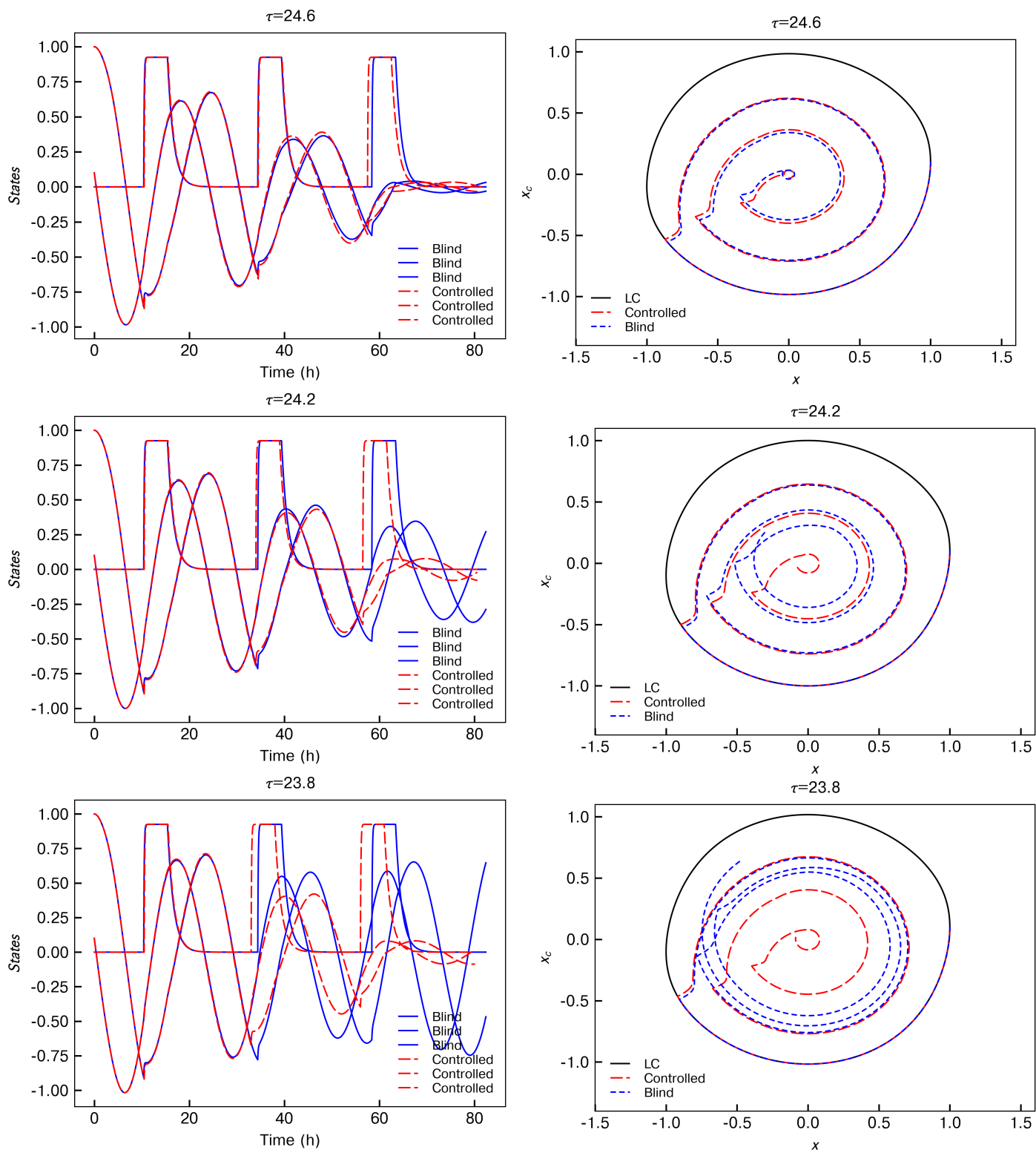
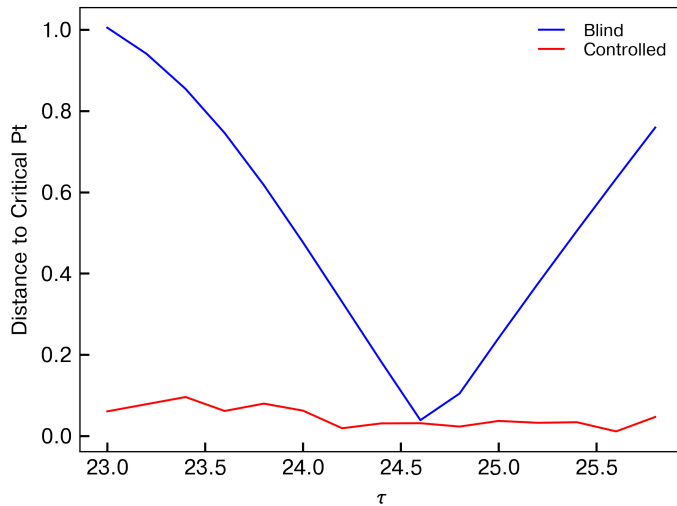


### (iii) Correction of timing using feedback control

Here I compare two protocols: the “shooting blind” protocol where the first pulse is at 10.4h and each is 24h after, and the “targeted” protocol where the light starts when it reaches a certain phase (2.66 radians in each cycle, since that’s what 10.4h corresponds to). This is extremely simple but may allow better critical resetting. I’ll try this for periods of 24.6, 24.2, 23.8 hours. Right is dynamic plot showing the three states (light input is the nearly-square wave), left is the same limit cycle plots as above.



So, in all cases this formulation seems to be at least as good as the blind method. I'll plot the final distance as a function of period now for all of these to compare.



So it looks like we can get pretty good performance for all taus using this event-triggered method.

#### (iv) Selection of control using pARC (better than just timing)

(would work by applying possibly shorter-duration pulses in the extremely sensitive regions rather than the prolonged pulses)