = 580.0
01:21:26 Filter number = 0
01:21:26 Focus Start HFD: 25
01:21:36 Target star found at X = 756, Y = 505
01:21:36 Focus exposures will be 1.00 sec
01:21:42 Position , HFD , Mean Best Focus , X , Y , Flux
01:21:42 11472 , 2.94 , 0 , 755 , 507 , 630679
01:21:54 11410 , 21.70 , 0 , 757 , 504 , 691810
01:21:54 On correct side of focus
01:21:54 Moving to start HFD
01:22:03 11401 , 25.42 , 0 , 757 , 502 , 674330
01:22:03 Move to Near Focus HFD
01:22:12 11430 , 14.59 , 0 , 757 , 500 , 701534
01:22:12 ** Starting Near Focus **
01:22:12 Position , HFD , Mean Best Focus , X , Y , Flux
01:22:12 11430 , 14.59 , 11471 , 757 , 500 , 701534
01:22:19 11430 , 14.79 , 11471 , 756 , 500 , 714815
01:22:22 11430 , 14.44 , 11471 , 755 , 499 , 697977
01:22:29 11430 , 14.54 , 11471 , 755 , 499 , 701787
01:22:36 11430 , 14.44 , 11471 , 755 , 499 , 699810
01:22:36 Best Focus is: 11471
01:22:45 11471 , 3.02 , 11471 , 755 , 496 , 625243
01:22:46 Focusing Completed
01:22:46 Focus time = 80 sec
01:22:54 Single Exp. HFD: 3.01 @ 11471 X: 756 Y: 497 Flux: 629045
01:22:58 Single Exp. HFD: 2.96 @ 11471 X: 755 Y: 497 Flux: 625415
01:23:03 Single Exp. HFD: 3.03 @ 11471 X: 755 Y: 497 Flux: 636102
01:23:08 Single Exp. HFD: 2.99 @ 11471 X: 755 Y: 497 Flux: 655045
01:23:13 Single Exp. HFD: 3.05 @ 11471 X: 755 Y: 496 Flux: 683731
01:57:26
01:57:26 System: c8_st8_cfw10_f10
01:57:26 ** Beginning Focus run **
01:57:26 LS: -0.354353 RS: 0.354219 PID: 0.98 NFHFD: 15
01:57:26 Move direction: Out
01:57:26 Temperature = 580.0
01:57:26 Filter number = 0
01:57:26 Focus Start HFD: 25
01:57:36 Target star found at X = 758, Y = 504
01:57:36 Focus exposures will be 1.00 sec
01:57:43 Position , HFD , Mean Best Focus , X , Y , Flux
01:57:43 11471 , 2.99 , 0 , 761 , 507 , 631913
01:57:55 11409 , 22.26 , 0 , 763 , 504 , 694119
01:57:55 On correct side of focus
01:57:55 Moving to start HFD
01:58:03 11401 , 25.22 , 0 , 763 , 503 , 653856
01:58:03 Move to Near Focus HFD
01:58:12 11430 , 14.94 , 0 , 763 , 500 , 631407
01:58:12 ** Starting Near Focus **
01:58:12 Position , HFD , Mean Best Focus , X , Y , Flux
01:58:12 11430 , 14.94 , 11472 , 763 , 500 , 631407
01:58:19 11430 , 15.01 , 11472 , 762 , 501 , 605755
01:58:22 11430 , 14.91 , 11472 , 763 , 501 , 592835
01:58:26 11430 , 14.60 , 11471 , 763 , 501 , 590027
01:58:33 11430 , 14.95 , 11472 , 763 , 501 , 579562
01:58:33 Best Focus is: 11472
01:58:42 11472 , 3.02 , 11472 , 763 , 499 , 575918
01:58:43 Focusing Completed
01:58:43 Focus time = 77 sec
01:58:50 Single Exp. HFD: 2.74 @ 11472 X: 762 Y: 500 Flux: 556851
01:58:54 Single Exp. HFD: 2.95 @ 11472 X: 762 Y: 499 Flux: 586896

01:58:59 Single Exp. HFD: 2.94 @ 11472 X: 762 Y: 499 Flux: 604003
01:59:04 Single Exp. HFD: 3.03 @ 11472 X: 761 Y: 498 Flux: 623254
01:59:09 Single Exp. HFD: 2.87 @ 11472 X: 762 Y: 499 Flux: 588834
02:26:21
02:26:21 System: c8_st8_cfw10_f10
02:26:21 ** Beginning Focus run **
02:26:21 LS: -0.354353 RS: 0.354219 PID: 0.98 NFHFD: 15
02:26:21 Move direction: Out
02:26:21 Temperature = 581.0
02:26:21 Filter number = 1
02:26:21 Focus Start HFD: 25
02:26:31 Target star found at X = 756, Y = 509
02:26:31 Focus exposures will be 1.00 sec
02:26:38 Position , HFD , Mean Best Focus , X , Y , Flux
02:26:38 11472 , 3.86 , 0 , 754 , 511 , 210452
02:26:49 11412 , 21.34 , 0 , 750 , 520 , 216571
02:26:49 On correct side of focus
02:26:49 Moving to start HFD
02:26:59 11402 , 25.14 , 0 , 748 , 518 , 219690
02:26:59 Move to Near Focus HFD
02:27:08 11431 , 16.65 , 0 , 748 , 509 , 218400
02:27:08 ** Starting Near Focus **
02:27:08 Position , HFD , Mean Best Focus , X , Y , Flux
02:27:08 11431 , 16.65 , 11478 , 748 , 509 , 218400
02:27:15 11431 , 16.08 , 11477 , 747 , 510 , 208722
02:27:19 11431 , 15.88 , 11476 , 746 , 510 , 211023
02:27:26 11431 , 15.86 , 11476 , 746 , 510 , 213398
02:27:34 11431 , 15.95 , 11476 , 745 , 510 , 210678
02:27:34 Best Focus is: 11476
02:27:43 11476 , 3.75 , 11476 , 744 , 505 , 208588
02:27:44 Focusing Completed
02:27:44 Focus time = 83 sec
02:27:52 Single Exp. HFD: 3.81 @ 11476 X: 743 Y: 507 Flux: 216631
02:27:57 Single Exp. HFD: 3.75 @ 11476 X: 743 Y: 507 Flux: 210024
02:28:02 Single Exp. HFD: 3.64 @ 11476 X: 743 Y: 507 Flux: 203905
02:28:07 Single Exp. HFD: 3.81 @ 11476 X: 743 Y: 507 Flux: 218656
02:28:12 Single Exp. HFD: 3.80 @ 11476 X: 743 Y: 507 Flux: 207590