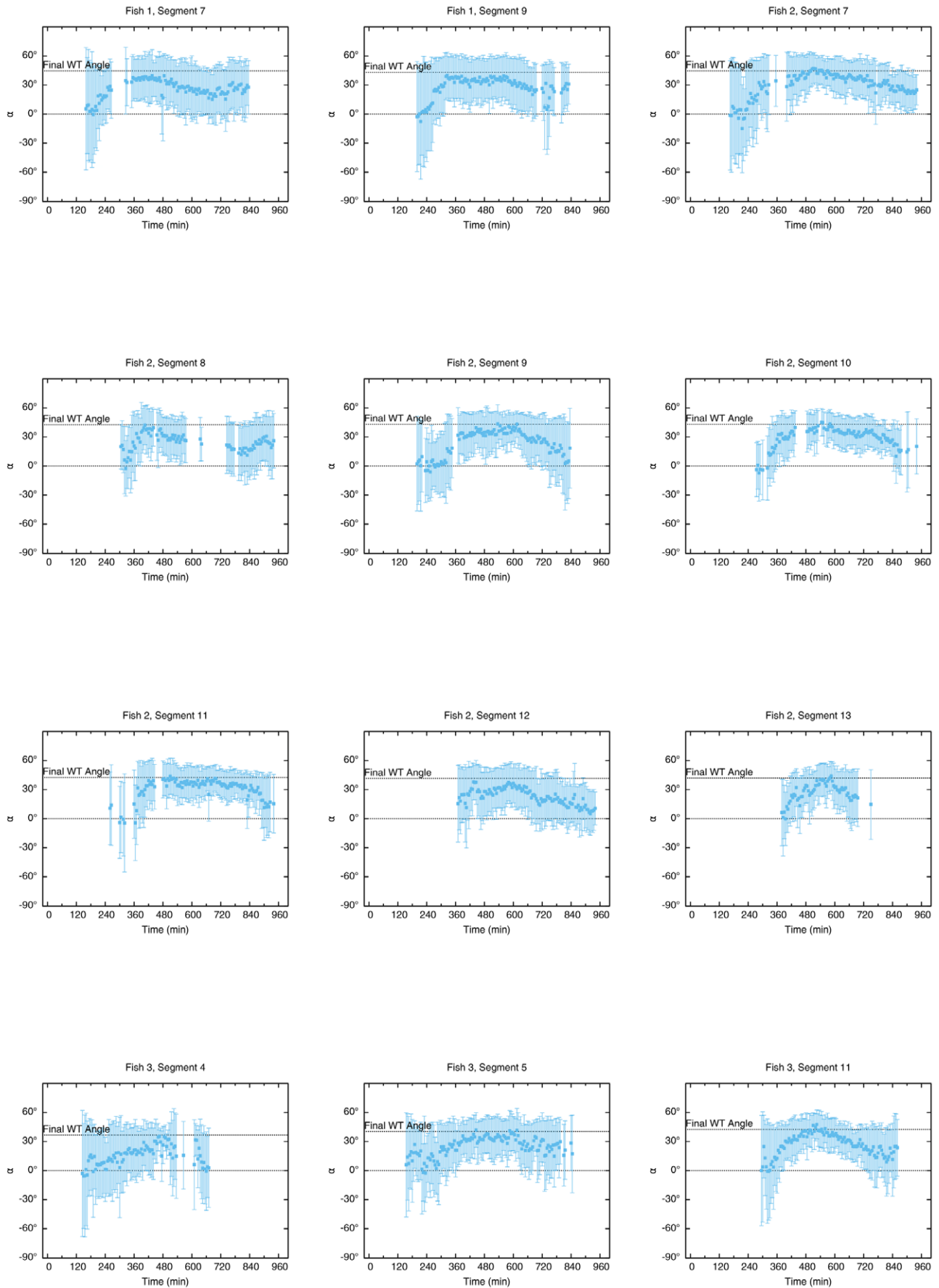
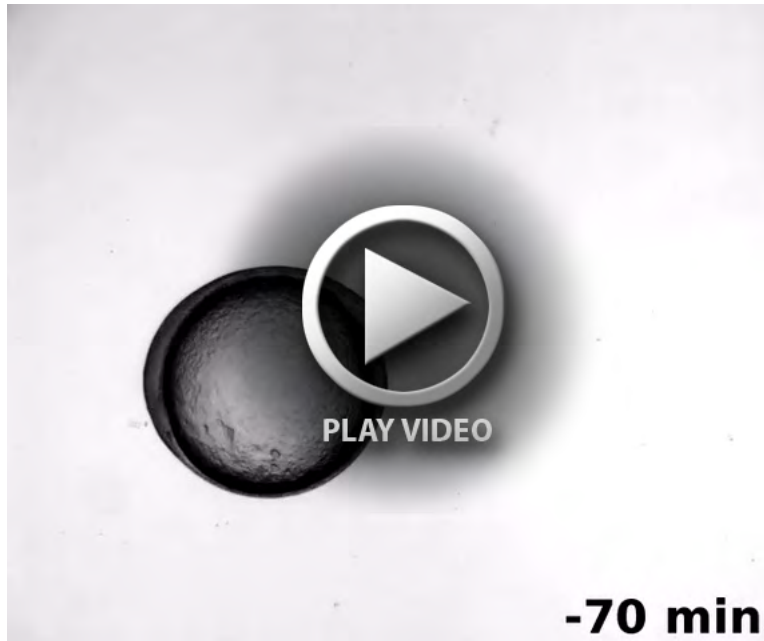


**Fig. S1.** Raw angle data,  $\gamma_{\min}$  and  $\gamma_{\max}$ , used to calculate  $\alpha \pm \Delta\alpha$  for Fig. 2C–E.



**Fig. S2. Multiple time series of chevron angle,  $\alpha$ , of embryos treated with cyclopamine.** For all these segments, chevrons formed with normal angle but then relaxed. Fish 2, segment 7 is also shown in Fig. 2H.



**Movie 1. Developing mobile zebrafish (Figs 1, 2).** First movements start at 480 min, when 17 segments have formed. However, movements are burst-like and for a number of frames, angle measurements remain possible.



**Movie 2. Developing immobile zebrafish (homozygous *nic<sup>b107</sup>* mutant).** From about 400 min on the vacuolating cells of the notochord become visible. They clearly move posteriorly relative to the segment boundaries. At this time the segments are already chevron shaped.



**Movie 3. Developing zebrafish treated with cyclopamine.** Raw angle data OpenDocument Spreadsheet file containing all original measurements of chevron angles  $\gamma_{\min}$  and  $\gamma_{\max}$  (Figs 2A,B, 4H; supplementary material Figs S1, S2).

**Table S1. Chevron formation of the zebrafish muscle segments**

[Download Table S1](#)