

The single richest galaxy group in Pisces is the NGC 507 Group, located midway between Beta Andromedae and M33. The group includes nine NGC brighter than 15th magnitude. NGC 508 is also catalogued as Arp 229--a galaxy with concentric rings. (Anybody seen them?) Be sure to admire the bright blue and gold double star in the same field!

#### Observing Notes by Steve Gottlieb

N0494 = U00919 = M+05-04-034

01 22.9 +33 10

13: fairly faint, very elongated 3:1 ~E-W, bright core. A wide mag 13 double star at 30" separation is just 1' SSW. Forms the vertex of a right triangle with mag 7.8 SAO 54647 8' NNE and mag 8.7 SAO 54632 11' WNW. First in group with N504 7'ENE, N507 11' NE and N508 12'NE.

N0495 = U00920 = M+05-04-035

01 22.9 +33 28

13: faint, small, slightly elongated, small bright core. Located midway two mag 14 stars 1.1' SSW and 1.1' NNE. First of three with N496 4.8' NE and N499 3.3' ESE. Located in a rich galaxy group.

N0496 = U00927 = M+05-04-036

01 23.2 +33 32

13: faint, low even surface brightness. Second and largest of three with N495 4.8' SW and N499 4.2' S.

N0498 = M+05-04-037 = NPM1G +33.0043

01 23.2 +33 29

17.5: extremely faint and small, no details visible. This very difficult object was only detected after extended viewing at 220x, 280x and 420x. Finally started to glimpse a virtually stellar spot for moments at 280x using a GSC finder chart to pinpoint location. Located 1.7' N of N499 and 2.4' S of N496 within the cluster.

N0499 = U00926 = M+05-04-038 = IC1686

01 23.2 +33 28

13: moderately bright, moderately large, very bright core with a much fainter halo! Third of three with N495 3.3' WNW and N496 4.2' N.

IC 1687 = M+05-04-039 = Z502-061

01 23.3 +33 17

17.5: extremely faint and small, round, 10" diameter. Required averted vision to view. Located just 1.6' SE of mag 7.5 SAO 54647 within the N507 group. A mag 14 star lies 30" preceding.

N0501 = Z502-062 = NPM1G +33.0044

01 23.4 +33 26

17.5: very faint, very small, round, 20" diameter. Can just hold continually with averted vision once identified. Located 2.8' SE of N499 in a cluster. A mag 10.5' lies 1.8' NE.

N0503 = M+05-04-040 = Z502-065 = NPM1G +33.0045

01 23.5 +33 20

17.5: very faint, very small, round, 20" diameter. Collinear with two mag 13.5 stars 0.6' SE and 1.0' SE. Located 4' NE of mag 7.5 SAO 54647 within the N507 group (N507/508 in the field).

N0504 = U00935 = M+05-04-041 = N0506

01 23.5 +33 12

13: faint, small, very elongated 3:1 SW-NE, small bright core. First of three with N507 4' NNE and N508 5.3' NNE. Also N494 lies 7.2' WSW.

N0507 = U00938 = M+05-04-044 = Arp 229 = VV 207

01 23.7 +33 15

13: moderately bright, moderately large, round, very bright core. Second of three with N508 1.5' N and N504 4' SSW in large group. Located 6' ESE of mag 7.8 SAO 54647.

N0508 = U00939 = M+05-04-045 = Arp 229 = VV 207

01 23.7 +33 17

13: fairly faint, small, round. Forms a close pair with N507 1.5' S. Third of three with N504 5.3' SSW. Located 6' E of mag 7.8 SAO 54647

IC 1690 = Z502-071 = NPM1G +32.0061

01 23.8 +33 09

17.5: extremely faint, very small, elongated 2:1 NW-SE, 20"x10". Extended in the direction of a mag 12 star 1.5' SE. Member of the N499/507 cluster and located 6.4' SSE of N507.

N0510

01 23.9 +33 26

17.5: this is a faint and difficult double star in the N499/507 group which was just resolved at 280x. The fainter eastern component is difficult to cleanly view [separation 8"] and it is easy to imagine that this object would be mistaken as nonstellar by Schultz.

N0512 = U00944 = M+06-04-013 = Z521-018

01 24.0 +33 54

13: fairly faint, fairly small, very elongated WNW-ESE. A mag 14 star is just off the SE edge 0.6' from center and a mag 12 star is 1.6' SSW. Located 6.5' NE of a mag 11 star. N513 lies 9' SE. The RNGC misidentifies N512 with a faint companion 2.5' S.

N0513 = U00953 = M+06-04-016 = Z521-020

01 24.4 +33 48

13: fairly faint, small, elongated WSW-ESE, weak concentration. Located at the NE end of a line of four mag 12-13 stars which extend to SW; the closest mag 13.5 star is 0.9' SW and is followed by a second parallel line of stars. N512 lies 9' NW. Incorrect RA by 0.6 minutes W in the RNGC and plotted incorrectly on the U2000.

N0515 = U00956 = M+05-04-052

01 24.6 +33 28

13: fairly faint, small, slightly elongated, faint stellar nucleus. An extremely faint mag 16 star is suspected at the NW end (confirmed on the POSS). Forms a pair with N517 3' SSE.

N0517 = U00960 = M+05-04-054

01 24.7 +33 26

13: fairly faint, small, elongated 2:1 SSW-NNE. Appears slightly brighter than N515 3' NNW.