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Re-activation of main-belt comet 288P in 2021

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The binary main-belt comet 288P is peculiar both because of its comet-like activity and because of its unusual system properties, combining near-equal component sizes with a wide separation of about 100 times the primary radius. The system likely formed by rotational disruption after YORP spin-up and subsequently widened, possibly by radiative or outgassing torques.

We present Hubble Space Telescope data obtained in 2021 while 288P re-approached perihelion and activity re-kindled. The data show a developing dust tail. We constrain the time of activity onset and investigate whether one or both components were active, which is key to understanding whether the splitting was the cause of the activity.