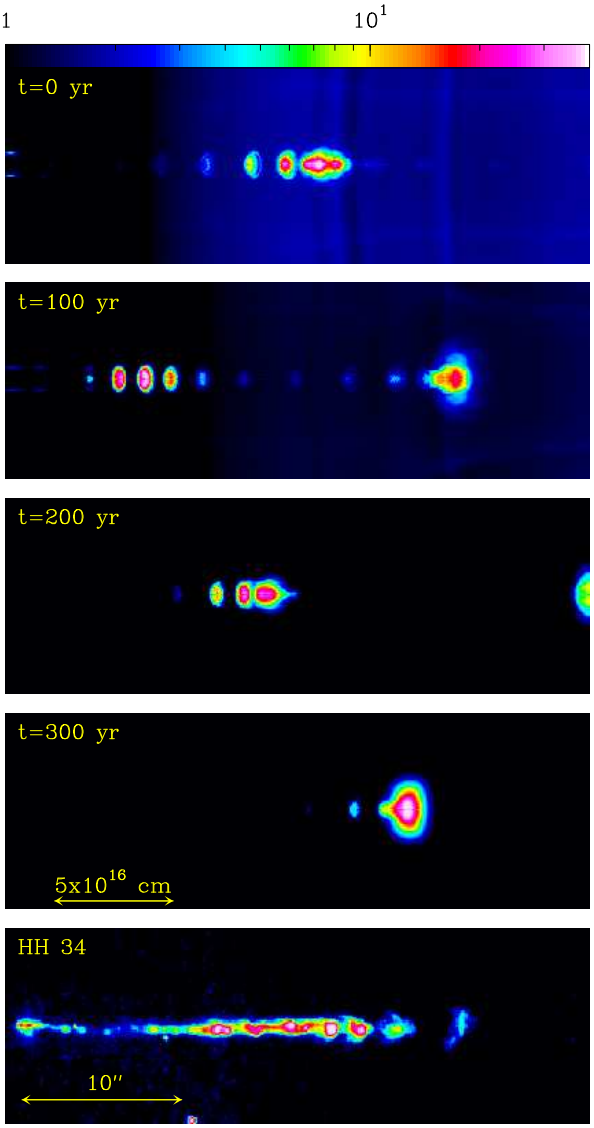

Fig. 5. [S II] 6716+30 intensity maps predicted from the $\sigma = 1$, 3-mode jet model for times $t = 0$, 100, 200 and 300 yr (the integration was started at $t = -3000$ yr, see § 4). The bottom frame shows the [S II] image obtained with the HST in 1998 (see § 2). The predicted maps have been computed assuming that the outflow axis lies at a 30° angle with respect to the plane of the sky (as appropriate for HH 34), and show a region with the source on the left and an axial extent of 2.46×10^{17} cm. The HH 34 [S II] map has been scaled to the same scale as the predicted maps, assuming a distance of 450 pc (the displayed region has a horizontal size of 36″.5). The intensities are shown with a logarithmic color scheme covering a dynamic range of 40 (see the top bar), scaled so that in the four maps the brighter regions start to saturate at the highest depicted intensity. The color figure can be viewed online.

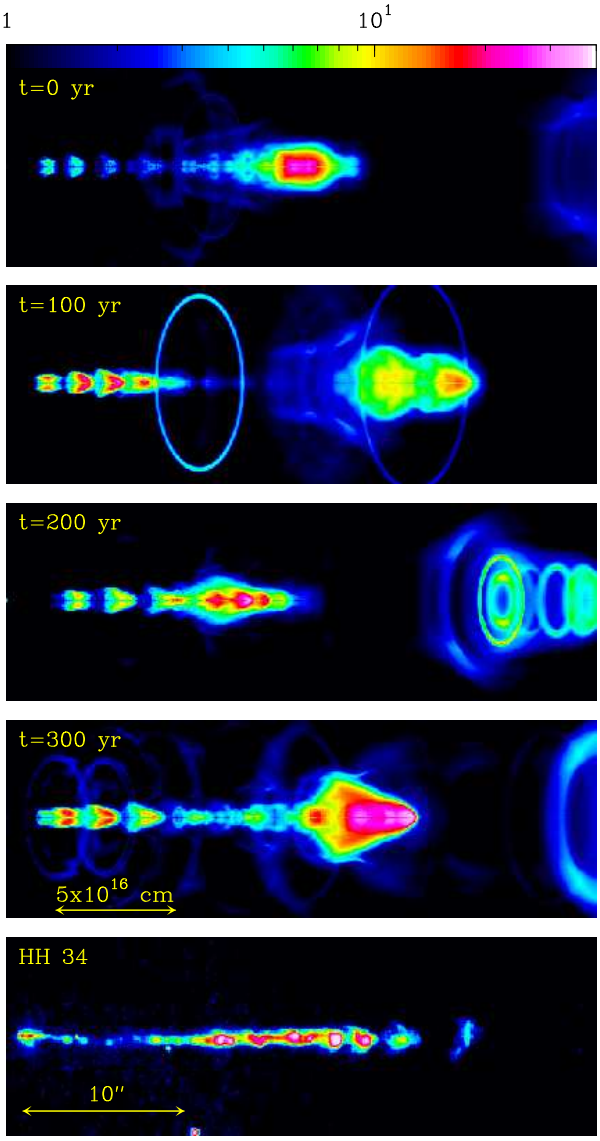

Fig. 6. The same as Figure 5 but for the $\sigma = 0.75$, 3-mode jet model (see § 4). The color figure can be viewed online.

13 yr time-span, with some of the knots becoming relatively fainter and other knots becoming brighter.

These changes are clearly seen in Figure 10, which shows intensity vs. position traces (obtained by integrating across the HH 34 jet and subtracting the adjacent background). It is clear that the $x < 2''$ region (where x is the distance from the source) has become considerably brighter, that the knots in the $10'' < x < 30''$ region have had clear variations (several of the knots having become fainter and others brighter).