



Alfvén wave driven giant polar plumes

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We present the first results of simulations of giant polar plumes generated by Alfvénic motions of their magnetic footpoints. We use a 2.5D axisymmetric MHD numerical model of an isothermal corona and slow solar wind with transparent boundary conditions. Alfvén waves are continuously injected from the coronal base and a dense jet (plume) forms just above a small magnetic dipole embedded in an unipolar flux region. The jet presents a series of blobs which propagate outwards along its axis as slow mode wavefronts.