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Comparing Single- and Multiple-Onset Isolated Substorms PATRICIA GAVIN, AMI DUBOIS, CHRISTINE GABRIELSE, IAN SWANSON, SANDRA BROGL, RAMON LOPEZ, Florida Institute of Technology, Department of Physics and Space Sciences — Using AE data, we have identified 218 isolated substorms whose initial onset was over North America (between 0300UT and 0800UT). We constructed a data table that contained each substorms' onset time, strength in AE, duration, and whether or not the substorm was a multiple-onset or a single-onset substorm. We have examined the statistics of these events, in particular comparing single-onset and multiple-onset substorms. Preliminary results indicate that the distributions of strengths as determined by AE of both single- and multiple-onset substorms are very similar. Further investigations will determine if there are relationships between a substorm's maximum strength and duration, and what factors, such as the strength of the first onset in a multiple-onset substorm, affect those characteristics.

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