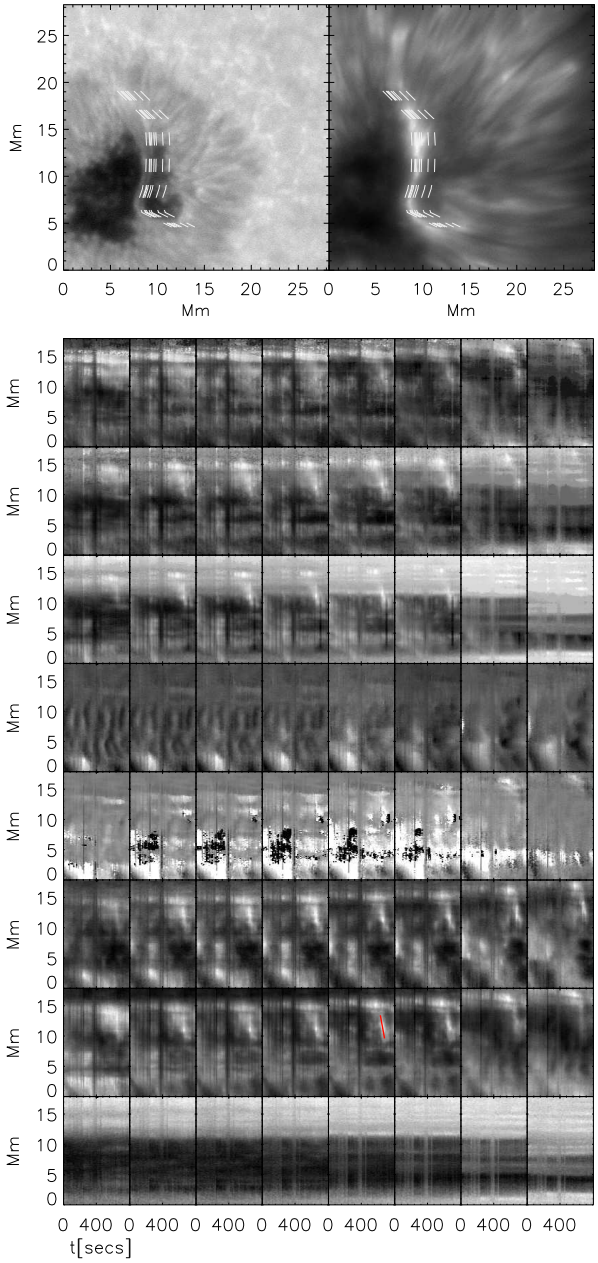

FIG. 11.— Time slices on locations parallel to the light bridge. Top: locations of the time slices. Bottom panel: time slices in from botttom to top line-wing intensity at 854.2 nm, line-core intensity of Ca 854.2 nm and H_α, line-core velocity of Ca 854.2 nm and H_α, temperature at $\log\tau = -1, -2$ and -4 from the inversion of the Ca 854.2 nm from IBIS. The eight panels from left to right correspond to the eight locations from left to right marked in the top panel.

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APPENDIX

AVERAGE PROFILES

Figure 12 shows average profiles for the different spectrometers. The horizontal and vertical coloured lines inside of the chromospheric absorption lines denote the intensity and location of the determined bisectors, respectively. For the Ca 854.2 nm spectra from IBIS, ten bisector levels between the line core and roughly the continuum level were used. For all other lines, 30 bisector levels were used. The bisector levels close to the continuum (up to 20 % relative line depth) did not yield reliable information because of the line blends, interference fringes or low light level, i.e. in the IBIS spectra the outermost wavelength points were already far out in the wing of the prefilter transmission curve. The bisector levels inthe He I line at 1083 nm turned out to give nearly identical information regardless of the line depth that they corresponded to. The average observed H_α profiles of each spectral scan with IBIS were forced exactly onto the FTS reference spectrum by using the ratio between FTS and the observed profiles as a correction. For all other lines, low-order polynomials were used to match the observed profiles to the FTS reference in blend-free wavelength

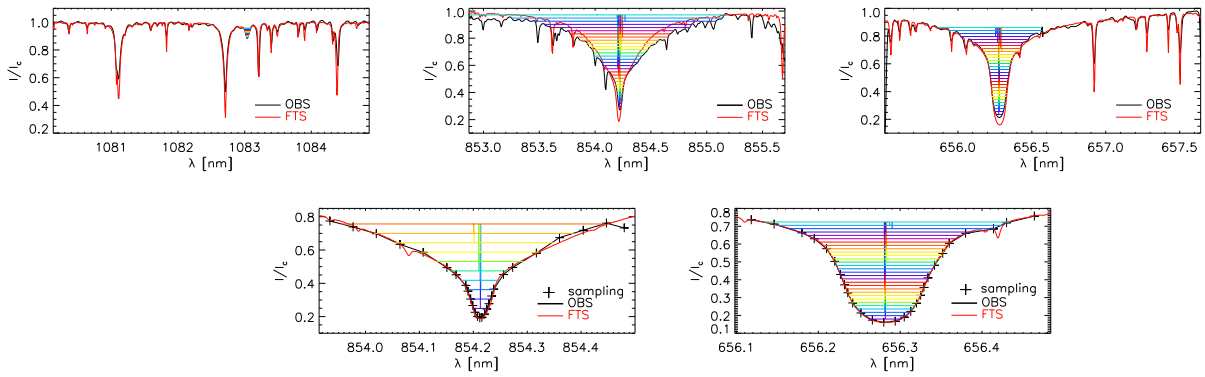

FIG. 12.— Average profiles and bisector determination. Top row, left to right: SPINOR spectra of He I 1083 nm, Ca 854.2 nm and H_α. Bottom row, left to right: IBIS spectra of Ca 854.2 nm and H_α. The crosses indicate the spectral sampling. Black lines: average observed profiles. Red lines: FTS reference profile. Coloured horizontal lines: bisector levels. Coloured vertical lines: bisector positions.

windows.

ADD FIGS