New Timing Solutions for Rotating Radio Transients BINGYI CUI,
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tating radio transients (RRATs) are sporadic pulsars which have a wide range of
emission properties. They can be loosely defined as objects that were discovered only
through their single pulses. For most of these RRATs, the timing of these individual
pulses is the most reliable method to measure their periods and determine timing
solutions, while some of them that are less sporadic can be timed by using folding
techniques as we do for normal pulsars. Here, based on Parkes and Green Bank Tele-
scope (GBT) observations, we introduce our results on eight RRATs including their
precise rotation parameters, positions, and dispersion measures (DMs), along with a
series of studies on RRAT properties. By analyzing data for all RRATs with timing
solutions, we find that the period derivatives of RRATsn are likely to be larger than
that of normal pulsars. We also carry out Lomb-Scargle tests for the eight RRATs
to search for periodicities in their pulse arrival times on long timescales, and signifi-
cant periodicities are detected for all of them. Analyzing the single pulse amplitudes,
the log-normal distributions provide the best fits, which imply that RRAT pulses
represent the tail of an intensity distribution for normal pulsars.

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