

GREENPEACE

TotalPollution

Data Fact - Calculation Method



STUDIO BIRTHPLACE

OIL PRODUCTION

Globally, we produced **93.848 million** barrels of oil every day in the year 2022 - [source](#) - or [this pdf: slide 15](#)
The 2023 figure is higher, but it fluctuates daily, therefore we avoided it. The 2022 number is fixed.

1 barrel = **159 liters** (158.987 to be precise) - [source](#)
93.848 million x 158.987 liters = **14,920,611,976 liters**
1 cubic meter (m³) = 1,000 liters
14,920,611,976 liters = **14,920,611.98 m³** of oil every day

	2022	Units
Global Oil Production	93.848	million barrels per day
Global Oil Production	14,920,611,976	litres / day
Global Oil Production	14,920,611.98	m³ / day



STADE DE FRANCE - DIMENSIONS

There is not much info on the measurements of Stade De France. We found these measurements online: [source](#)

- Wall To Wall Length: **320m**
- Wall to Wall Width: **280m**

However, the roof of the stadium is extended beyond the building itself. We checked the dimensions in Google maps (right).

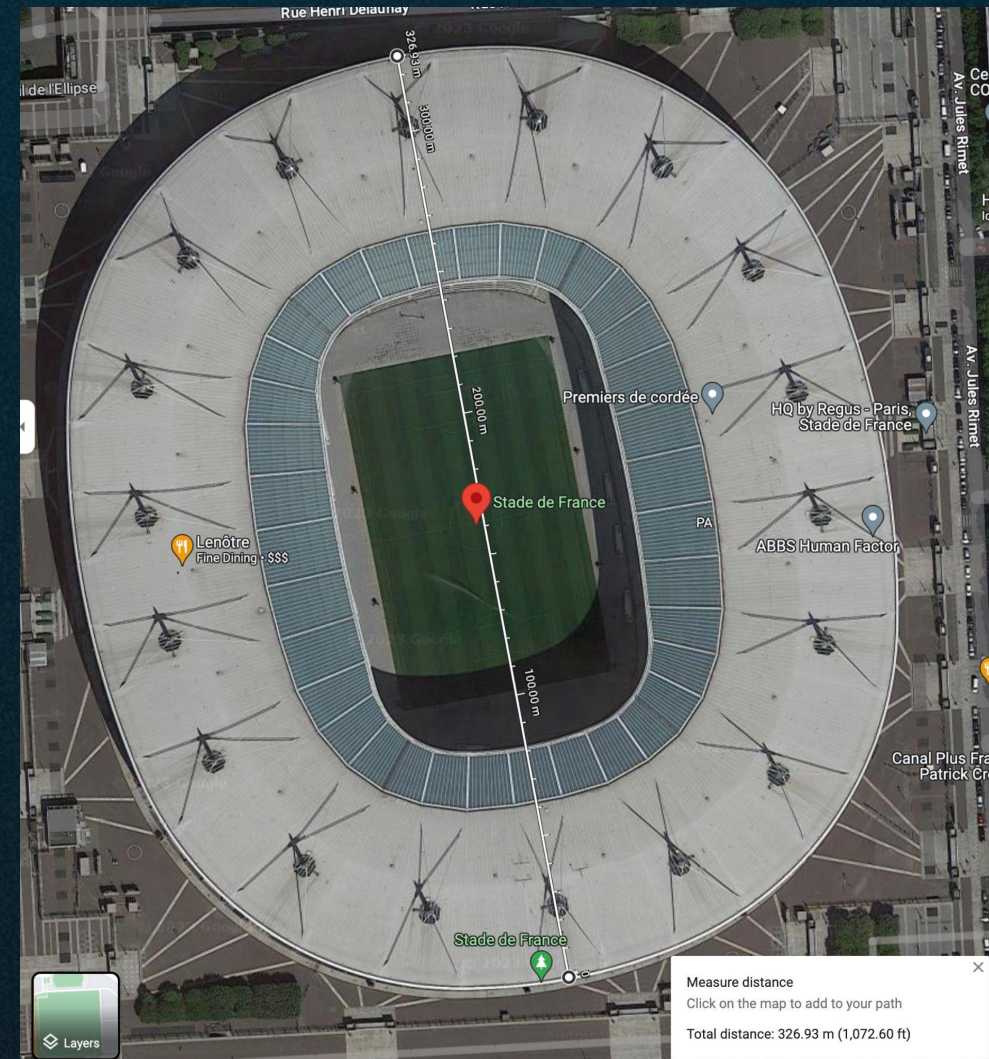
We matched our 3d model to both the wall to wall and extended roof measurements.

