

SMC Tour #2 –Northwest

SMC charts 6 & 7 from cloudsofmagellan.net.au will serve well for this tour.

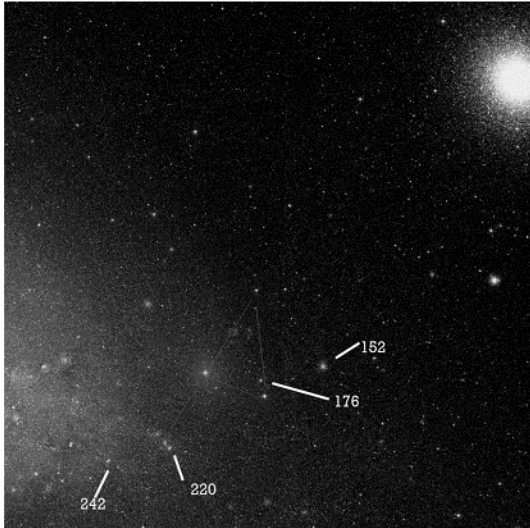
Start this tour at the distinctive 47 Tuc/NGC 104. If you are new to browsing the Southern night sky, this is apparent to the unaided eye at a dark site just to the north and preceding edge of the SMC, appearing as a fuzzy star. If you've not observed it through a telescope before, spend a lot of time with this marvel. Even if you have, it is a sight hard to move on from.

40' to the North following of 47 Tuc is the small round glow of NGC 121, the only globular cluster in the SMC. At 175x in a 12-16" scope it appears as a 2' slightly grainy glow, slightly elongated p-f with no core. Return to 47 Tuc. 30' from its southern edge is a group of 6 brighter stars spread across 14' forming a convex-north arc. 14' to the south of this is open cluster Kron 3 – at 3' it is a bit larger circular glow than NGC 121 but not quite as distinct. Its brighter centre fades evenly to an indistinct edge.

Kron 3 lies between stars at the preceding end of a line of 4. Extend this line 14' to the f of the following star of the line and you arrive at the south-preceding star of a 10' Np-Sf line of 3 stars. Take this 10' line as the base of a triangle with the apex a faint star following. Just S of this faint star is the faint open cluster Kron7. Dark skies and larger scopes may be needed for this one.

We now dive more deeply into the western end of the SMC and there is an asterism that I find a very helpful guide for much of this.

Come back to 47 Tuc. A bit over 1 degree to the Sf is a pair of bright stars of equal mag. separated by 20' p-f. In a magnified finder, it looks like the short base of a right-angled triangle with the apex formed by a fainter star back 30' towards 47 Tuc from the f of the pair (which forms the right angle). This right-angle triangle is the useful guide for diving into the body of the SMC.



Near the p star of the base pair and about 5' up the hypotenuse is the faint grainy disc of open cluster NGC 176. Take the nearby star of the pair as the apex of a flat triangle and the other star of the pair as the f point of the base. Where the other point would be is the 3' faint round glow of open cluster NGC 152. This one will also benefit from a dark sky and larger aperture.

Come back to the right-angled triangle asterism. Extend the following side of the triangle (from the star closest to 47 Tuc through the f star of the base, the right angle) for 20' to the S. You will find a p-f chain of 3 open clusters spread over 6' with a close pair of stars 5' to the p of the line. The p-most cluster is the brightest of the 3, NGC 220, separated by a star from NGC 222 then the larger and fainter NGC 231. I find this a quite attractive little group and a useful landmark for the next step.

Extending a line from the star at the right angle of the triangle through NGC 231 for 14' and the interesting open cluster NGC 242 pops into view. This is a 2'x1' glow elongated Sp to Nf with a brightening in each pole. 3' following NGC 242 is a close pair of stars. Put 242 at the p edge of the field of view and you will see a triangle formed by 242 with NGCs 248 14' to f and 256 10' S of 248. Both are quite distinct, open cluster + emission nebula NGC 248 being 2'x1' elongated N-S, brightening with UHC filter, and open cluster NGC 256 smaller, rounder and quite bright. 4' to Nf of NGC 256 is a bright star. Open cluster NGC 265 is about 8' f 256 and is both larger and fainter. About 2/3 of the way along a line from 265 to 248 is Henize emission nebula N26, a small soft glow which brightens with UHC filter. A line from 248 through 265 and extended for 6' leads to open cluster NGC 269, a soft glow somewhat larger and fainter than NGC 265.

A line from NGC 242 through 248 and extended 18' leads to open cluster and emission nebula NGC 267, a 4'x2' Sp-Nf oval glow with many stars just resolvable. Just to its Nf is Henize emission nebula N25. NGC 267 and N25 both respond to UHC filter.

14' to Nf of NGC 267 is the large glow of open cluster and emission nebula NGC 261, also the apex of triangle with NGCs 248 & 267. NGC 261 is a soft round 2' glow with resolved stars in the centre. 5' Nf is the 3'x2' oval of open cluster/nebula NGC 249. Both 261 and 249 are quite distinct and sit in a larger oval nebulosity Henize emission nebula N12. All 3 objects respond to UHC filter.

Extend for 10' following NGC 261 is the group of about 25 stars in background nebulosity that is Henize emission nebula N19. Beyond the tip of this, Henize emission nebula N30 which lights up as a 3' dia round glow with UHC filter. Follow the axis of NGCs 249-261 and N19 for 14' past N30 and you will find the small bright 1' knot of open cluster NGC 290.