

TRANSPORTATION OF MECHANICAL ENERGY INTO THE SOLAR ATMOSPHERE BY LOW-FREQUENCY MAGNETO-ACOUSTIC GRAVITY WAVES

S. M. Jefferies^{1,2}, B. Fleck³, Th. Straus⁴ and S. W. McIntosh⁵

¹*Institute for Astronomy, University of Hawaii, USA*

²*Steward Observatory, University of Arizona, USA*

³*European Space Agency, NASA Goddard Space Flight Center, USA*

⁴*I.N.A.F./Osservatorio Astronomico di Capodimonte, Italy*

⁵*Southwest Research Institute, Boulder, USA*

We present observational evidence of low-frequency (<5 mHz) magneto-acoustic and internal gravity waves propagating in the solar atmosphere. Both types of wave are found to be capable of transporting mechanical energy into the solar atmosphere at similar levels to that of the high-frequency (> 5 mHz) acoustic waves that are traditionally considered as the main source of wave heating of the solar atmosphere.