

7th China-Chile Bilateral Conference for Astronomy



Contribution ID: 88 Contribution code: CC01

Type: **Talk**

The Rise and Fall of HuBi 1

Thursday, January 8, 2026 11:55 AM (15 minutes)

HuBi 1 is a born-again PNe that underwent a very late thermal pulse (VLTP). The previous research suggests it experienced a rapid brightness decline over five decades, mostly attributable to dust obscuration formed through VLTP. Furthermore, VLTP-born-again objects experience a brightening phase due to the expansion of the star driven by the He-shell flash before the formation of the dust. In this study, we present the most comprehensive multi-wavelength lightcurve of HuBi 1, which reveals a brightening process for the first time. Through this, we reconstructed the evolutionary history of HuBi 1. Moreover, we have analyzed its SED in the infrared band to investigate its dust properties.

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Session Classification: Contributed talks

Track Classification: CC01: Star formation (including late stage stellar evolution)