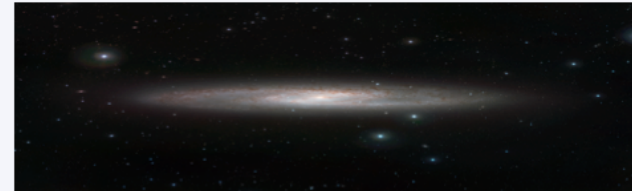


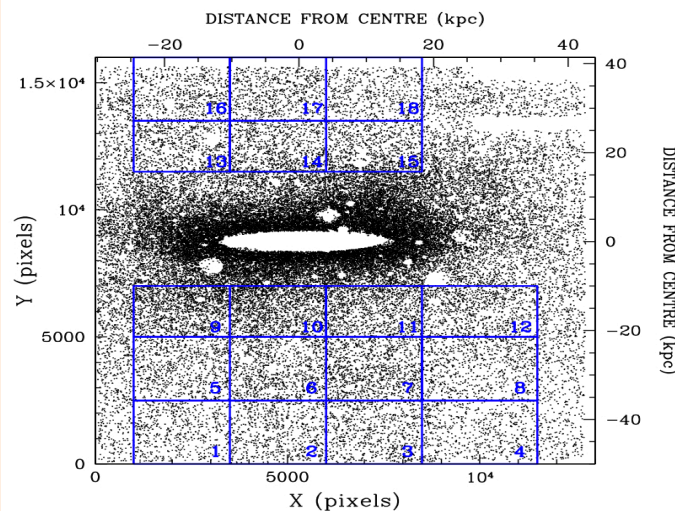
The Stellar Halo of NGC 253

L. Greggio, M. Rejkuba, O. A. Gonzalez, M. Arnaboldi, E. Iodice, M. Irwin, M.J. Neeser, J. Emerson, 2014, A&A, 562, A73

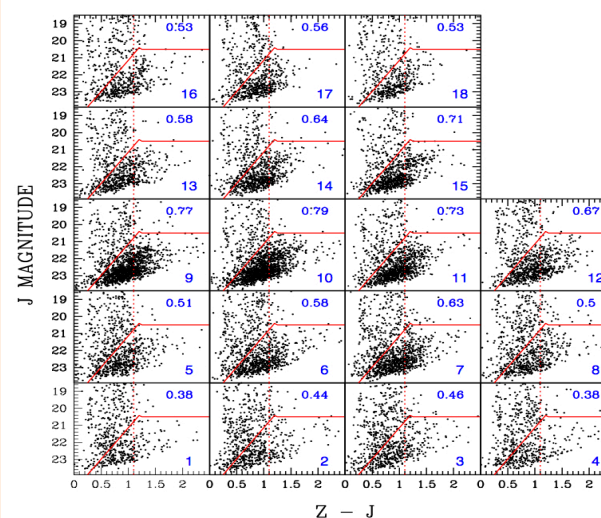
NGC 253 is the brightest member of the Sculptor group ($M_B \cong -20$)
We have obtained VISTA images in the J and Z bands of a region
of $91 \times 74 \text{ Kpc}^2$
The photometry reaches about 1 magnitude below the RGB Tip



Map of the bona fide stars

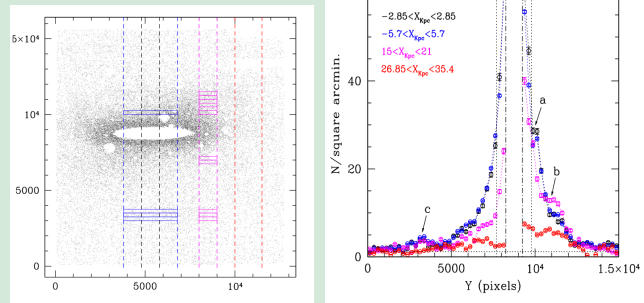


Their spatially resolved CMD

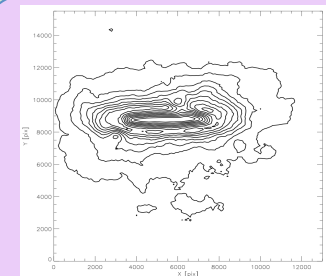
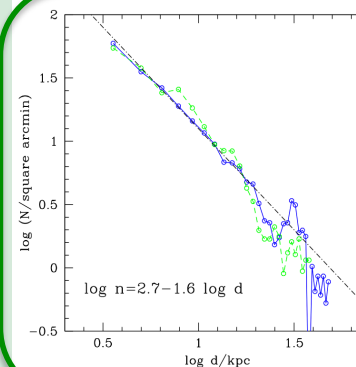


The number in the upper left corner is the fraction of objects below the red line, which increases approaching the galaxy disk.
In the bottom panels this fraction is still greater than the expected foreground contamination.
NGC 253 members are detected all over the tile.

The star counts profile



The overdensity c is detected for the first time
It is a substructure 20 kpc wide at 30 kpc from the disk



Isodensity stellar contours
The inner halo is flattened