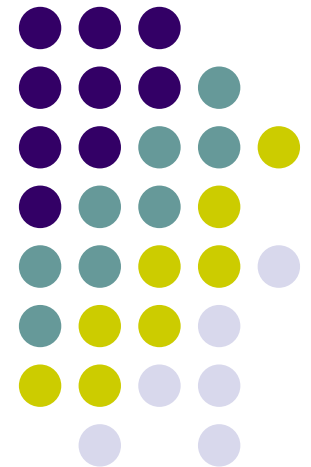


# Production 2 WLS QC

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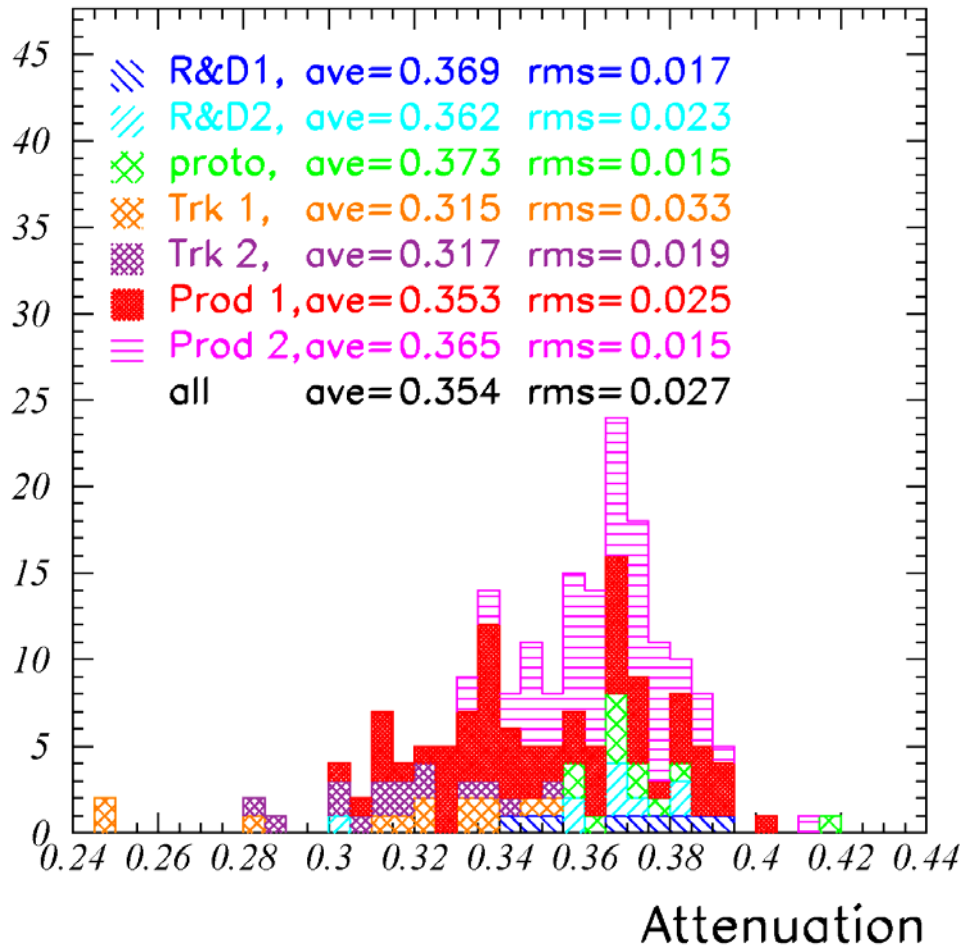
Howard Budd  
University of Rochester  
Rochester Meeting  
Oct 17 2008



