

Fig 3a. In Case 1, cool gas is lifted to chromospheric heights by low-lying magnetic loops originating from the magnetic network. If this gas is electrondense, it will result in a decreased mm brightness temperatures.

Fig 3b. In Case 2, the inclined canopy field reflects/redirects acoustic waves (red lines) before they can steepen and heat the overlying chromosphere (e.g. through shocks, as in the quiet Sun). The atmosphere above the canopy will radiatively cool while remaining relatively dense, resulting in the low temperatures see in the mm continuum.

Fig 3c. In Case 3, the chromosphere is usually suffused with hot, electron-dense gas, which blocks mm emission from lower in the atmosphere (e.g. the temperature minimum). In places where the electron density of the chromosphere dips, the mm continuum may show emission from these cooler regions.