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3C A MULTI-WAVELENGTH DATABASE FOR THE FUTURE GTC COSMOLOGICAL SURVEYS

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The 3C Database aims to provide complete multi-wavelength information over different cosmological fields, such as GOODS, Groth or Sa68 allowing detailed studies on wide samples of galaxies.

Currently in 3C, we have focused our efforts on the CDFS, which as a part of the GOODS project, has been extensively studied, on a range of wavelengths which covers from the FUV to the FIR and radio.

3C includes data from public catalogs and other previous compilations as well as captions from images publicly available. Using the HST-ACS catalog as reference (Giavalisco et al. 2004) we have matched information from: Galex, COMBO17, The ESO Spectroscopical Compilation (Vanzella et al. 2005), Spitzer (mips 24μ) and Chandra. We also benefit from the great work of the MUSIC team (Grazian et al. 2006), which employing PSF matching techniques provides the ACS sources with data from IRAC(4CH), ESO-ISAAC J, H, and Ks, and three different U filters.

The data is accessed through a query form (Figure 1) that allows multiple condition searches, and a flexible output, selecting which fields are to be displayed on the final table, just by clicking in the checkboxes. We use a color code to indicate different catalogs, and fields desired in the output. The check-rings choose the output style. Selecting ACS (default) you will be working with data from COMBO17, MUSIC and ESO-spectroscopy, that has been robustly matched to the ACS objects. Choosing UV or IR, the bigger PSF of Galex and Spitzer-Mips, implies that each ACS object will be assigned a closest neighbor, that is likely to be shared by many other.

Moreover, each object has an info sheet showing cross matched data from the different catalogs. The sheets are accesible via the output of the query interface, or browsing the objects in the clickmap. A color code helps to interpret the information. When cross relating the ACS objects to other catalogs, two new columns appears in the foreign tables that shows the accuracy of the match indicating the ACS object distance to the bigger PSF object. Also, the ACS object selected is red bordered.

Finally, an interactive click map is accesible from the GOODS-S map region. Each sector tile links to his own 4-band color image (by ACS Team) where, on mouse over, every object will display a label showing the available redshift information along with the morphological type from MUSIC.

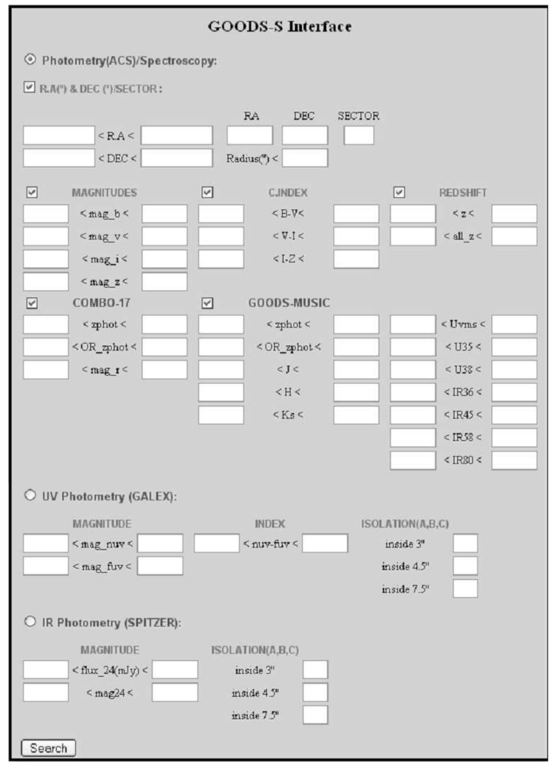

Fig. 1. Web interface layout showing the possible query styles: ACS (more accurate) or GALEX , SPITZER (big PSF match). And fields, including photometry, colors, spectroscopy and degree of isolation.

REFERENCES

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