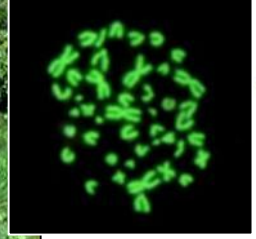
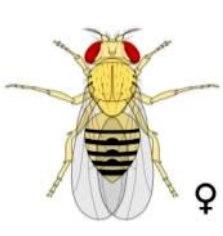
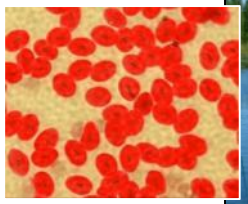





Question:

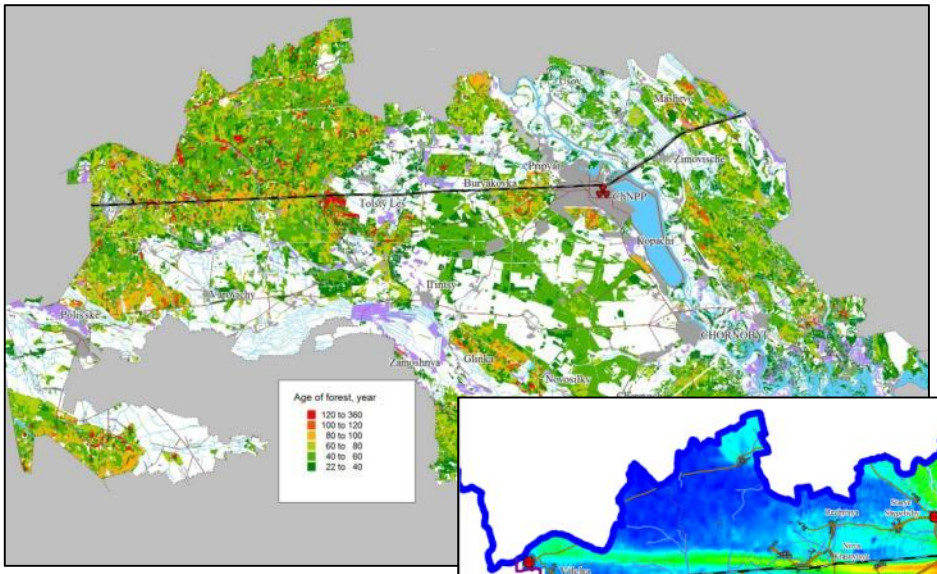
How our choice of study object, subject and methodology is appropriate to the conditions of Chernobyl area?

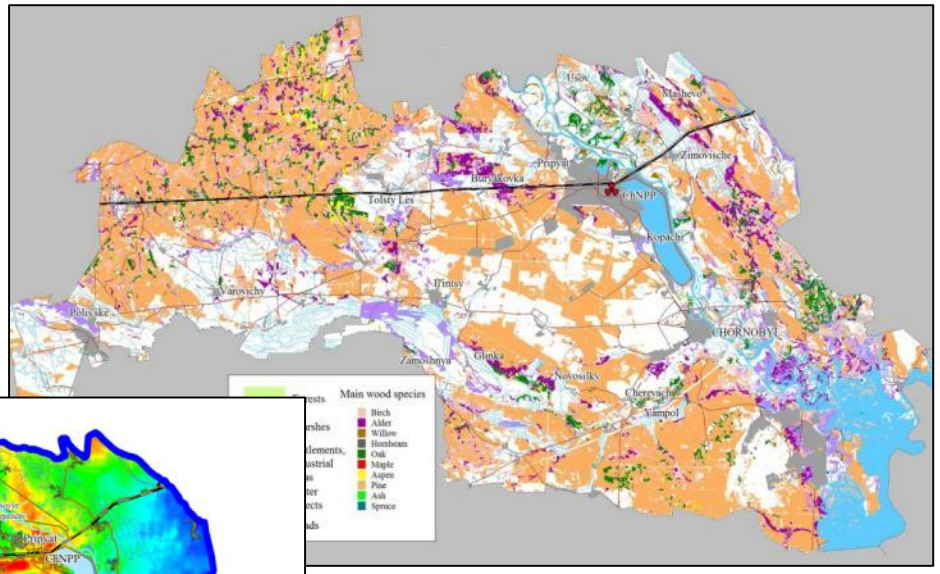
COMET

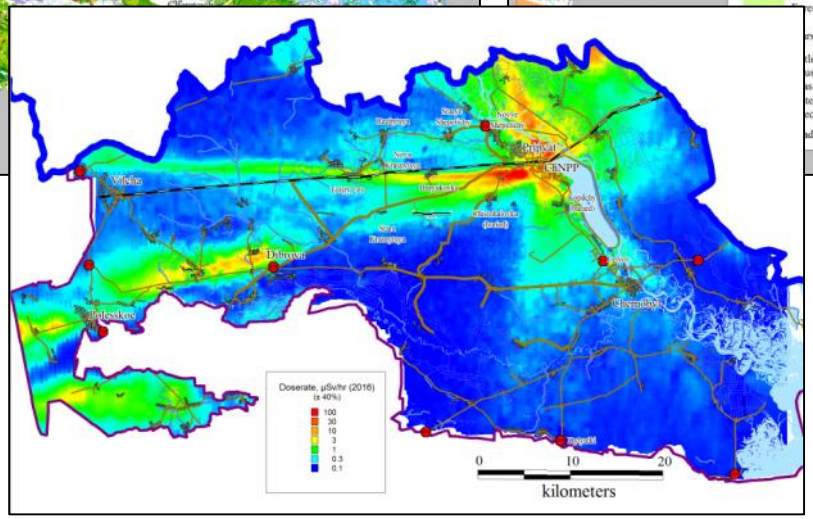
Chernobyl still provides opportunities to study radiation impact on wildlife

BUT!!!!

