



EU2022.CZ

Nocturnal satellite data availability and their limitations

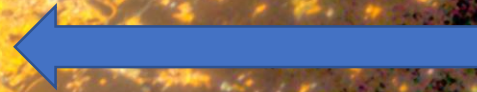
Dr. Alejandro Sánchez de Miguel

International workshop Light Pollution 2022 on October 26th in Brno, Czech Republic.



UNIVERSIDAD
COMPLUTENSE
MADRID

Sky glow

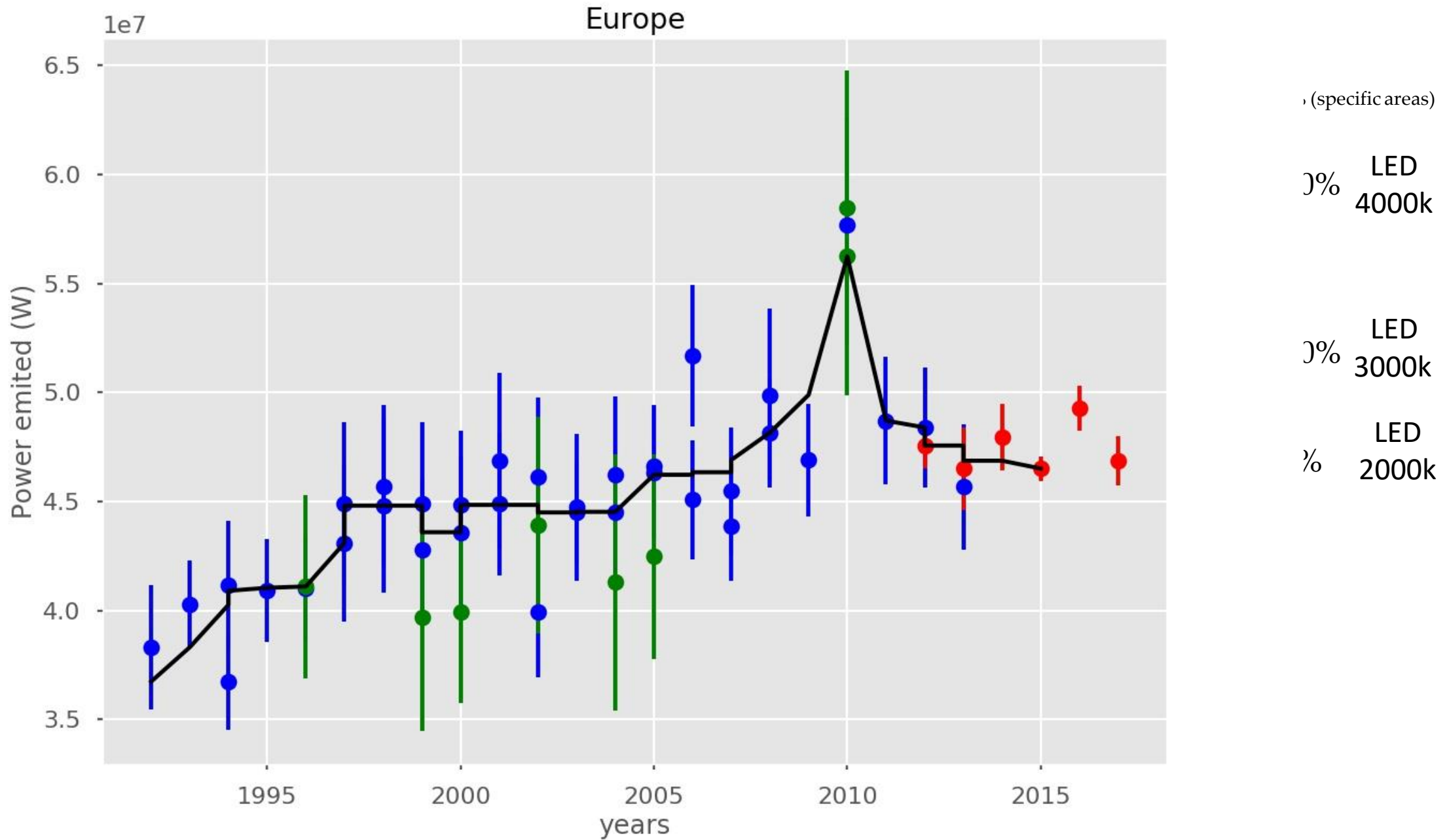


Direct lights

Pmisson



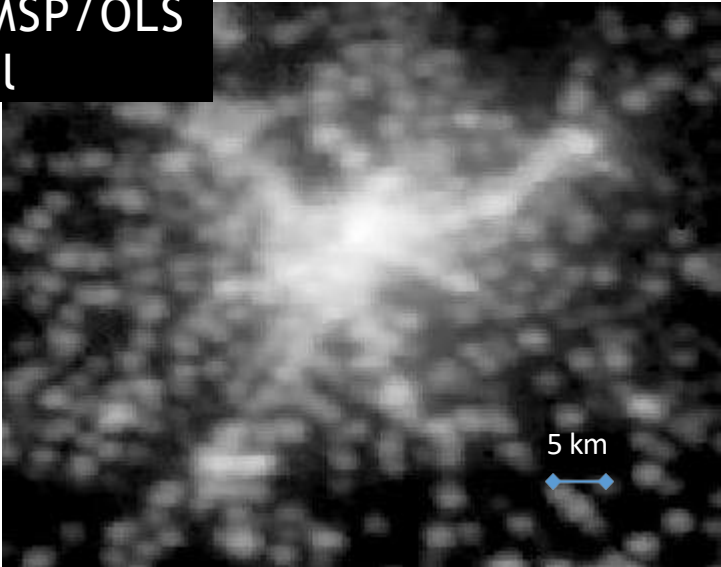
