

RAIN INTEL / RAININTELLABS.COM

Rain, on *record.*

A browser notebook for learning to read an hourly rainfall record.

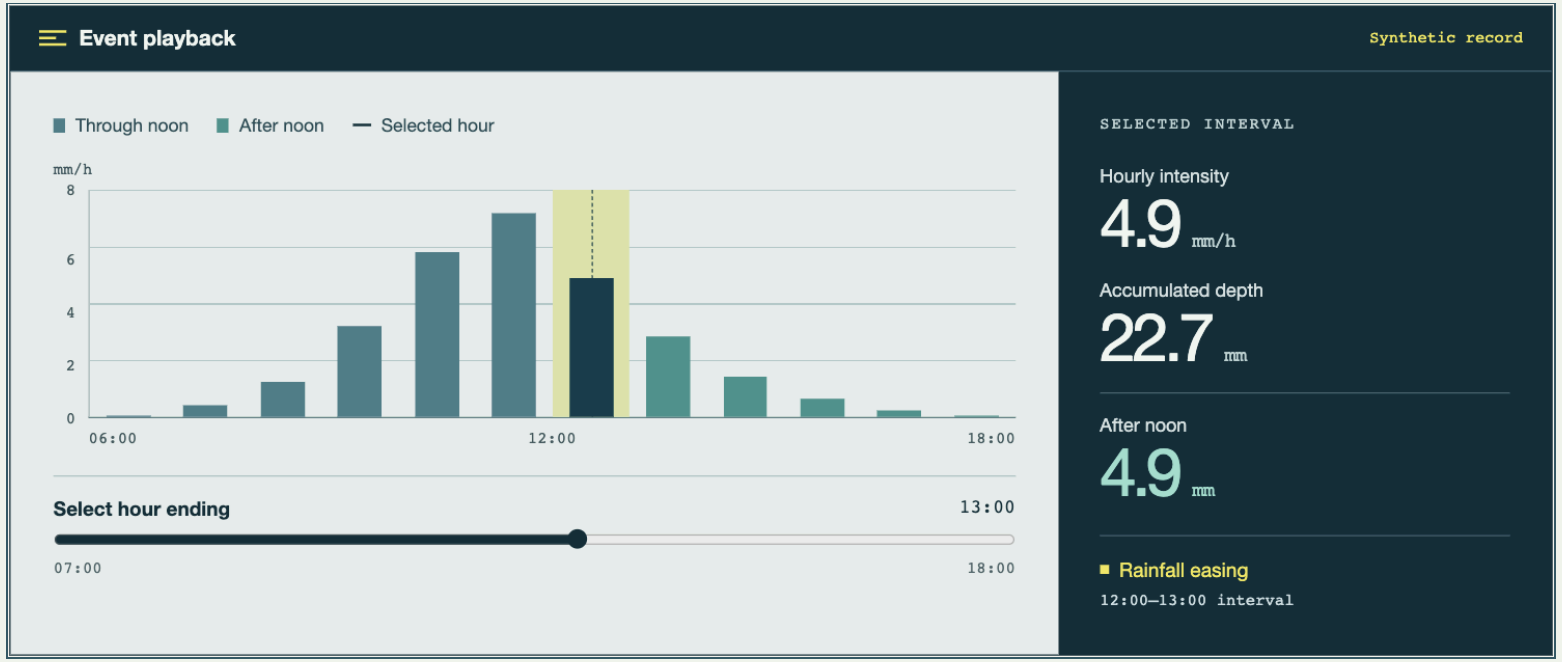
Independent design concept for Rain Intel

Record A / Synthetic rainfall / 06:00–18:00

What happens after the strongest hour?

A student sees a shorter bar at 13:00. Does that mean the storm has finished?