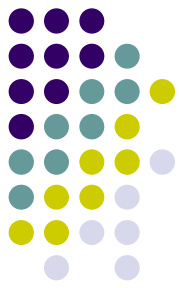


# WLS QC, Attenuation Length

WLS Fiber, Attenuation at x=320

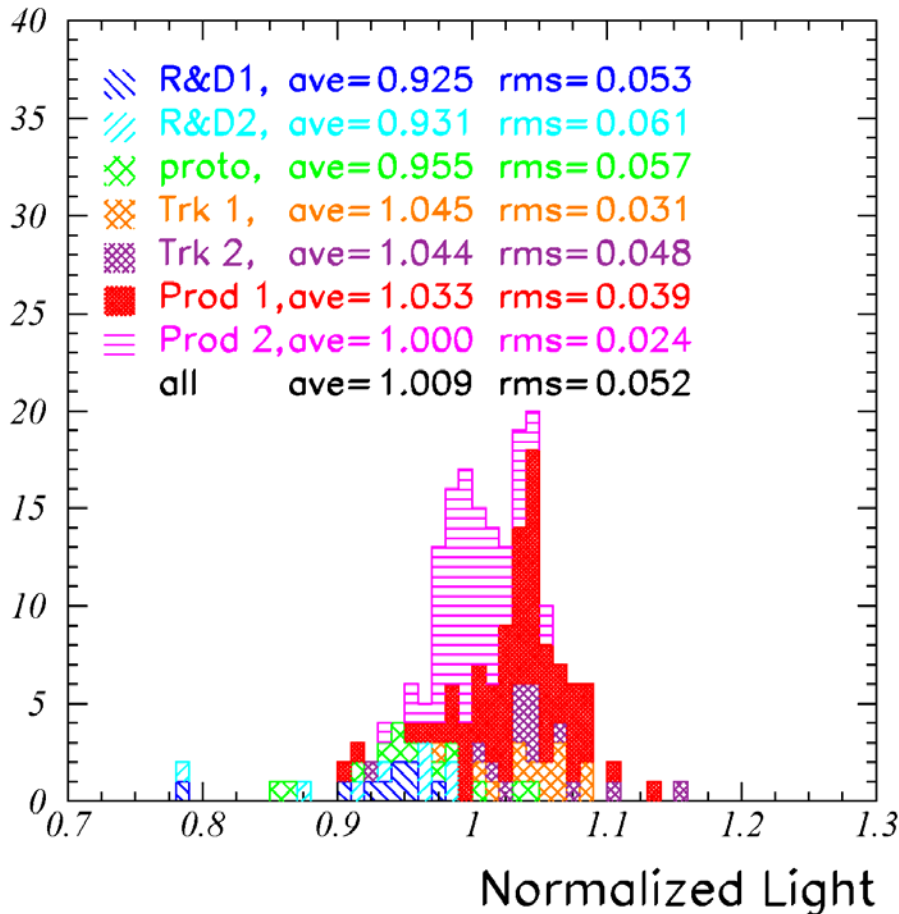


- Measured attenuation of fibers
- Dan has QCed Production 2 fiber
- Production 2 looks OK
- Looks like Prod 2 has a longer attenuation length than Prod 1