Elaborating design of ‘dose – effect’ study we have to remember: **Chernobyl is specific region with own set of components, conditions and relationships**



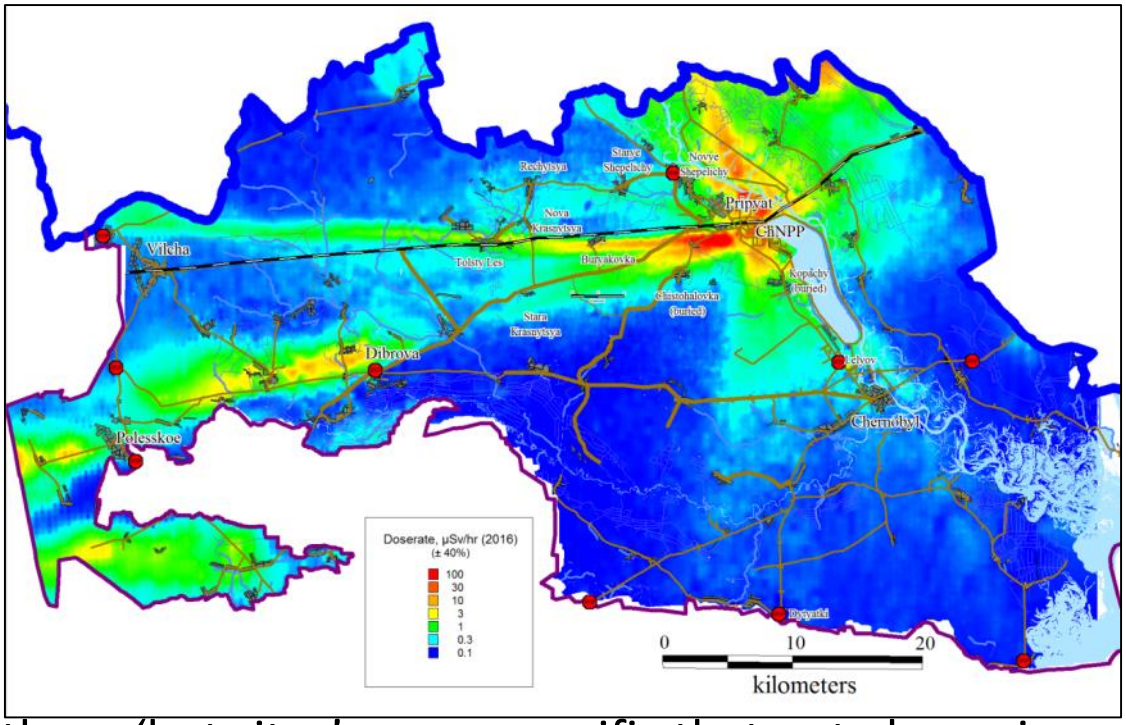




Hence we have to ask ourselves:

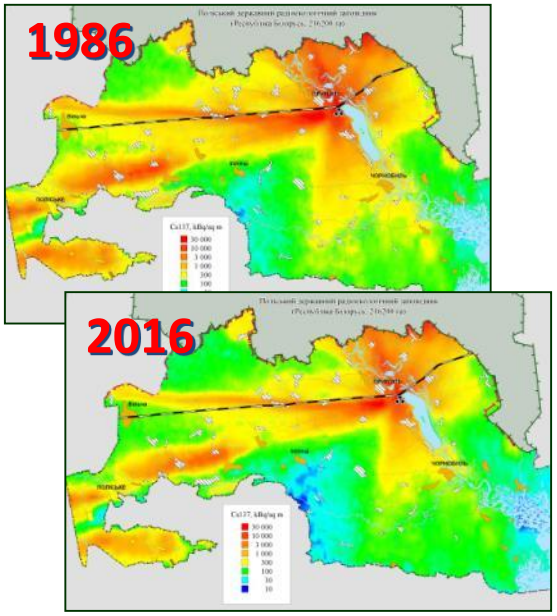
- **Is it your study system native or common for Chernobyl region?** Is it feasible to get significant sample of data over study period in every study sites?
- Are the any reasons to expect the effect in **the given biological system at the doses available in Chernobyl in the given period**? Are the any data supposing this at least in theory?

- **High contaminated areas** have naturally and **much smaller size** than the less or control ones
- As a result the ‘hot sites’ have very limited diversity of natural conditions, habitats, and hence – choice of potential study objects



- Moreover these ‘hot sites’ are so specific that not always is possible to find control (reference) sites with similar conditions (desired study system)
- For mobile species the fact of relatively small size suppose also both constant exchange of organisms (genes) with less contaminated areas and final mitigation of radiation impact on population.

- 30 years after the accident all local organisms live in conditions of **gradual significant decrease of radioactivity** (every next generation lives in softer conditions than the previous)
- All local organisms have **long-term experience of exposure to radiation**
- For the same contamination of the habitat **absorbed doses of local inhabitants depend on features of their ecology**, biology etc



Desiring a study in Chernobyl we always have to consider specificity of local:

- