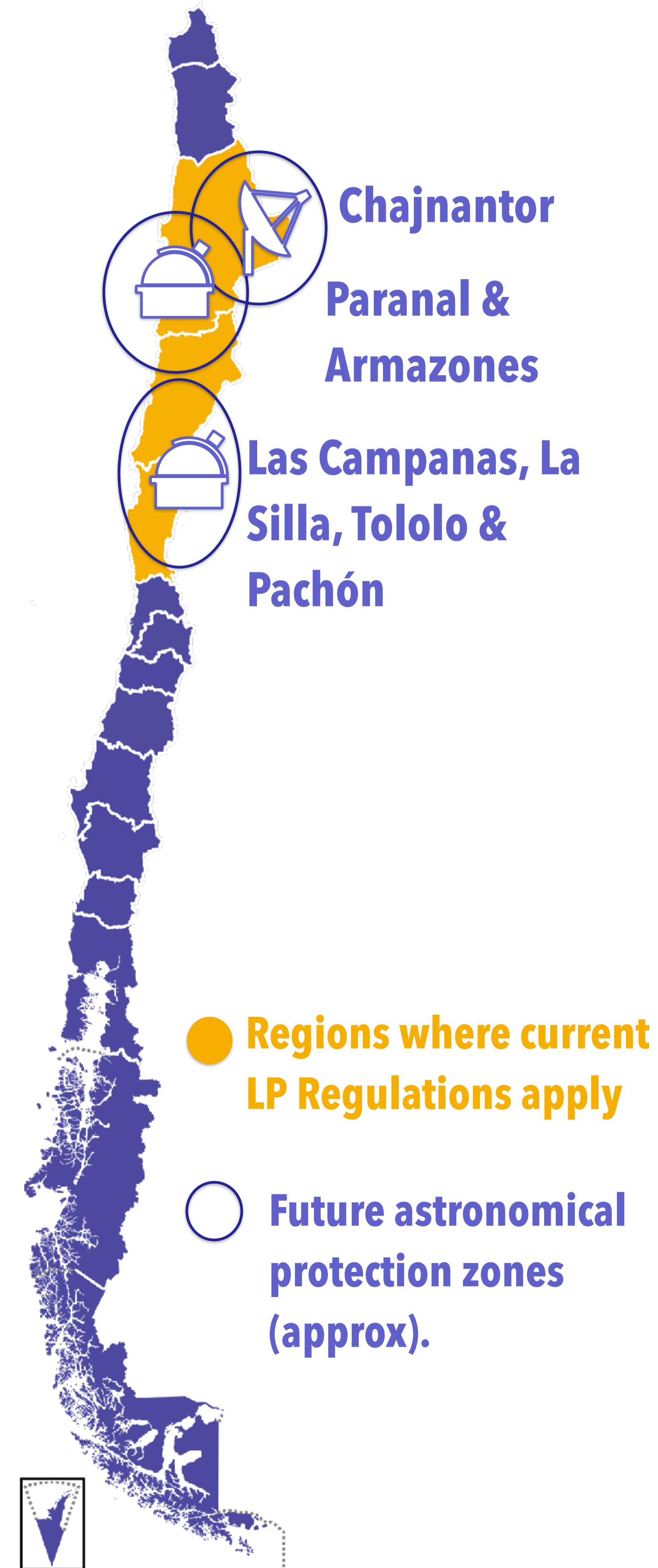


Introduction

By 2030, Chile will host more than 60% of the light collecting area from astronomical facilities (>3m). The Chilean state and astronomical community are committed to ensure that our skies remain the best for astronomical observations, in all frequencies.

Light Pollution (LP) Working Group

The Chilean Astronomical Society (SOCHIAS) created the Light Pollution Working Group² in 2018, with the mission of tackling the LP in different frequencies in the country. This mission includes representing the interests of the Chilean astronomical community in matters regarding LP, maintain current information on the status of LP in the country and educating the general public about LP. Several other initiatives are also working to protect the dark skies such as the OPCC (Office for the Protection of the Quality of the Chilean Northern Skies) and the Fundación Cielos de Chile, among others.



Light pollution Regulations

Current regulations (in effect since 2014) include:

- ✓ Restrictions on emissions to the superior hemisphere
 - ✓ Limits the intensity of the light source.
 - ✓ Limits the spectral range of the emissions
 - ✓ Limits the brightness of publicity screens
- There is a special emphasis on limiting the amount of blue light that outdoor luminaries can have.

New regulations (expected to become official during 2022), were developed considering the alarming increase in light sources and their intensity, and the consequent damage to the night sky and the habitat of endangered species. The most significant changes are:

- ✓ Extends LP regulations to **the entire country**.
- ✓ Establishes special astronomical protection zones (APZ).
- ✓ Lowers the amount of UV light (up to 380 nm) emission, from 15% maximum, to 1%.
- ✓ Lowers the amount of blue light (380-500 nm) emission, from 15% maximum, to 1% in APZ, and to 7% in the rest of the country.

More initiatives to tackle LP

- This year, the nano satellite SUCHAI 2 was launched with a camera aimed at measuring LP in the northern part of Chile from space for the first time.
- Different awareness campaigns have been conducted, specially for National Astronomy Day 2021 and 2022, and the series of infographics by the LP Working Group launched in 2021.
- There has also been different initiatives to include the protection of the dark sky in the proposed new constitution, demonstrating a transversal support from the public opinion, in a country where Astronomy is considered a common heritage



References

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3. https://opcc.cl/revision_ds043.html
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