Sánchez S., & G. in nocturnal pollution



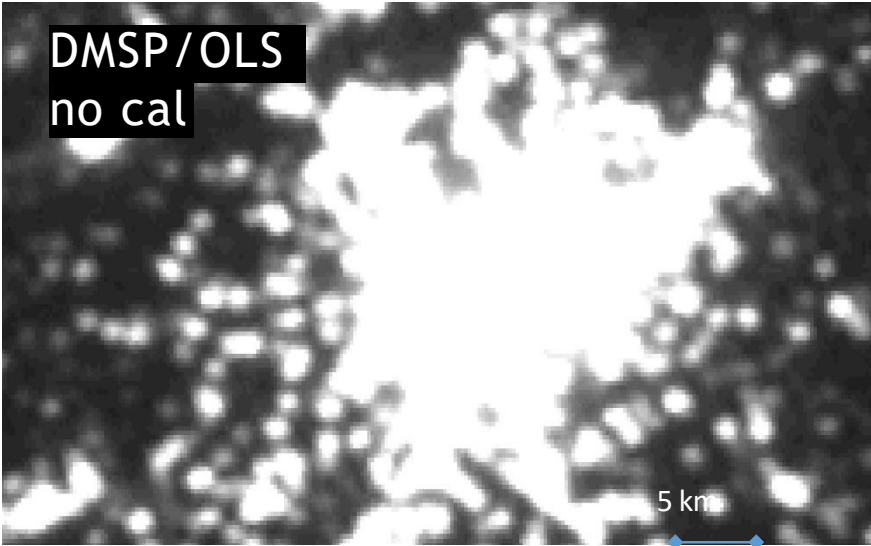
COMPARING SATELLITE IMAGES

DMSP + VIIRS + ISS

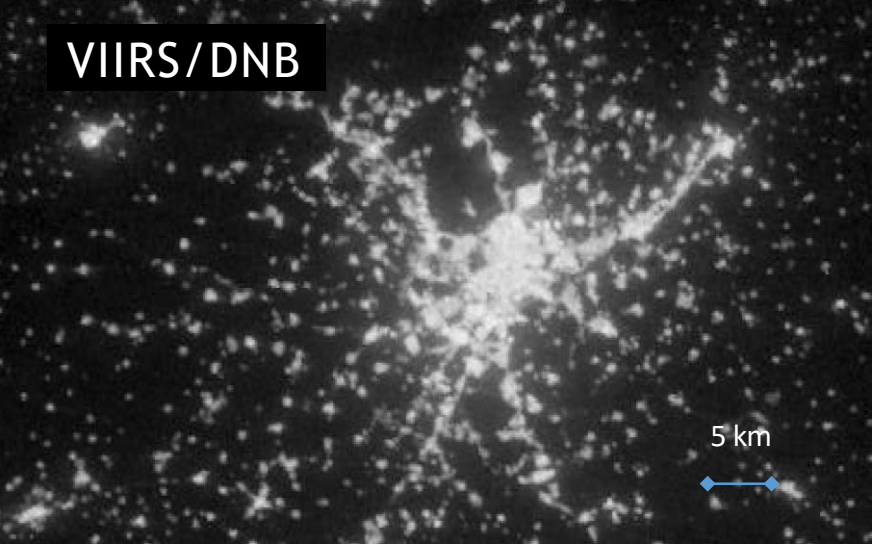
