1138-05-239 Jie Zhang* (zhangjie.sjtu@163.com). Wiener index, degrees, and segments in trees. Wiener index is probably one of the most well known chemical indices. The extremal problems with respect to Wiener index has been extensively studied for various structures including trees with a given degree sequence or segment sequence. We will consider analogous questions on maximizing or minimizing the Wiener index among trees with a given degree sequence and a segment sequence. The question and its (partial) solution is sometimes very similar to existing work, and sometimes very different. (Received February 10, 2018)