Light pollution in Spain 2010

Alejandro Sánchez de Miguel^{1,2}, Jaime Zamorano^{1,2}, Berenice Pila-Díez^{1,2}, Jesús Rubio², Roque Ruiz^{1,2}, Isabel Rodríguez-Herranz^{1,2}, and Alicia González-Pérez^{1,2}

Abstract

The most recent data on electricity consumption for public lighting in Spain is presented and compared with light pollution measurements as derived from night satellite imagery. NOAA-MSP images (low-resolution) and higher resolution images obtained with conventional DSLR cameras on board the International Space Station (ISS) have been used. We show that the data can be related to night sky brightness maps with a study conducted within the Comunidad Autónoma de Madrid. We intend to extend our work to the rest of Spain through tight collaboration with amateur astronomers.

¹ Departamento de Astrofísica y C.C. de la Atmósfera, Universidad Complutense de Madrid

² ASAAF-UCM