DMSP/OLS
cal



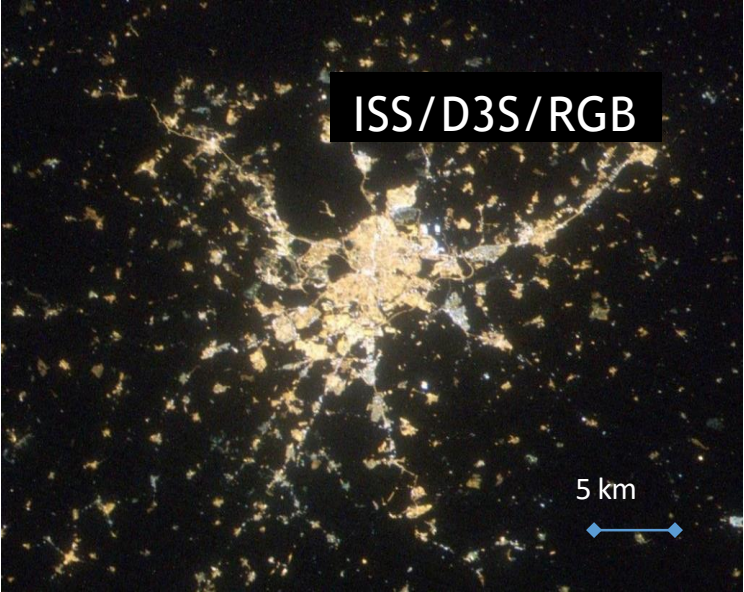
1996-2010



1992-2014



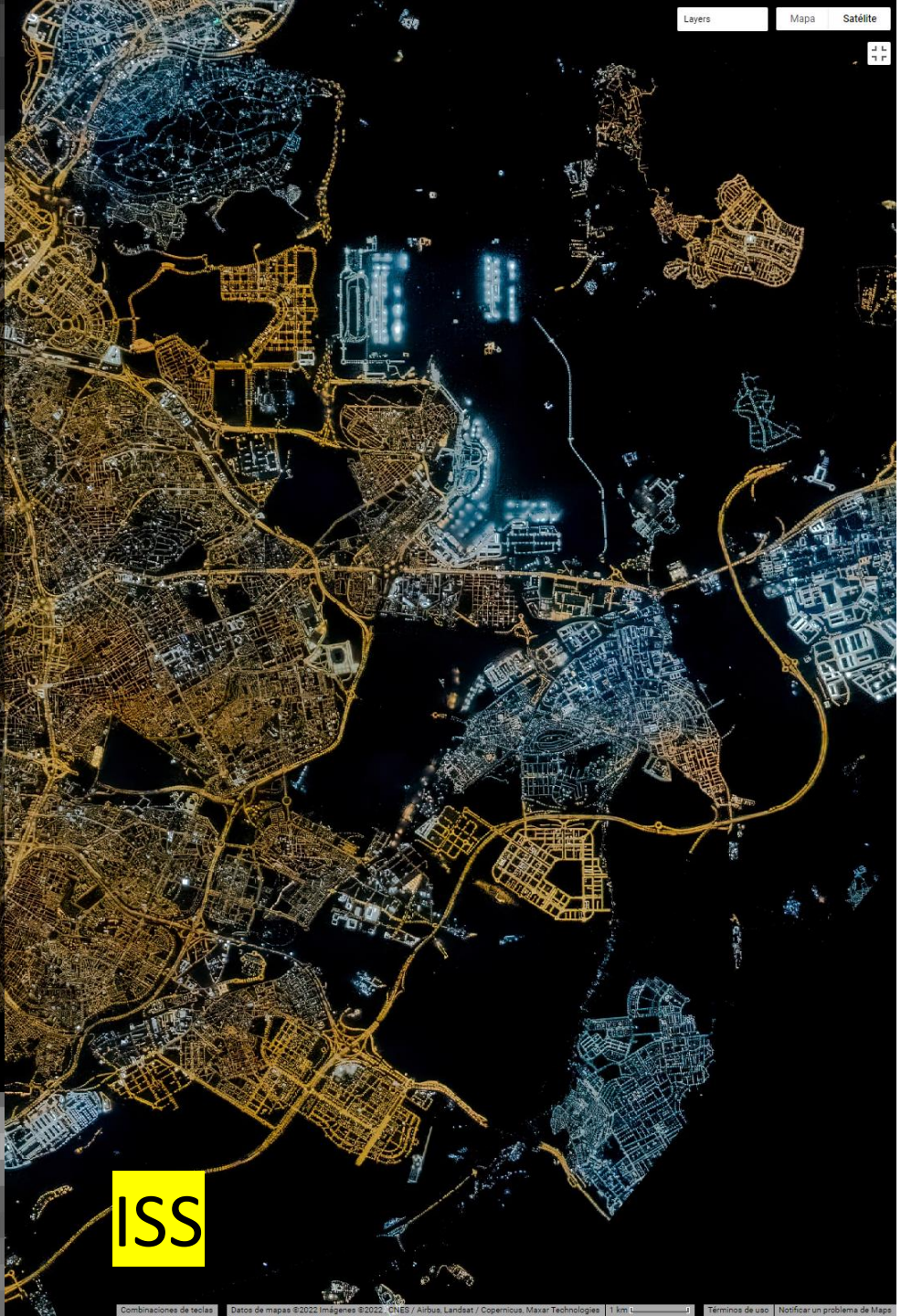
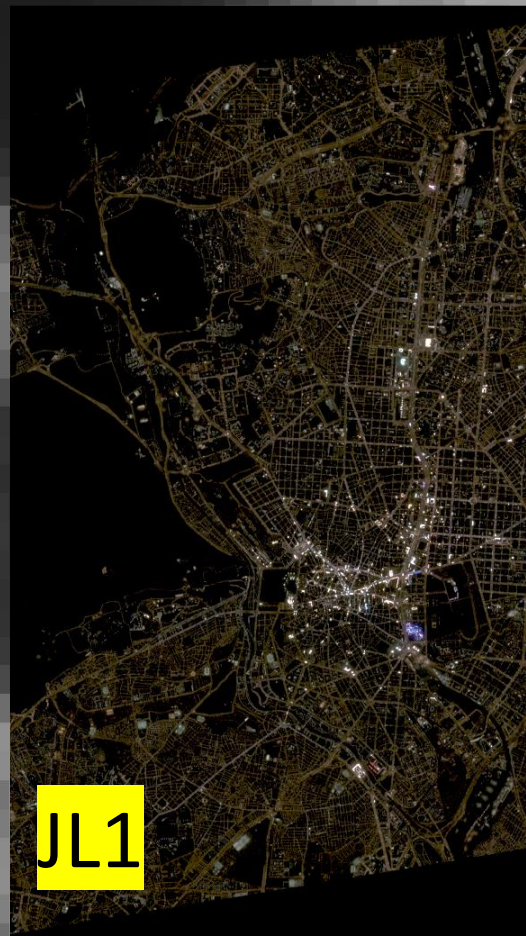
2012-2022