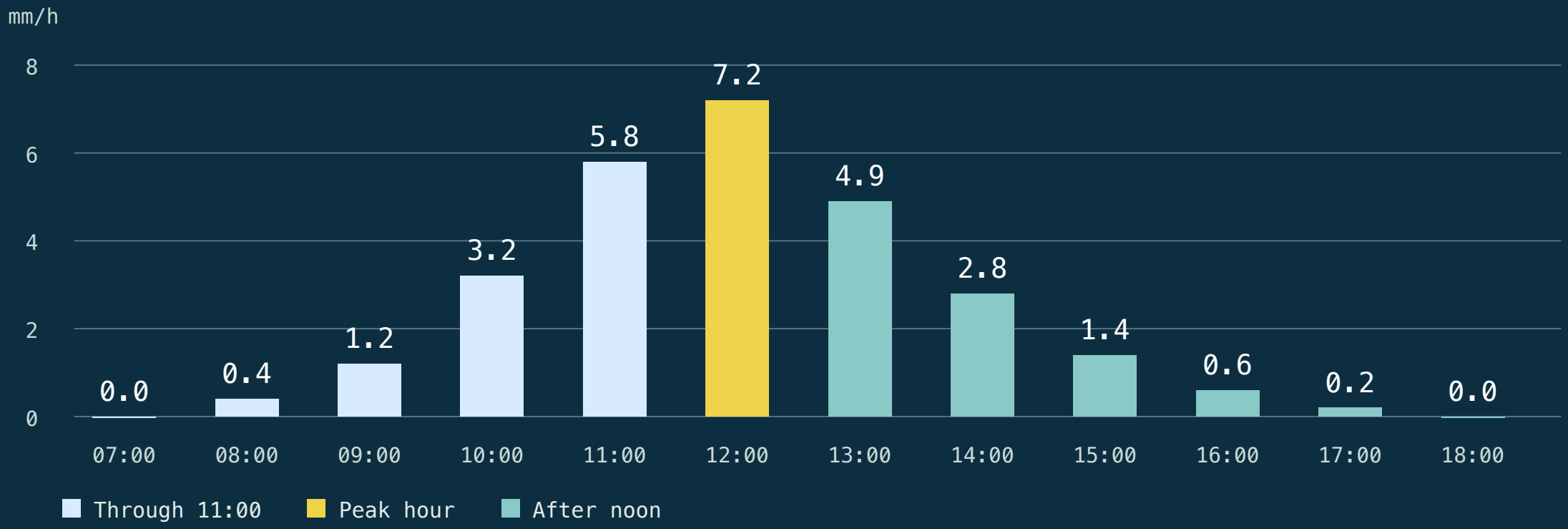
The instructor can ask for two readings from the same interval. The hourly rate has fallen to **4.9 mm/h**, while total depth has climbed to **22.7 mm**.



The working reader at 13:00 / Record A

Twelve hours on one scale

Each bar covers the hour ending at its label. Noon marks the tallest bar.



The browser adds the twelve depths in time order, using whole tenths of a millimetre.

Two readings at noon

HOURLY MEAN INTENSITY

7.2 mm/h

During the hour ending at noon, 7.2 mm fell over one hour.

`7.2 mm ÷ 1 h = 7.2 mm/h`

DEPTH SINCE 06:00

17.8 mm

The five earlier intervals had already contributed 10.6 mm.

`10.6 mm + 7.2 mm = 17.8 mm`

First six hourly depths, in mm 0.0 · 0.4 · 1.2 · 3.2 · 5.8 · 7.2

The six later hours added more water



2.7 mm more

Every later hourly rate was lower. Together those six hours brought the event from 17.8 mm at noon to **27.7 mm at 18:00**.

Recover the hour ending at 16:00

Cover the hourly column. How much rain fell between these two entries?

Time	Running depth
15:00	**26.9 mm**
16:00	**27.5 mm**

CHECK ON THE READER

0.6 mm

27.5 − 26.9 = 0.6

Select 16:00 or step forward with the arrow key. The one-hour mean is **0.6 mm/h**, and the afternoon tally is **9.7 mm**.



A FIELD EXERCISE TO TRY NEXT

Repeat the check with a real gauge record

Start by writing down the station, the date and the length of each interval. Flag gaps before adding the depths.

Record A uses twelve constructed values. An hourly total can support a mean rate, but it cannot reveal the exact minute the rain began or whether a short burst occurred.

CLASSROOM PROMPT

Ask a partner to reconstruct one hour using only the two neighbouring totals.