

Friday 06-07-13 AL

LW crew coach Chris Kerber, replied back, referred us to Kleshnev's article (see below), and asked for specifics on what we wanted. I replied back, writing that graphs that describe the force profile over the course of the power stroke are great, and I asked to see some similar data from the Cornell crew.

Read publications on rowing and erging:

1. Modelling the Rowing Stroke in Racing Shells

Maurice N. Brearley, Neville J. de Mestre and Donald R. Watson
The Mathematical Gazette, Vol. 82, No. 495 (Nov., 1998), pp. 389-404
Published by: [The Mathematical Association](#)
Article Stable URL: <http://www.jstor.org/stable/3619885>

- The water drag force $D = a + bv + cv^2$, where v is the velocity of the racing scull, and a , b , and c are constants that can be obtained through regression analysis from rowing data.

2. Kleshnev, Valery. "Rowing Biomechanics." *BioRow*. N.p., 2006. Web. 7 June 2013. <http://biorow.org/publ/2006_rowing_biomechanics/1-1-0-20>.

- This article covers the difference between boat types, rowing efficiency, common rigging set-up dimensions, accelerations/forces on the boat /rower over the course of a stroke, and rowing techniques. It's a snappy technical overview of rowing.
- There are four major categories of rowing styles, each defined by whether they emphasize the trunk or the legs, and if the trunks and legs extend simultaneously or consequently.
- "A force curve with a peak increases blade slippage and decreases efficiency. Conversely, a rectangular shape of the force curve affects efficiency positively." - page 7