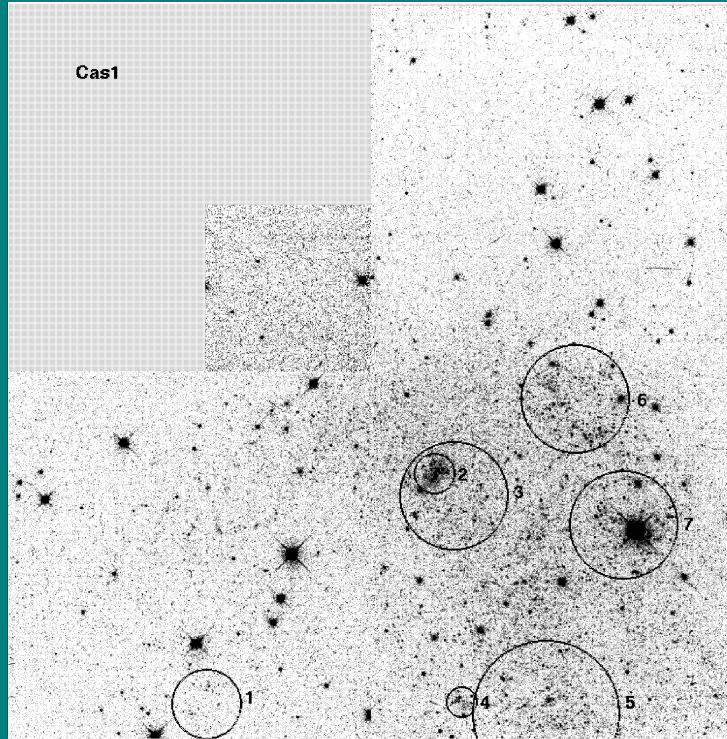
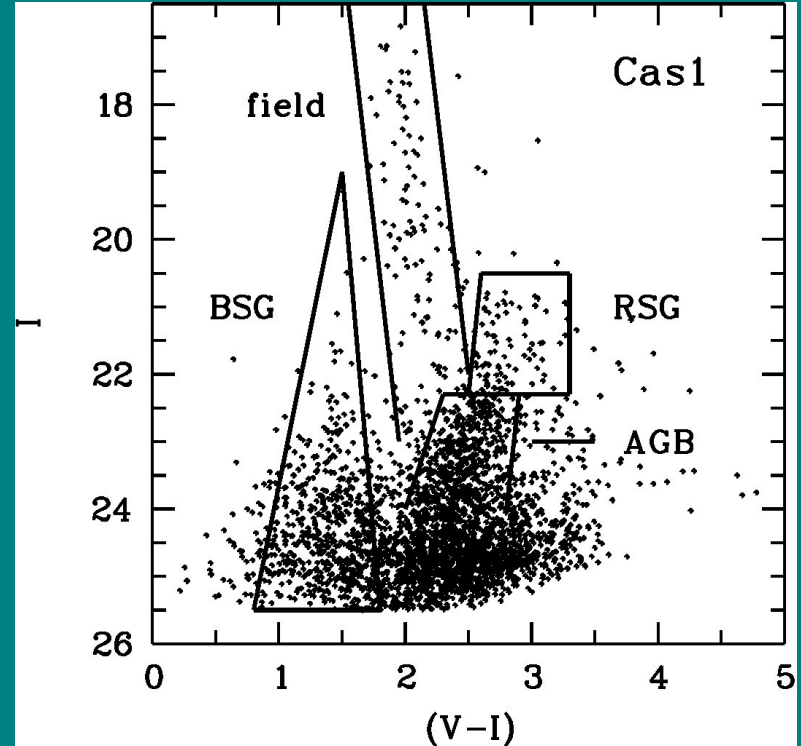


# The distance to the irregular galaxy Cassiopeia-1

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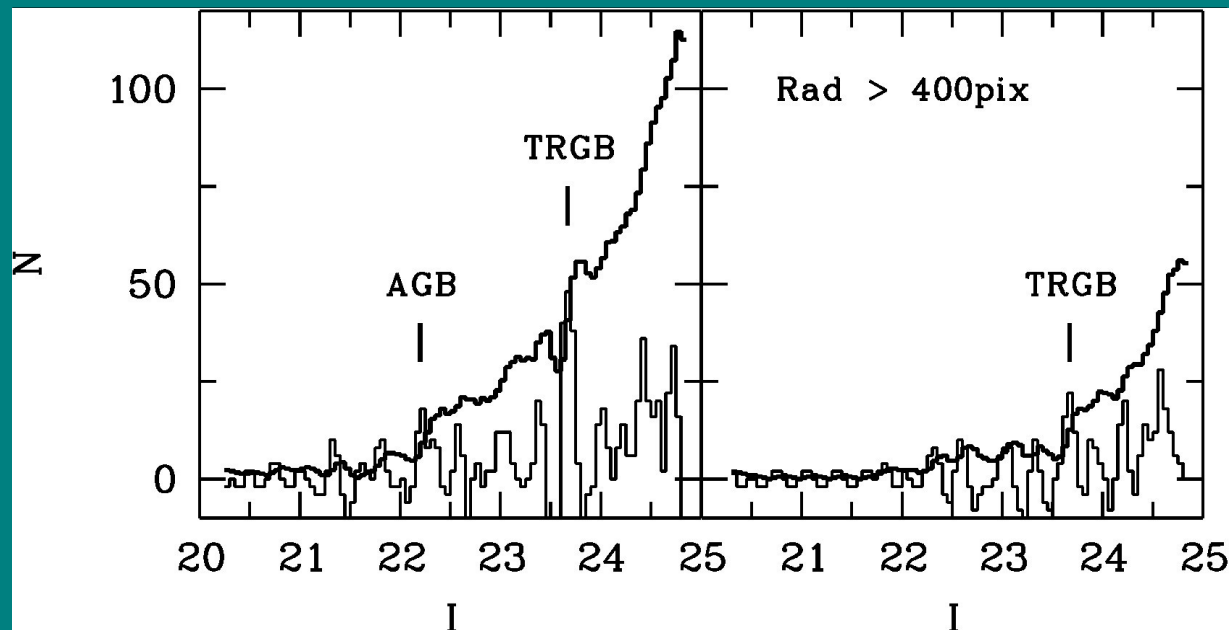
Cassiopeia 1 on the WFPC2 image of the Hubble Space Telescope. Star complexes containing young stars are marked with circles. Image size  $2.5' \times 2.5'$ .



CM diagram of Cas1 stars. A band of background stars is visible, as well as a branch of blue and red stars, with increased color indices due to reddening of the light on the dust-gas clouds of the Galaxy.

## Distance to Cassiopeya-1

D, Mpc	A <sub>V</sub>	References
0.79	4.0	Tikhonov (1996)
1.7	4.16	Karachentsev et al. (1997)
3.0	2.5	Weinberger & Saurer (1998)
4.5		Marvel & Wilcots (2000)
5.27	2.79	<a href="http://www.sao.ru/lv/lvgdb">www.sao.ru/lv/lvgdb</a>
1.61	2.79	Tikhonov (2019)



The luminosity function of the AGB stars and red giants Cas1 with selection by color index  $2.0 < (V-I) < 2.8$  (left) and with additional selection along the galaxy radius (right).