# Light at x=0

WLS Fiber, Light Extrapolated to x=0, Ave to 1

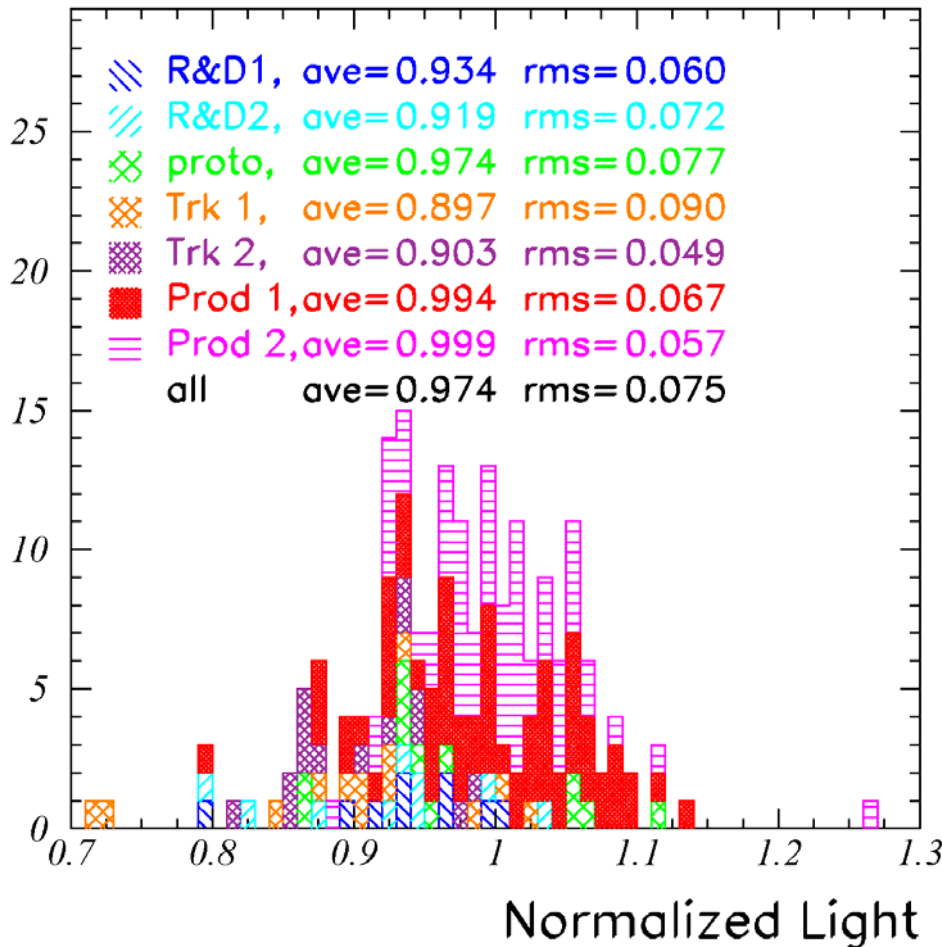


- Light Extrapolated to x=0
  - Prod 2 fibers are normalized to 1
  - Shows the amount of light accepted into the fiber
- No attempt to correct overall normalization between different sets of measurements
  - PMT, HV, scintillator & source are the same
- Looks like Prod 1 accepts more light than Prod 2



# Light At x=320

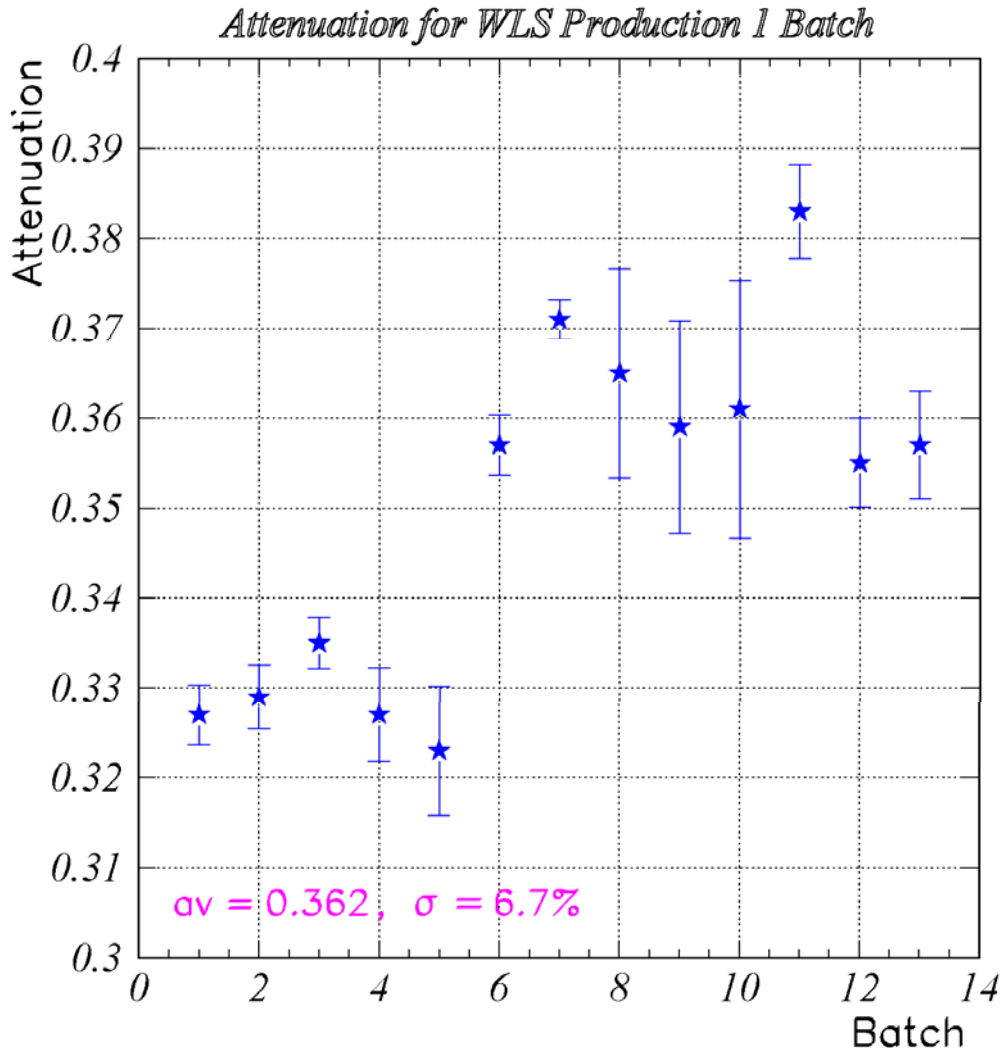
WLS Fiber, Light Extrapolated to x=320 , Ave to 1



