DYNAMICAL EFFECTS IN THE EUV CHROMOSPHERIC NETWORK

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Extreme ultraviolet observations of the chromospheric network obtained by the Harvard College Observatory experiment aboard Skylab on May 31st, 1973, are analyzed.

The data, which have a spatial resolution of 5" x 5", cover an area of 5' x 5' near the center of the sun, where a large coronal hole was present, and are recorded in several lines formed in a range of temperatures from 10^4 to 10^6 °K.

By studying the EUV spatial intensity distribution, the average intensity in cell and network, the contrast, and the emission measures have been derived.

The network distribution, highly asymmetrical and skewed to higher intensity, suggests an inhomogeneous network structure, probably associated with the presence of spicules, not resolved by the instrument.

A dynamical model of the transition zone is therefore developed, and the resulting EUV emission in spicules is computed and compared with available observations, and with previous network models.