PRACTICAL APPROXIMATIONS TO A TROPOSKIEN
BY STRAIGHT-LINE AND CIRCULAR-ARC SEGMENTS

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ABSTRACT

Curves made up of circular arcs and straight lines which approximate troposkiens of interest in the design of crosswind-axis wind turbines have been calculated for a variety of constraints. These curves were fitted to the troposkiens by numerical iteration by using both a least-squares and a least-maximum fit. Curves produced with the least-maximum spacing criteria approximate the troposkiens more closely than curves developed with the least-squares goodness-of-fit criteria.