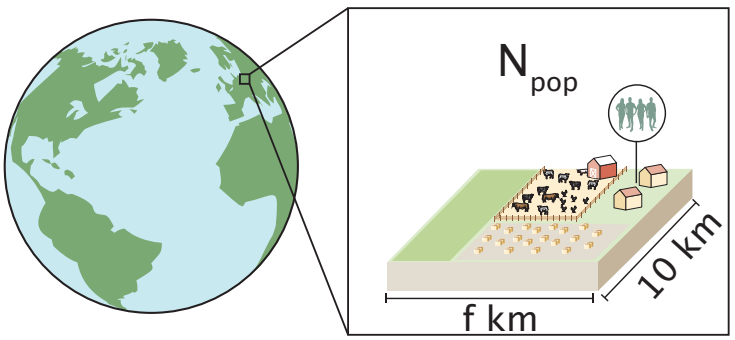
(A) RURAL POPULATION DENSITY ESTIMATE



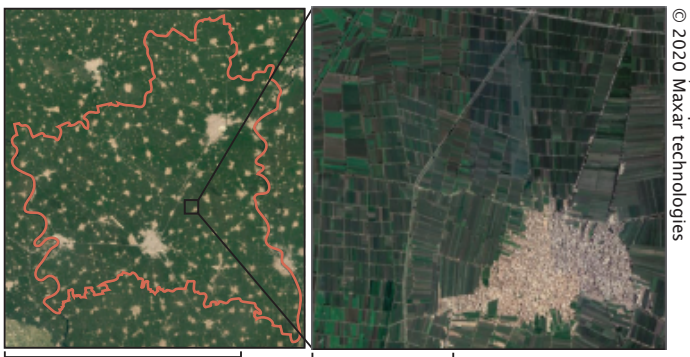
typical population, $N_{pop} \approx f \times 10^3$

typical area, $A \approx f \times 10\ km^2$

typical density, $\rho \approx \frac{N_{pop}}{A} \approx \frac{f \times 10^3\ people}{f \times 10\ km^2}$

$\approx 10^2\ people/km^2$

GHARBIA GOVENORATE, EGYPT



land area, $A \approx 2 \times 10^3\ km^2$

rural population, $N_{pop}^{(rural)} \approx 3 \times 10^6$

density, $\rho \approx \frac{2000\ people}{1\ km^2}$

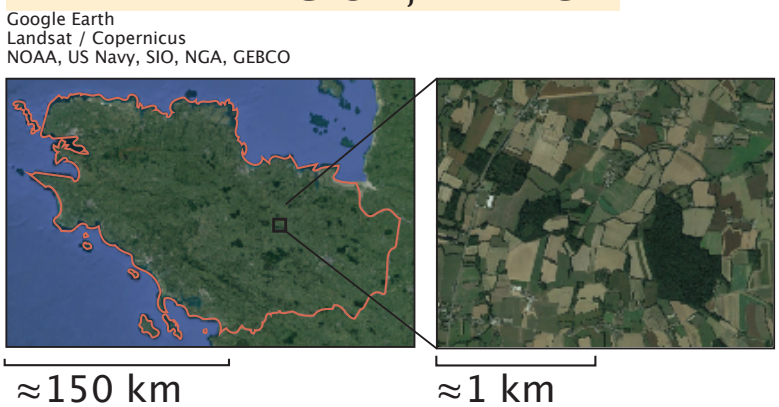
JIANGSU PROVINCE, CHINA

land area, $A \approx 7 \times 10^4\ km^2$

rural population, $N_{pop}^{(rural)} \approx 4 \times 10^7$

density, $\rho \approx \frac{600\ people}{1\ km^2}$

BRITTANY REGION, FRANCE

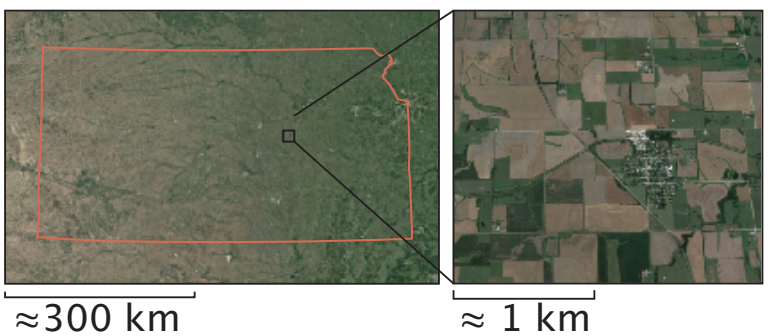


land area, $A \approx 3.5 \times 10^4\ km^2$

rural population, $N_{pop}^{(rural)} \approx 3 \times 10^6$

density, $\rho \approx \frac{85\ people}{1\ km^2}$

KANSAS STATE, USA



land area, $A \approx 2 \times 10^5\ km^2$

rural population, $N_{pop}^{(rural)} \approx 2 \times 10^6$

density, $\rho \approx \frac{10\ people}{1\ km^2}$