Regarding the height, we found 2 different sources:

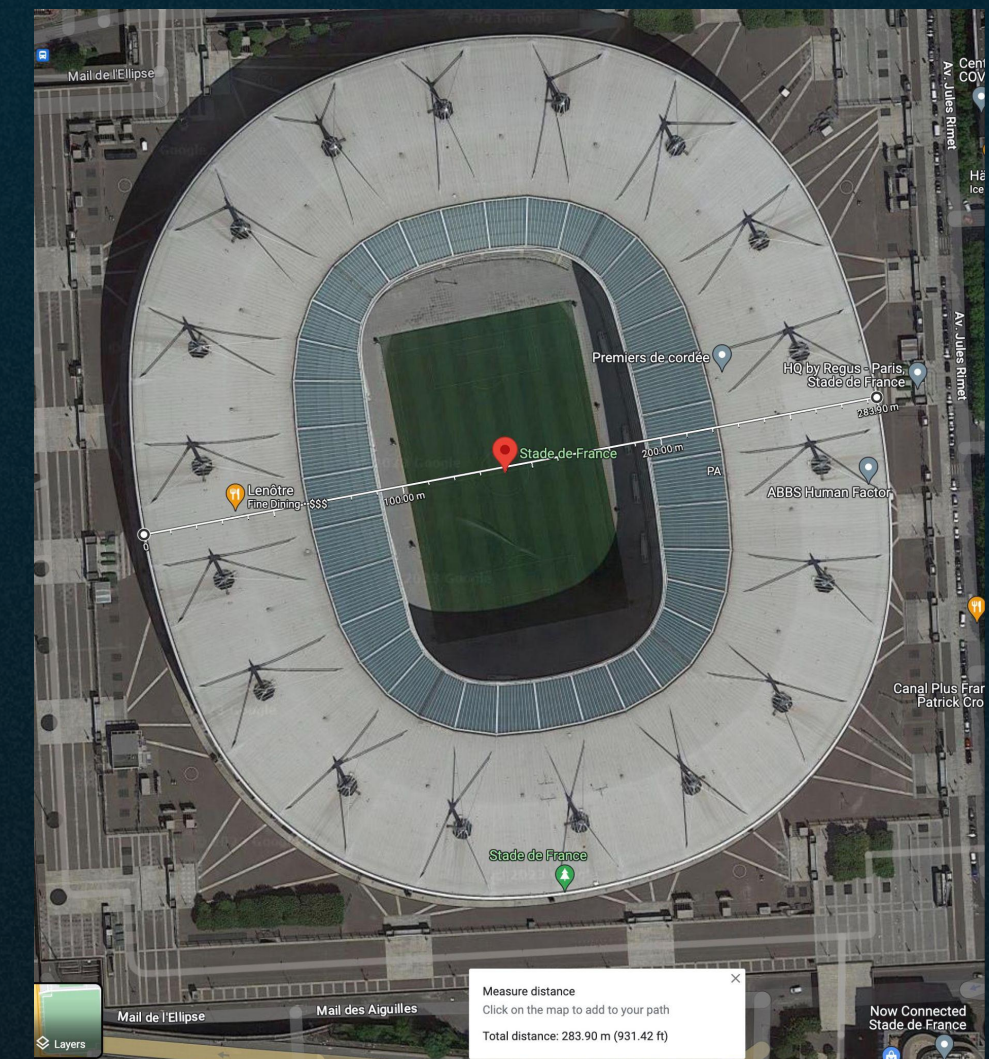
- Height: 42m - [source](#)
- Height: 46m - [source](#)

The roof is curved, the lower measurement likely is from the edge, and the higher measurement from the tallest point of the roof. The **46m** height matched our 3d model.

