

STATS 528: HW6

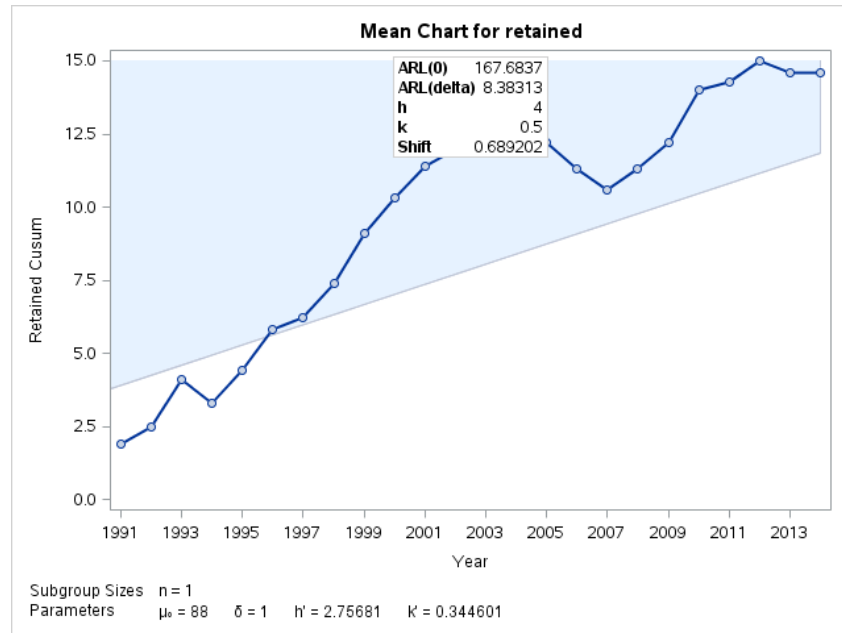
John Sherrill

November 3, 2015

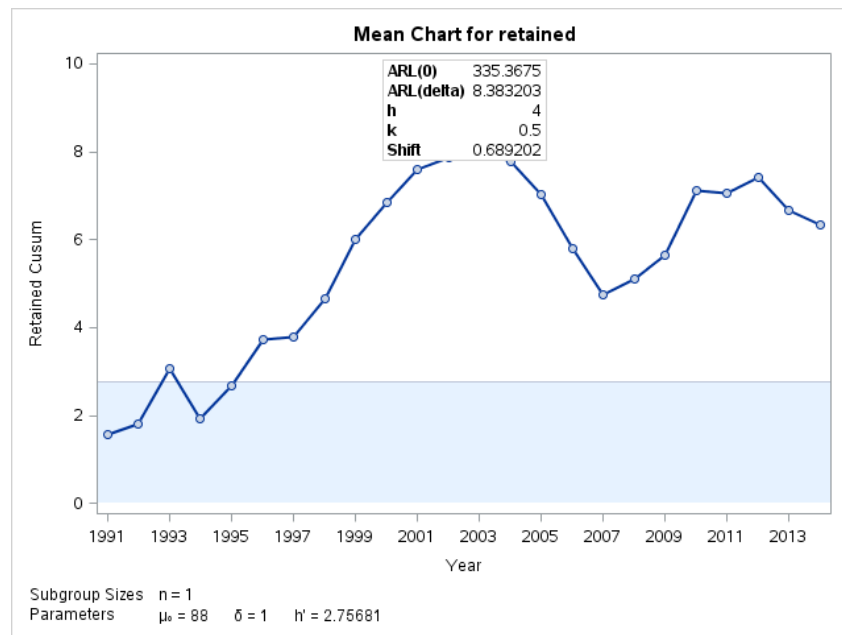
1. Enrollment Problem

(a) We have that $\hat{\sigma} = MSSD = 0.689$.