2003-2022

Madrid from space captured by 4 different satellites

Comparison between VIIRS - ISS - JL1

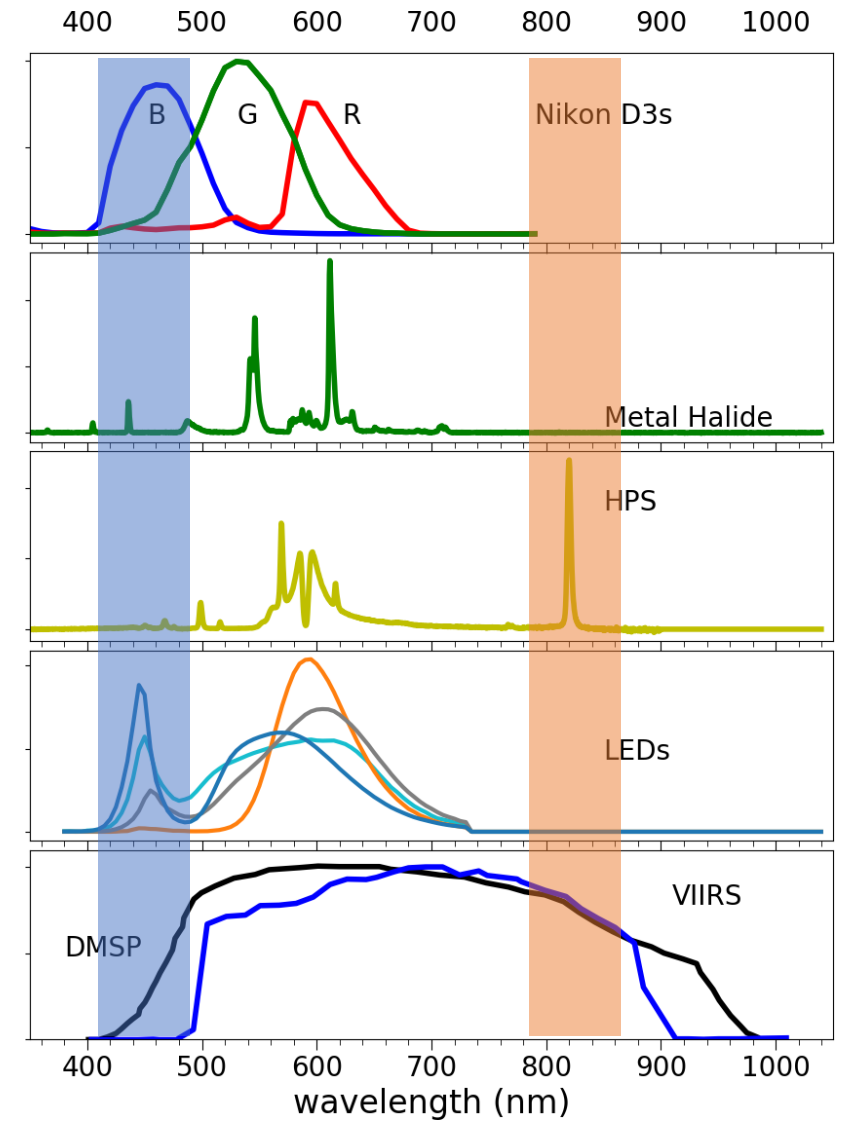
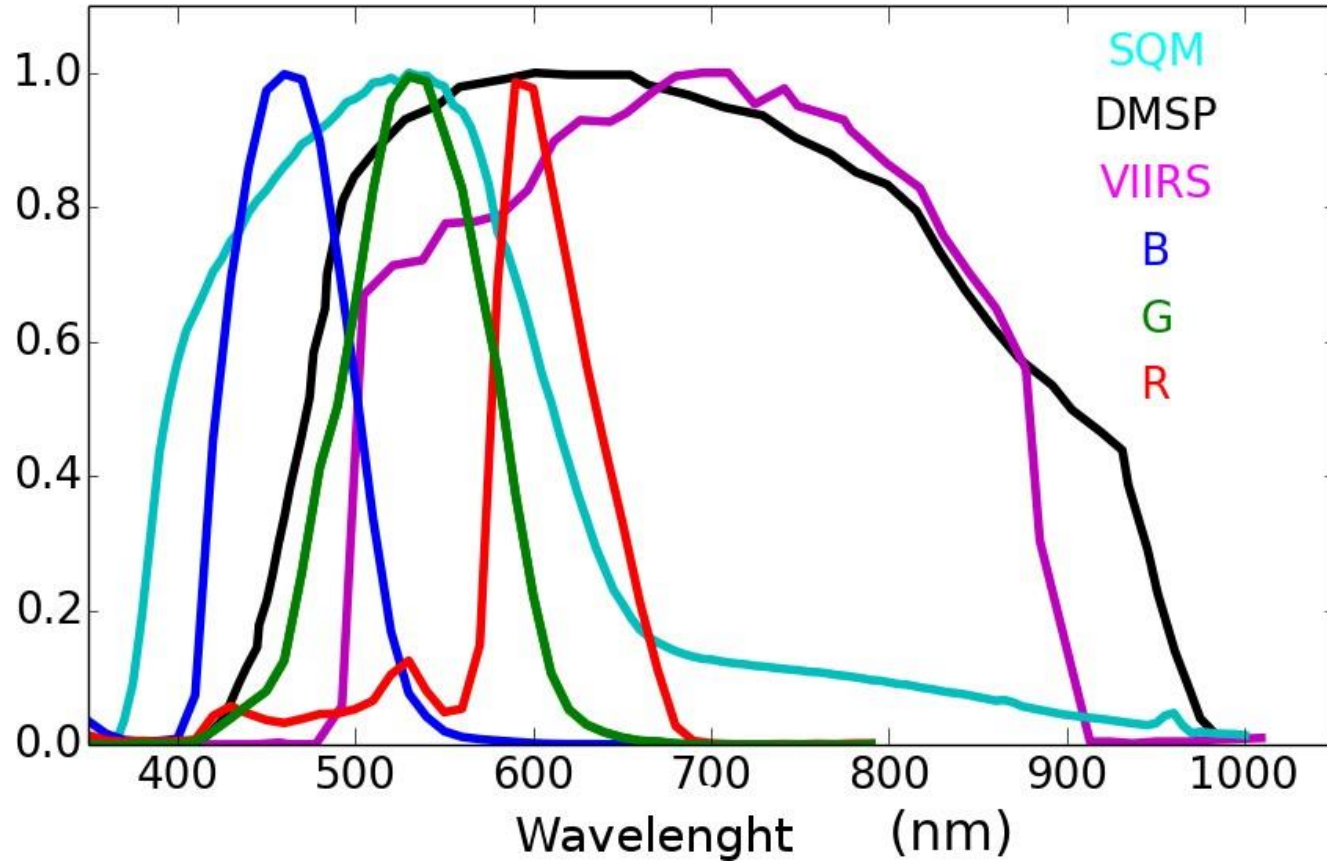


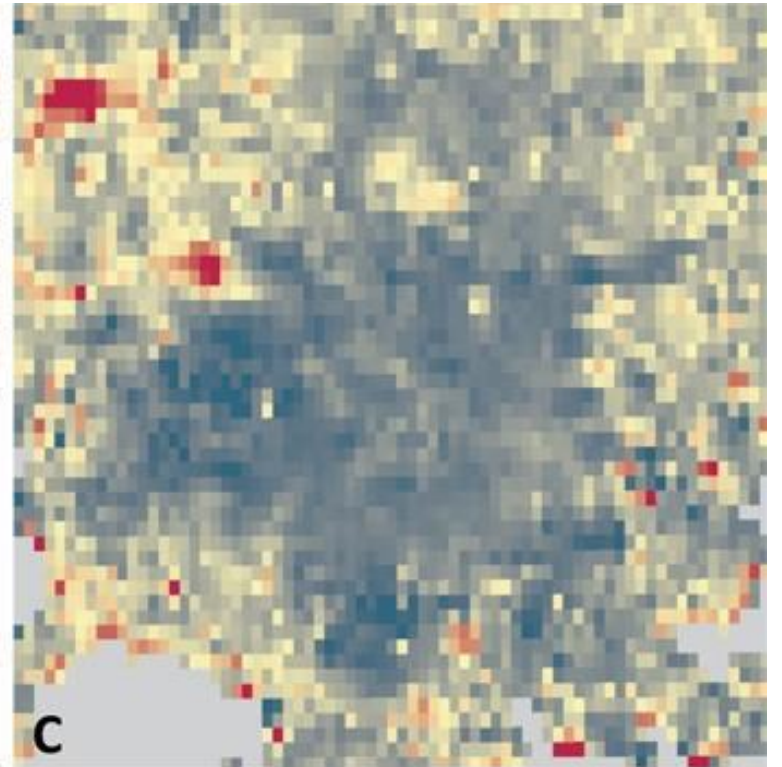
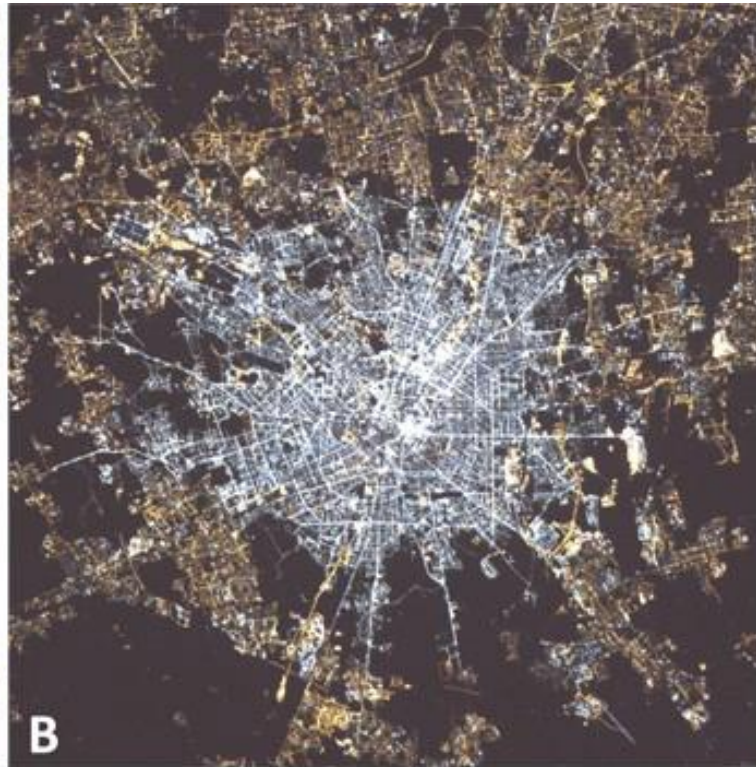
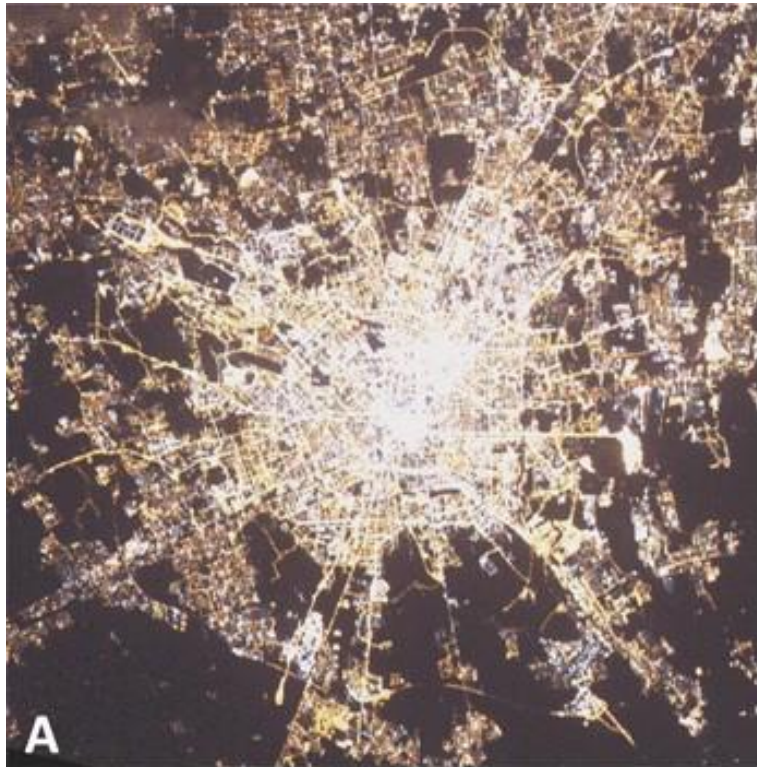
VIIRS

