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Tidal Dwarf Galaxies and the SMoC CARLA CARROLL, Brigham Young University, DAVID MARTINEZ-DELGADO, Astronomisches Rechen Institut, Universität Heidelberg — In a recent paper, Pavel Kroupa from the University of Bonn, Germany, attacked the Standard Model of Cosmology (SMoC) arguing that it demands that we see two distinct types of dwarf galaxies: dark matter galaxy satellites and tidal dwarf galaxies. All observed characteristics of dwarf galaxies suggest that only one type of dwarf galaxy actually exists: tidal dwarf galaxies. As the SMoC is the only currently accepted theory for cosmology, this puts great emphasis on enhancing our understanding of the properties of tidal dwarf galaxies. We present observational properties of several tidal dwarf galaxy candidates in two nearby interacting fields, NGC 3166/9 and NGC 7770/1 determined via photometric analysis as well as galaxy modelling.

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