Extended Roof Length: **327m**



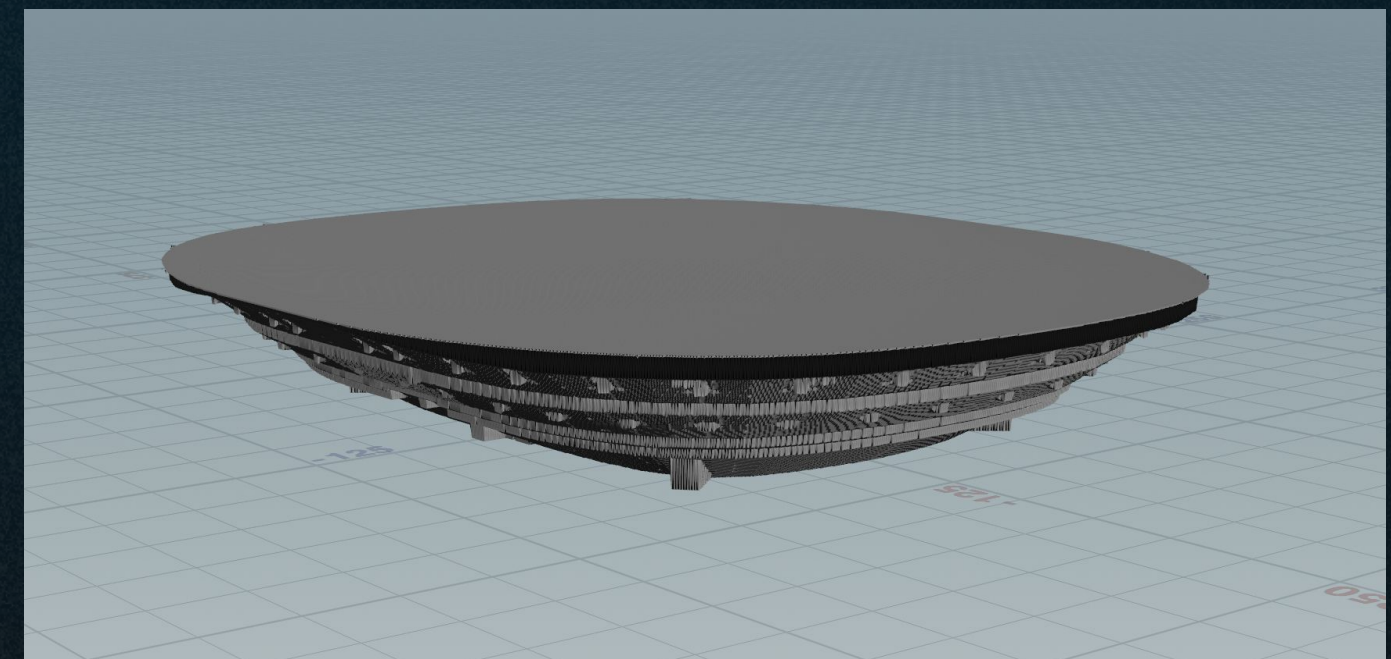
