

30 Years of Photodissociation Regions:

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Star Formation Near Sgr A*

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We present several different lines of evidence in favor of on-going star formation within a couple of pcs of Sgr A*. First, we report the detection of 44 partially resolved compact sources with size scales ranging between 400 and 1600 AUs. The bow-shock appearance of these sources face the direction of Sgr A*. We interpret these sources as a candidate population of photoevaporative protoplanetary disks (proplyds) that are associated with newly formed low mass stars. The disks are externally illuminated by strong Lyman continuum radiation from the 100 OB and WR massive stars distributed within 10" of Sgr A* (Yusef-Zadeh et al. 2015). Second, we report the detection of water masers with multiple and single velocity components. Third, we investigate SED modeling of 64 infrared excess sources in the inner pc of Sgr A* indicating the presence of YSO candidates. Lastly, we identify a bipolar outflow candidate in one of the clumps of SiO emission in the molecular ring.

REFERENCES

Yusef-Zadeh, F.; Roberts, D. A.; Wardle, M.; Cotton, W.; Schdel, R.; Royster, M. J. (2015) *Astrophysical Journal*, 801, L26