Young Stellar Object candidates from GALEX toward Orion.

Nestor Sanchez 1 , Ana Inés Gómez de Castro 1 , Fátima Lopez-Martinez 1 , and Javier López-Santiago 1

Abstract

We analize 359 ultraviolet tiles from the All Sky Survey (AIS) of the space mission GALEX covering roughly 400 square degrees towards the Orion star-forming region. There is a total of 1,555,174 ultraviolet sources that were cross-matched with the 2MASS, UCAC4 and WISE catalogs to produce a list of 290,717 reliable sources with a wide range of photometric information. Using different color selection criteria we identify 120 Young Stellar Object candidates having ultraviolet and infrared excesses, of which 85 are new. We discuss the spatial distribution, the Spectral Energy Distributions and other physical properties of these stars.

¹ Universidad Complutense de Madrid, Spain.