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**Extreme precipitation events recorded in the
oxygen isotope composition of tree-ring cellulose**

Robert Narmour and Brian A. Schubert

School of Geosciences, University of Louisiana at Lafayette, Lafayette, LA, 70504

Flooding from named tropical cyclones and slow-moving low-pressure systems, such as the 2015 and 2016 Louisiana floods, can cause more than \$10 billion in damages to a specific region. It is expected that these events will become more common in the future; however, our short historical record limits estimates of baseline flood frequencies. Here we present new high resolution intra-ring $\delta^{18}\text{O}$ measurements on tree-ring cellulose from old growth pine trees living in southwestern Louisiana in order to test whether ^{18}O depleted rainfall, which occurs during intense rainfall events, is recorded within plant tissue. Across the years studied (2001-2008), we identified anomalously low $\delta^{18}\text{O}$ values in the late-wood of tree rings from 2002, 2006, and 2007, which correspond to three documented extreme precipitation events: unnamed flood events in October of 2002 and 2006, and Hurricane Humberto in 2007. This work suggests that the high-resolution $\delta^{18}\text{O}$ measurements on tree-ring cellulose can be used to identify extreme precipitation events, thus greatly extending the historical flood record at a site.