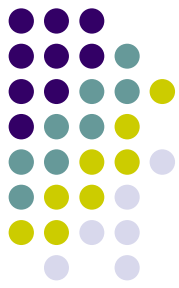
- Note that at x=320 Prod 1 & Prod 2 fibers seem to have the same amount light. These measurements claim the longer attenuation length of production 2 is being cancel by its accepting less light.



# Attenuation vs batch # for Prod 1

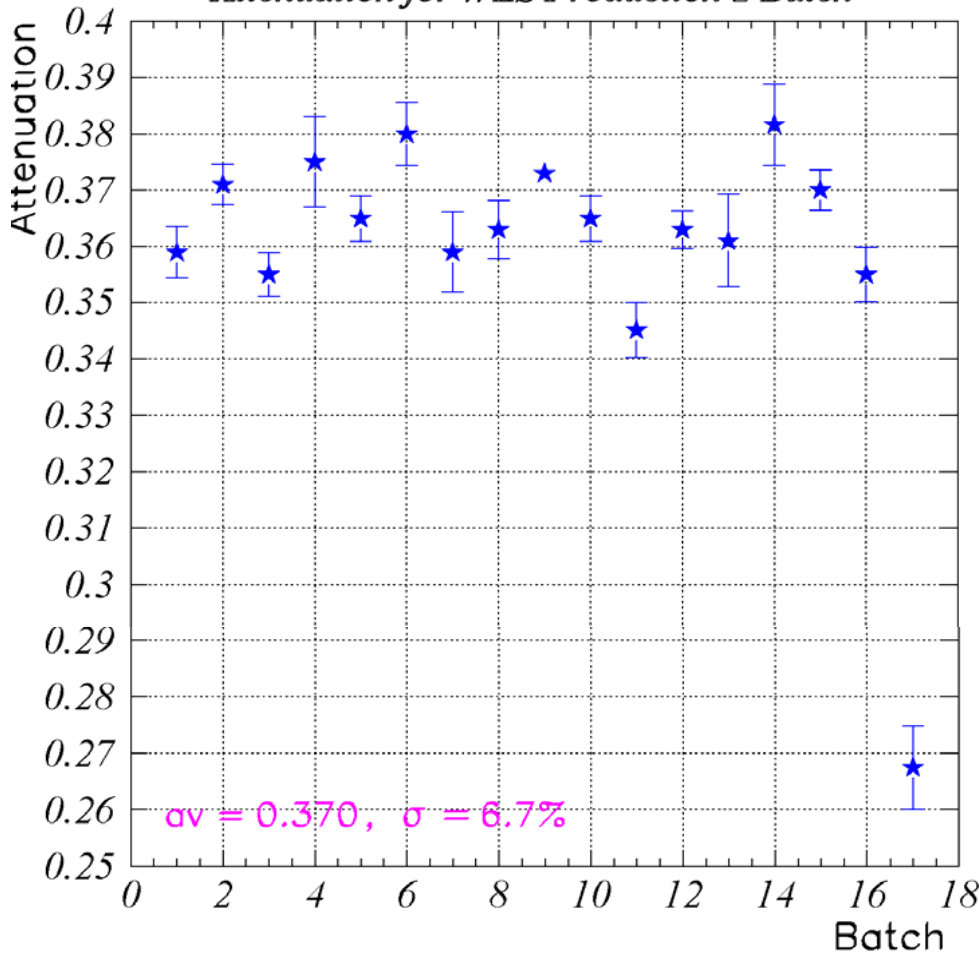


- We saw this funny behavior of light vs batch number for Production 1 fibers



# Attenuation vs Batch

*Attenuation for WLS Production 2 Batch*



13 Batches, do not see jump we saw before

Dan measured some fibers from the other batches at the same time

14 R&D 1

15 R&D 2

16 TRK 1

17 TKK 2, but the fibers were left out in fluorescent lights in the tunnel for about 6 1/2 months. Looks like the light damaged the fibers

Want to study more but I need to be sure I understand exactly what the data is for the files