

Spectral lines in solar arcs may indicate profile asymmetries. This phenomenon can contain information about velocity fields as present in different optical depths and geometric heights of solar atmosphere affected by thermal heating or different non-thermal arc processes. Spectral lines of various chemical elements originate in different heights of solar atmosphere so they can keep information about the spatial distribution and time evolution of velocity field in the arc atmosphere. To detect vertical velocity field from observed H profiles spectral line profile asymmetries are analysed. In addition to a classical bisector method a method of comparison of the observed and non-LTE calculated profiles is used. Possibilities and results of these two methods are compared and discussed.