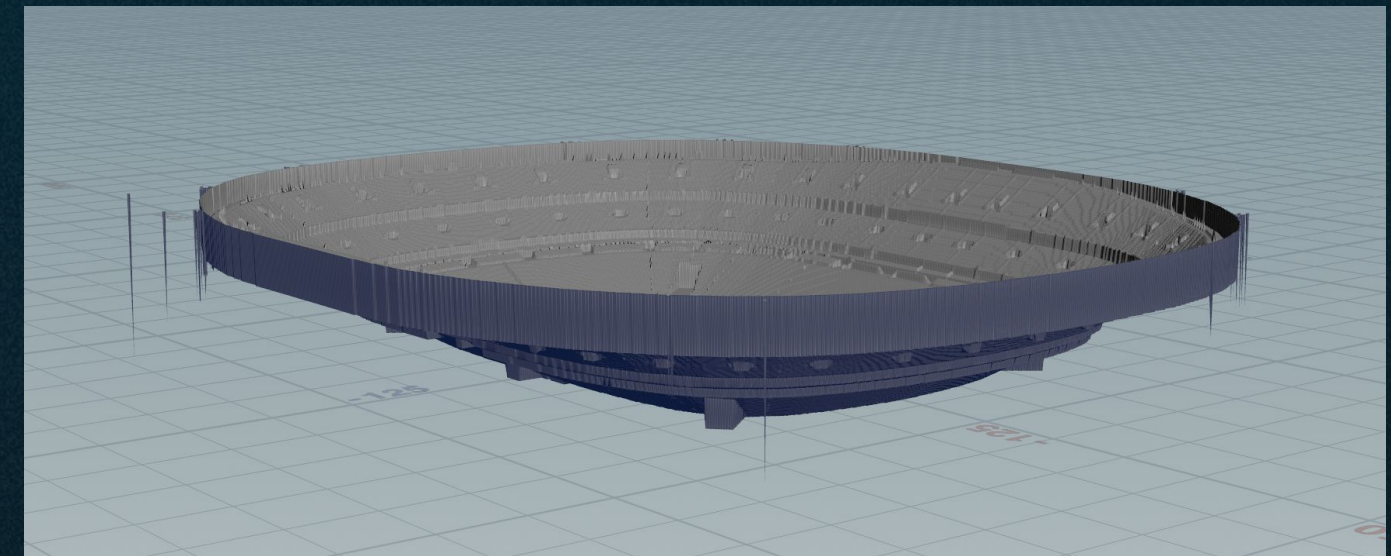
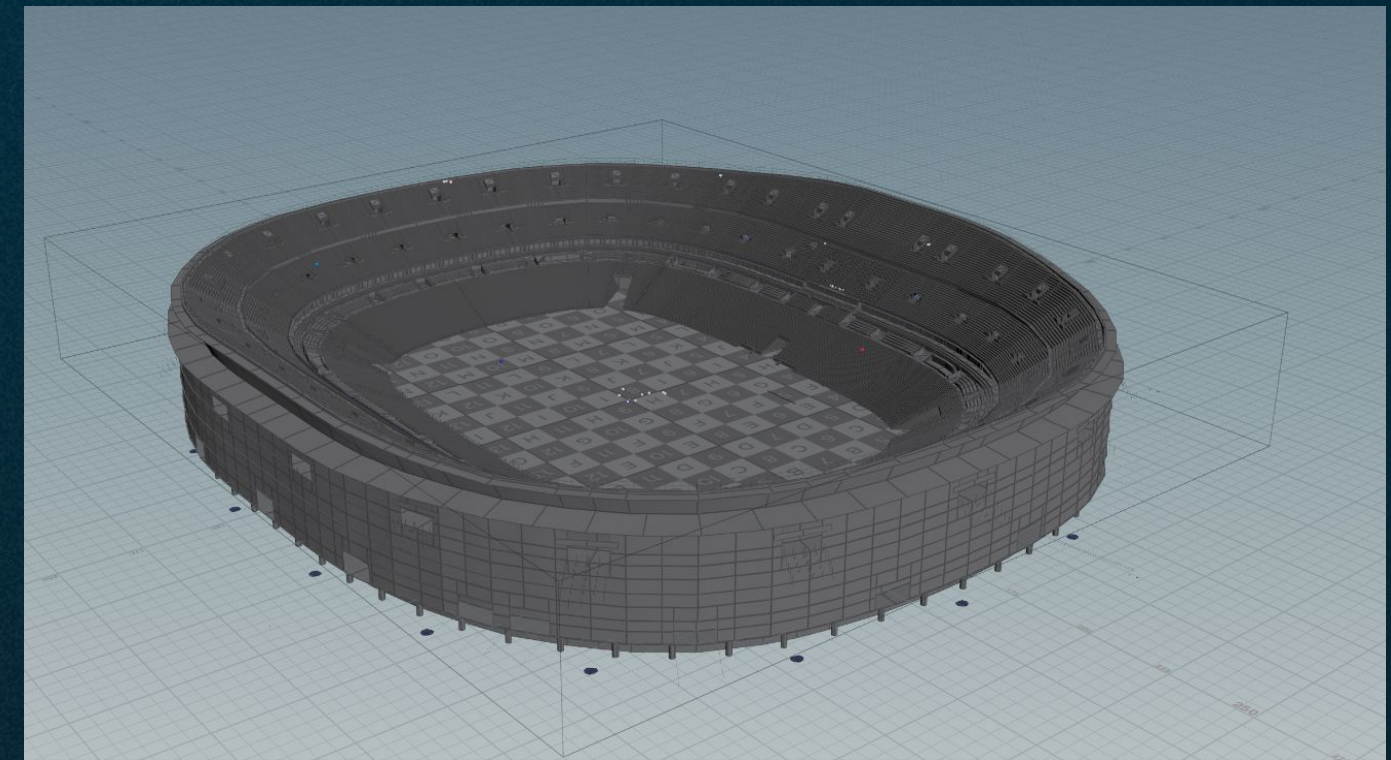
Extended Roof Width: **284m**



