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Helioseismic Exploration of Flows during the "Halloween" Events.

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The technique of time-distance helioseismology is used to measure flows in and around the active region 486 during the massive solar flare eruptions of October 2003, which has become known as the Halloween events. By using time-distance helioseismology, it has become possible to produce maps of the flows in connection with the active region. Investigations of these flows and their connection to the solar flares can hopefully lead to improved understanding of the mechanics behind the flares. We present preliminary results of our work on using the observed time-distance maps as input to a neural-network based flare-prediction model.