Women's World Cup: England v Argentina (BBC One HD - 4/6/2019)

27 lines

of HD video at a human scale

This 19.2 meter long poster blows up each pixel to a 1 cm square [(1)] and shows only 2.5% of a whole frame. At this scale, a whole frame would stretch down to the 3rd floor and, at 25 frames per second, it would only take about 24 hours to fill Dock House with paper [(2)].

Now that HD video can be thrown around so casually by even the most humble smart phones it's easy to forget just how amazing technology is...

Have a fun day! (and bring on high frame rate, HDR UHD)

A silly side project by Jonathan Heathcote.

(1) A square centimeter is about as small as I can comfortably write three 8-bit numbers (in decimal). To be sure, every digit in this poster is written by a simple handwriting synthesiser based on my writing...

(2) Using data from DEFRA [(3)], Dock house's footprint is approximately 1400 m^2 and, excluding the attached tower block and air conditioning plant, it is 33 m tall giving a total volume of 46 200 m^3. A complete HD frame is 1920 by 1080 pixels which at 1 cm per pixel is 19.2 by 10.8 m^2. Assuming a typical paper thickness of 0.1 mm, each frame has a volume of 0.020736 m^3. At 25 frames a second, the volume of paper grows at 0.5184 $m^3\ s^{-1}$. Therefore, to fill Dock House would take 89120.37 seconds, or 1 day, 45 minutes and 20.37 seconds.

(3) If you're keen enough to read a footnote's foot note, you're definately going to enjoy playing with a LIDAR 3D scan of the whole of England and Wales: https://tinyurl.com/defra-lidar