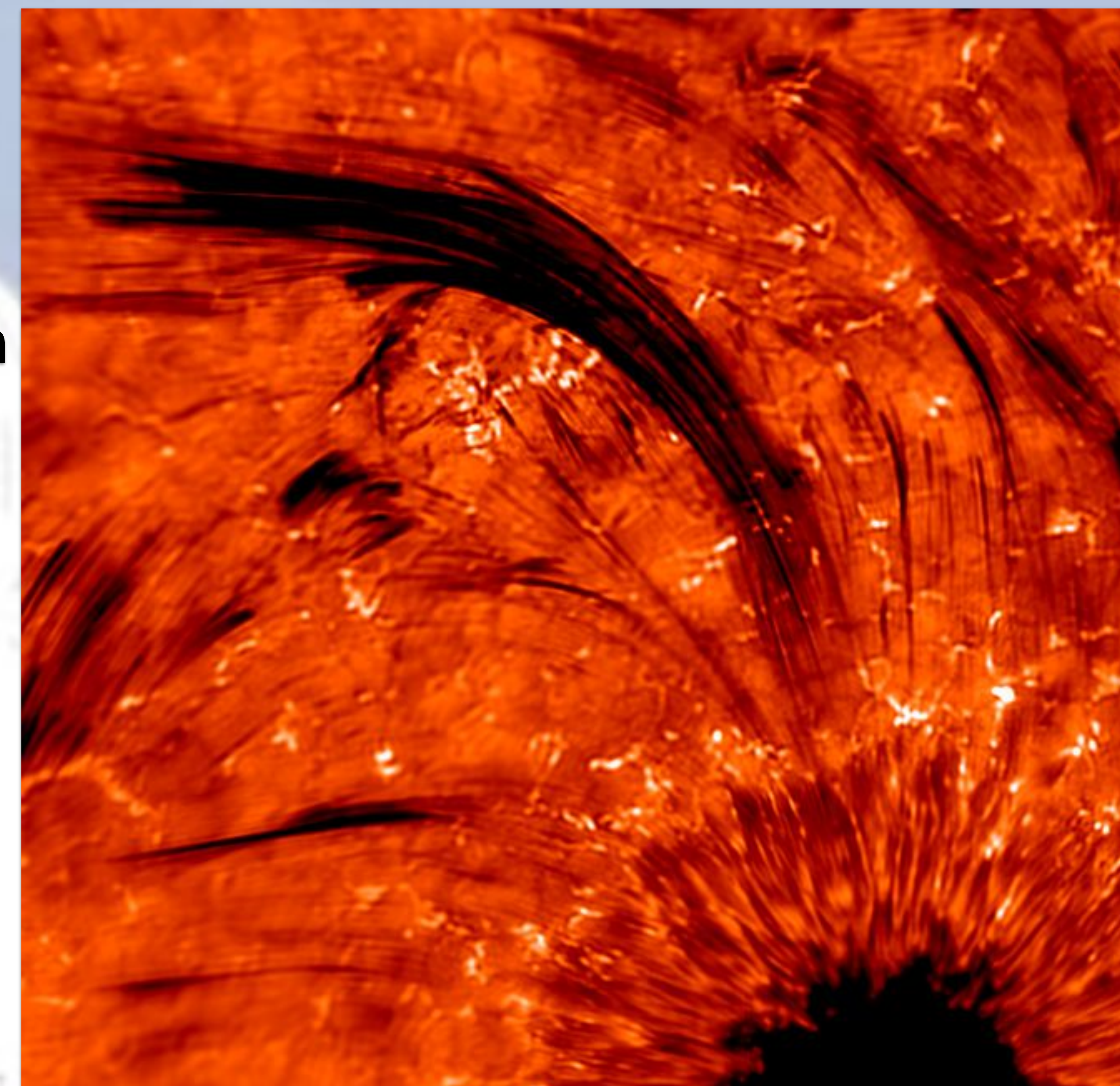




# Big Bear Solar Observatory



Left: The small dome houses the full-disk Hydrogen Alpha telescope, which tracks the dynamics of the Sun. The dome also houses the Earthshine telescope, which observes the dark of the Moon to measure the Earth's large scale reflectance, a critical climate parameter. We operate global networks of both kinds of telescopes.



Above: A picture of a sunspot taken with a hydrogen alpha filter, which reveals the dynamics of the solar chromosphere (a layer a few hundred miles above the Sun's visible surface). The long dark streaks are plasma jets carrying material higher into the solar atmosphere. The jets arising from the bright magnetic regions at the outer edge of the penumbra feed solar wind that constantly buffets the Earth's environment.

BBSO has three major on-going instrumentation projects for the 1.6 m solar telescope. They are a fully cryogenic spectrograph, visible light and infrared magnetographs, and next generation adaptive optics.

BBSO operates an observing station (right) for the GONG Project. (Global Oscillation Network Group). GONG, part of the National Solar Observatory, operates a global network of six telescopes to study the structure of the sun by observing its internal oscillations.

