

We present a multi-messenger search for binary neutron star mergers that produce both gravitational-wave and gamma-ray emission similar to GW170817 and GRB 170817A. We introduce a method to detect sources that do not produce significant gravitational-wave or gamma-ray burst candidates individually and discuss results from the public LIGO and Fermi data. Searches of this type can increase by 70% the detections of joint gravitational-wave and gamma-ray signals.