STADE DE FRANCE - CUBIC VOLUME

We took several steps to correctly define the cubic volume of Stade De France

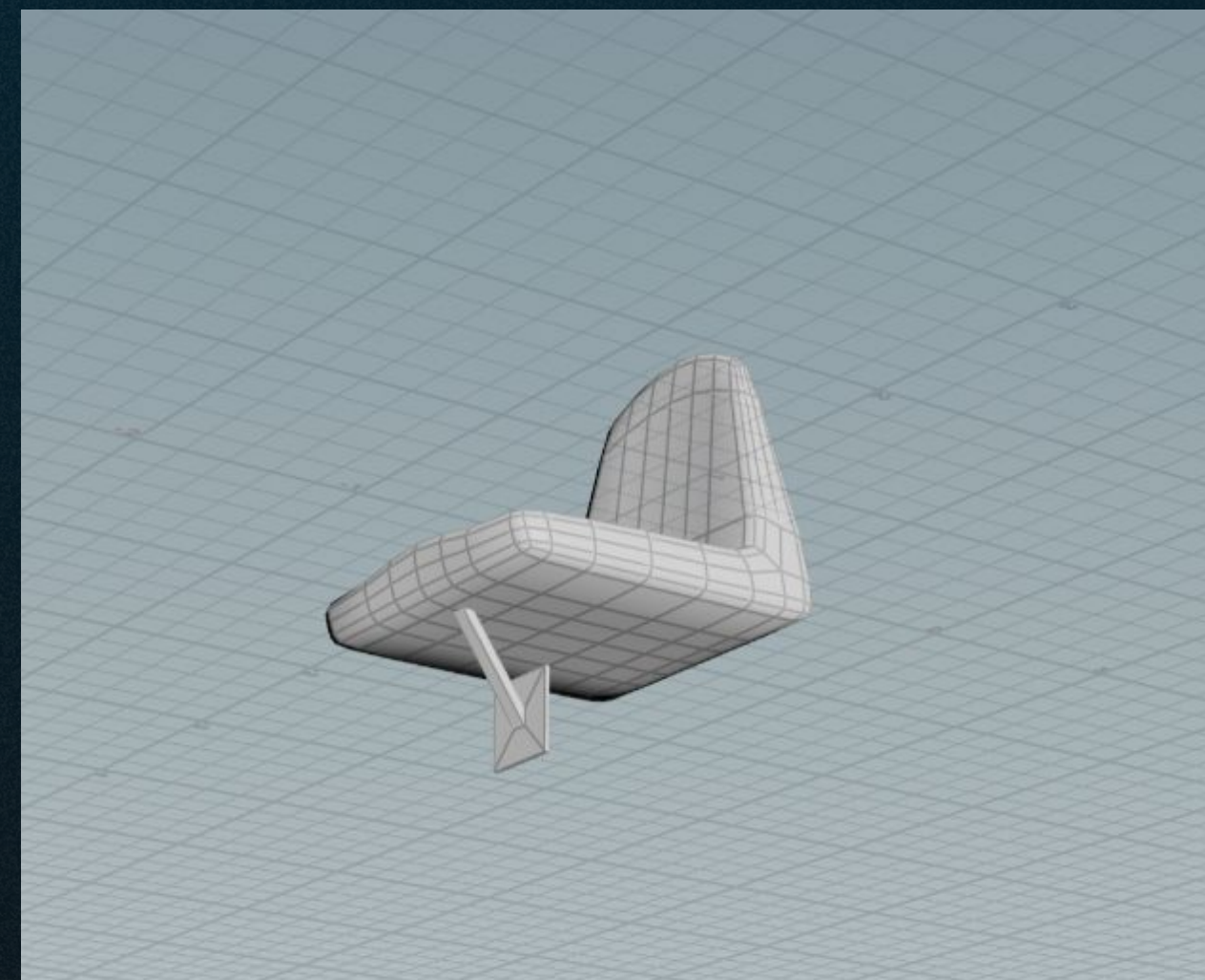
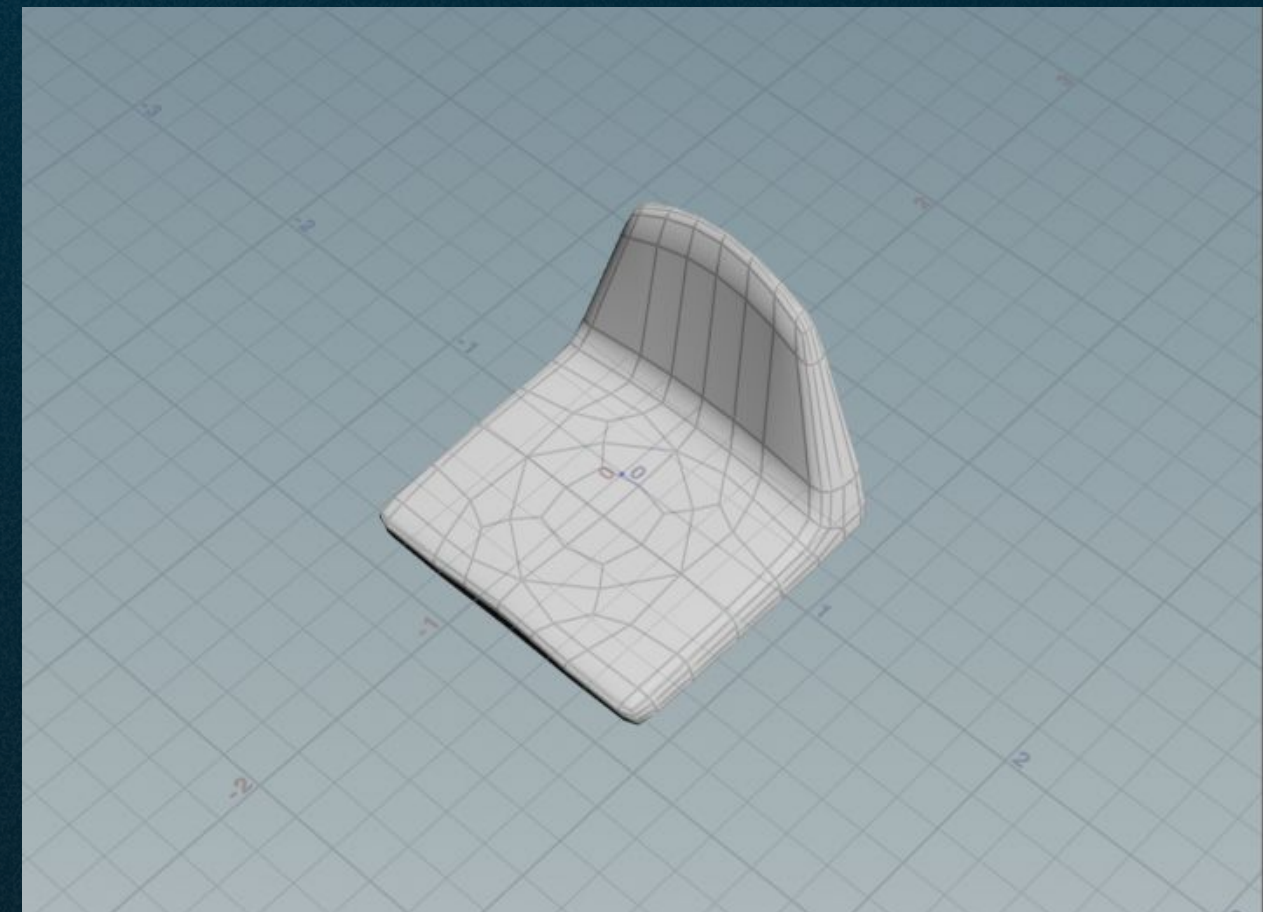
- If we were to go simply by the measurements of 320 x 280 x 46, then the cubic volume would be: 4.121.600 m³
- However, we have to consider the interior of the stadium like a bathtub. The stadium has rounded corners and there is a lot of dead space underneath the stands, which decreases the volume.
- We converted the stadium interior to a closed volume: hallways and gates were closed off.
- Also, the open space from the top of the stands up to the ceiling was closed.
- We then measured the volume of this 'closed bathtub' using our 3d software: **2,253,140 m³**



STADE DE FRANCE - CHAIRS

There are **80,698** chairs in Stade De France - [source](#)

- We measured the volume of a single chair. **0.0185693 m^3**
- $80,698 \text{ chairs} \times 0.0185693 \text{ m}^3$ is a total of: **$1,499 \text{ m}^3$**
- The last step was to subtract the total volume of the seats from the total volume of the stadium. The result is The result is $2,253,140 \text{ m}^3$ minus $1,499 \text{ m}^3$ is: **$2,251.641 \text{ m}^3$**



STADE DE FRANCE - FINAL VOLUME

- We now know that the 'bathtub volume' of the stadium is: $2,251.641 \text{ m}^3$
- And we know that the daily global oil production is $14,920,611.98 \text{ m}^3$
- $14,920,611.98 \text{ m}^3$ divided by $2,251.641 \text{ m}^3$ is **6.63**, meaning that Stade De France would be filled up 6.63 times per day.
- 24h divided by 6.63, means that the stadium is filled up every **3.62h**.
- 3.62h = **3 hours and 37 minutes**
- The correct line for our film is:

