**ABSTRACT**

Through analysis of archival images and photometry from the Spitzer GLIMPSE and MIPSGAL surveys combined with 2MASS and MSX data, we have identified 488 candidate young stellar objects (YSOs) in the giant molecular cloud M17 SWex, which extends ~50 pc southwest from the prominent Galactic H II region M17. Our sample includes >200 YSOs with masses >3 M_☉, that will become B-type stars on the main sequence. Extrapolating over the stellar initial mass function (IMF), we find that M17 SWex contains ~1.3×10^5 young stars, representing a proto-OB association. The YSO mass function is significantly steeper than the standard IMF, and early O stars are conspicuously absent from M17 SWex. These results reveal the combined effects of (1) more rapid circumstellar disk evolution in more massive YSOs and (2) delayed onset of massive star formation.

**RESULTS**

- M17 SWex will form >200 B stars. The total stellar population in the cloud is ~1.3×10^6, with total stellar mass ~8×10^4 M_☉. The present-day star formation rate is ~0.013 M_☉ yr⁻¹. M17 SWex is forming a proto-OB association.
- O stars are conspicuously absent. The YSO mass function slope is significantly steeper than Salpeter for m > 4 M_☉.
- Disk evolution proceeds more rapidly for higher-mass stars, with typical disk lifetimes of <0.5 Myr for YSOs with m > 4 M_☉.
- Massive stars begin forming at later times than low-mass stars. M17 SWex probably has not yet formed its most massive star, predicted to be an early O star of m > 50 M_☉.


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