

A BV PHOTOMETRIC STUDY OF STAR CLUSTERS IN TWO SELECTED REGIONS OF THE SMC.

Gonzalo Alcaino and William Liller
Instituto Isaac Newton, Ministerio de Educación de Chile,
Santiago, Chile.

We are deriving BV color-magnitude diagrams of star clusters in two selected regions in the SMC. These zones, characterized by the presence of a high density of star clusters, are centered at the 1981 coordinates for region 1: (RA: $1^{\text{h}} 10^{\text{m}}.33$, Dec $-73^{\circ}08'$), and for region 2: (RA: $1^{\text{h}} 0^{\text{m}}.33$, Dec $-73^{\circ}00'$). See Figure 1 for their identification relative to the SMC.

For region 1, some of the most conspicuous clusters are: NGC 376, NGC 416, NGC 419, NGC 456, NGC 460 and NGC 465. For region 2: NGC 290, NGC 292, NGC 294, NGC 299, NGC 306, NGC 330, NGC 346, NGC 376, NGC 416 and NGC 419.

Large size photographic plates (20 x 20 inches) have been obtained with the 2.5 m du Pont telescope at Las Campanas. They cover an area of 1.5×1.5 , have a plate scale of $10.8 \text{ arc sec mm}^{-1}$, and have been taken with a Pickering-Racine wedge ($\Delta m \sim 5.1 \text{ mag}$). The plates are now being calibrated with electronographic sequences (Walker 1972), as well as with other existing photoelectric sequences.

Reference

Walker, M. F.: 1972, Mon. Not. Roy. Astron. Soc. 159, p. 379.

Figure 1. Identification chart of the SMC clusters studied (next page)

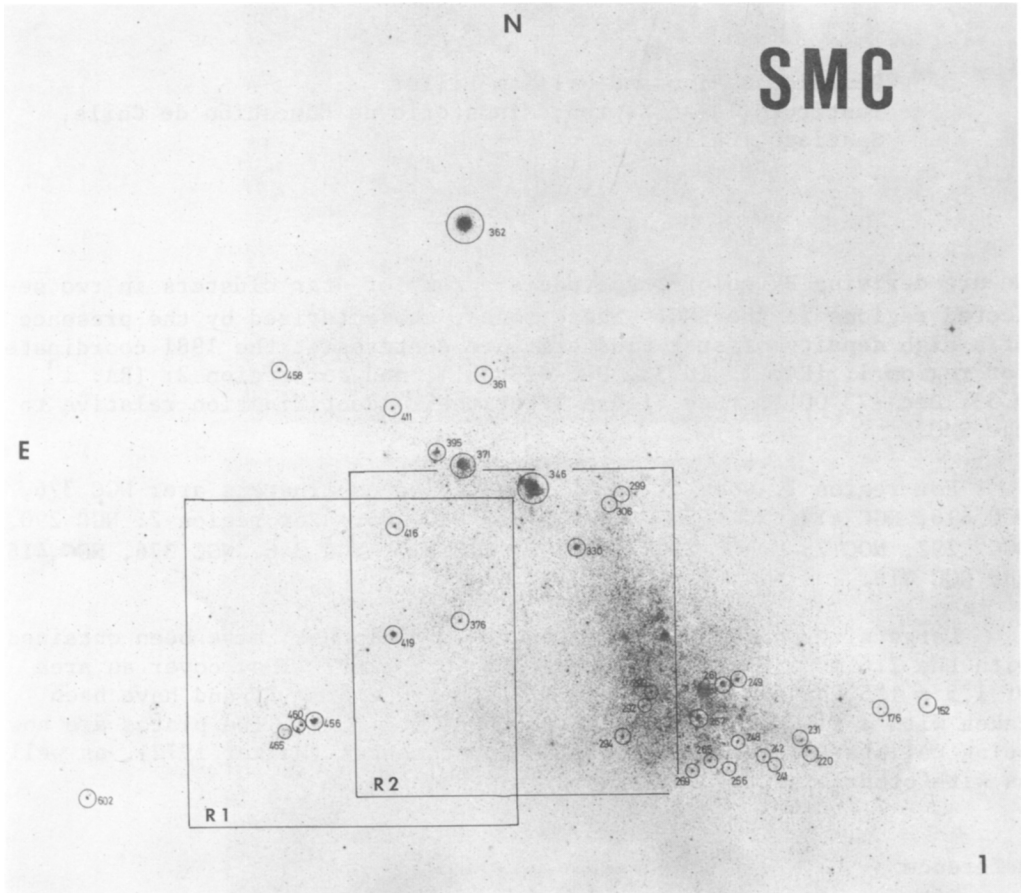


Figure 1.