JL1

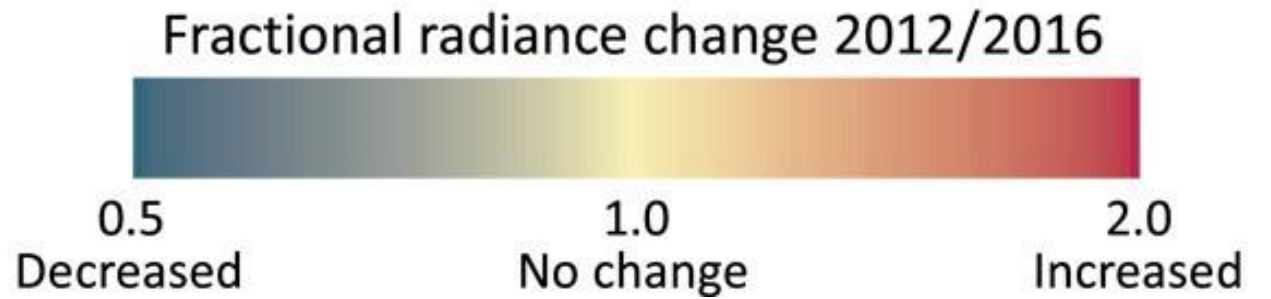
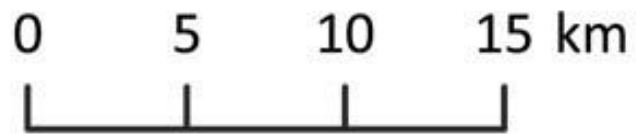
ISS

Satellites that are not colour sensitive, such as the DMSP and the VIIRS do not detect blue lights (such as many of the new LED streetlights worldwide) and detect spurious infrared lights





Milan, Italy



MIDNIGHT





RALAN-MAP

Can be 10 times more!!!



org/doi/1
77

ayers Mapa Satélite

Sánchez

https://w
s/s41598-020-04075-2

<https://doi.org/10.1525/elementa.2021.00049>