

2021 Report no.7: Addendum to Part I

In this report we listed the methane-bright patches that were near-stationary over the EZ in 2021, but did not actually show charts or measurements for most of them. Here are those charts & measurements in System III longitude, from the images in the previous figures.

I measured the centroid of each methane-bright patch manually. Measurements are imprecise because the patches are large and lacking distinct boundaries, and less distinct near the CM (where measurements are made) than near the limb. However the results give consistent drift rates, given below as DL3 in deg/30d. ($u = -DL3 / 2.08$, in m/s.) The uncertainties are estimated as $\pm 3-4$ deg/30d.

<u>Month</u>	<u>L3(approx.)</u>	<u>DL3</u>
May-June	240	-9.0*
Sep-Oct.	70	+3.6
Sep-Oct.	35	+0.9
Sep-Oct.	0	-5.3
Oct-Nov.	310	-3.0
Mean		-2.56 (± 5.0)

*The measurements for this feature were shown in original Figure 2. Here, the bay on the south edge is plotted.)

Most of the patches also had an extension north-preciding near the EZn edge, which I measured in two cases (not shown here). In May-June, the p. end of this streak was accelerating eastwards, reaching DL3 ~ -2 deg/day (see Figure 2). In August, the streak had DL3 ~ -1.0 deg/day.

--John Rogers (2023 Nov.)