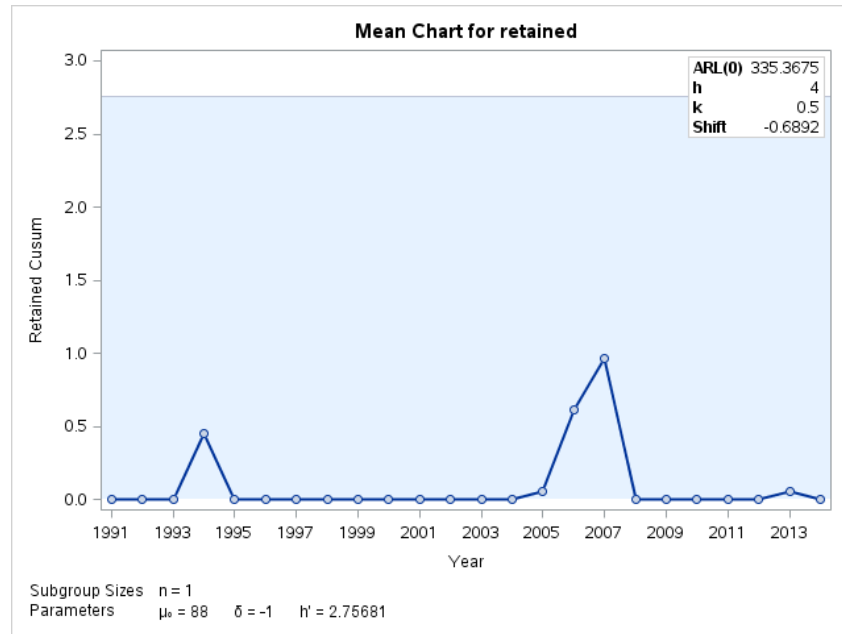
(b) Two-sided cusum plot:



Upper one-sided cusum plot:



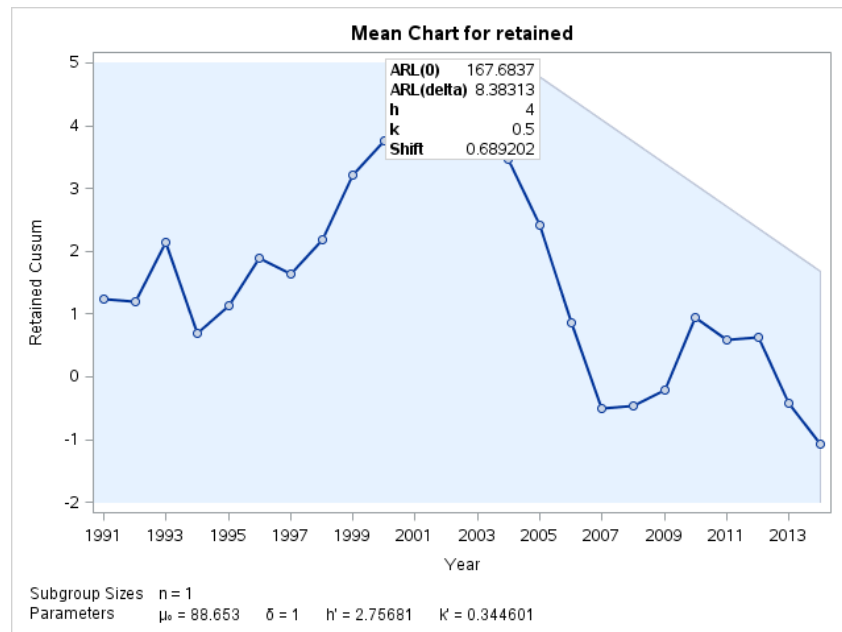
Lower one-sided cusum plot:



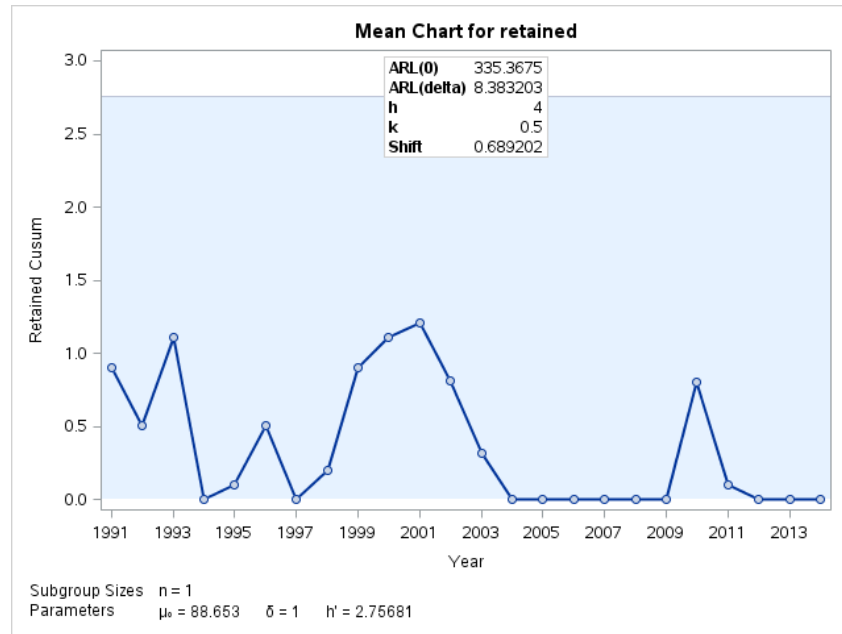
- (c) The year where out-of-control signals occur happen at... They happen on the lower/upper side.
 (d) The magnitude of the first significant shift it... which happened in the year...

2. Enrollment Problem take 2

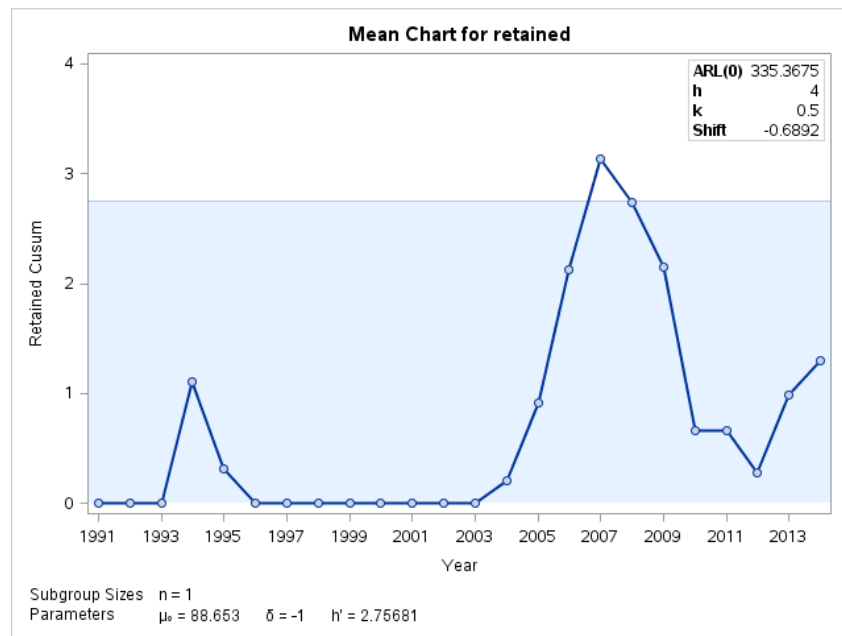
- (a) We have that $\hat{\sigma} = MSSD = 0.689$ (no change).
 (b) Two-sided cusum plot:



Upper one-sided cusum plot:



Lower one-sided cusum plot:



(c) The year where out-of-control signals occur happen at... They happen on the lower/upper side.

(d) The magnitude of the first significant shift it... which happened in the year...

3. ARL_0 and ARL_1 and other stuff

4. h and k values for cusum

Ex 9.9 (a)

(b)

(c)

Ex 9.14