

# Characterization of the daytime sky at the Carlos U. Cesco astronomical station in San Juan, Argentina from 1997 to 2020

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## **Abstract:**

We characterize the quality of the daytime sky at the Carlos U. Cesco astronomical station (San Juan, Argentina), using more than 20 years of solar observations. We collected data from various detectors and data sources including the Sky Tester and Sun Tester of the Mirror Coronagraph for Argentina (MICA, in operations from 1997 to 2012); flare factors from the automatic flare detection routines of the H-alpha Solar Telescope for Argentina (HASTA, in operations from 2009); daily reports from solar observations and various meteorological stations. We derive values and/or proxies for the sky brightness, cloud coverage, wind, telescope observing duty cycle and other relevant parameters for solar observations and determined their daily and seasonal variability. Due to the extended period of time covered, this information is of great value for planning of future daytime astronomical instruments at the Carlos U. Cesco station and surroundings.

**Session:** Solar Physics, heliosphere, cosmic rays

**Oral or Poster:** Poster