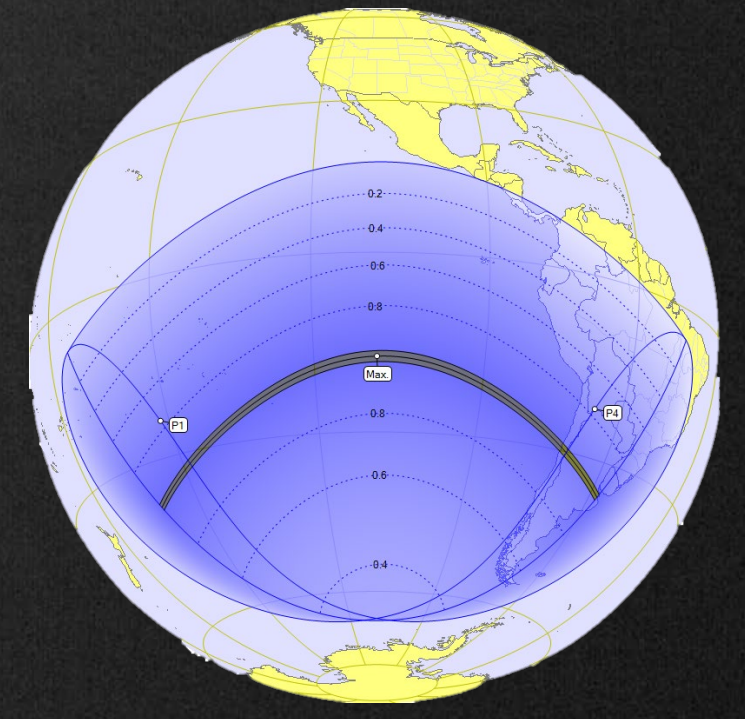


TOTAL ECLIPSE CHILE 2019

THE EXPEDITION



Miguel Pérez-Ayúcar, Manuel Castillo-Fraile, Joe Zender,
Wouter van Reeve, Darío Pérez, Michel Breitfellner



The poster presents the 2019 Total Solar Eclipse expedition, organized by the CESAR Education initiative and the ESAC and ESTEC Communications offices, on 02 Jul 2019. The Sun experts from Solar Orbiter, Proba-2 and 3, and CESAR participated in an interactive broadcast of the event from the CESAR facilities at ESA-ESAC. The expedition team traveled to La Silla Observatory (Chile) to retransmit live the astronomical event. The most important moment of the eclipse was totality, lasting 1min 50sec, at around 16:40 local time. The observation was ambitious and obtained good quality data, ranging from the inner and outer corona in visible light, the chromosphere and Baily's beads, polarization measurements, and the ionosphere variations.

EXPEDITION OBJECTIVES

- **SCIENCE:** polarization measurements of the corona, corona morphology, **ionospheric and UV variations**
- **Engaging the public** by CESAR education at ESA-ESAC, and ESTEC/ESAC Comms offices (via main ESA portal)
 - **Live HD transmission** of the eclipse phases
- Interactive **broadcast** with experts from **Solar Orbiter, Proba-2, Proba-3, ESO and CESAR**. Format: Google hangout.

LOCATION La Silla Observatory, ESO, CHILE, 02 Jul 2019



The Total Eclipse 2019 was observed on 02 Jul 2019, 16:40 local time (22:40 CEST) from ESO La Silla Observatory, Chile, with a totality of 1 min 50 sec. The site was selected for its dry weather conditions and altitude (2400 m, to reduce the atmospheric effects).

CESAR Expedition @ La Silla ESO



THE TEAMS



Comms and Web @ ESTEC



SCIENCE DATA

-- see accompanying posters !! --

Polarization of corona, Ionospheric variations, UV variations, **Baily beads** (moon's valleys), **Diamond ring**, **Inner and outer corona** images and video, **Chromosphere**, **image sequence @15sec (~3h)**

COLLABORATION



UNIVERSITÀ
DEGLI STUDI
DI TORINO



http://cesar.esa.int/index.php?Section=Total_Eclipse_2019