

Aroostook County, Maine has a model of the solar system built to scale by the students of the local high schools under the direction of UMPI. The models of the Sun, planets and dwarf planets stretch along nearly 100 miles of US Route 1.

(Jupiter and its moons are pictured here)

The scale of this model is 1:93,000,000

Given that scale, which segment best describes the size of Earth?



How fast would you have to move to travel across this model at the speed of light?

(Photo Credit: Michael York)



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$$\frac{7,917.5 \text{ miles} \times 5280 \text{ ft/mile} \times 12 \text{ in/ft}}{93,000,000}$$

$$93,000,000$$

$$\approx 5.4 \text{ inches (yellow segment)}$$

How fast would you have to move to travel across this model at the speed of light?

$$\frac{186,000 \text{ mi/sec.} \times 60 \text{ sec./min} \times 60 \text{ min/hour}}{93,000,000}$$

$$93,000,000$$

$$\approx 7.2 \text{ miles per hour}$$

(Photo Credit: Michael York)

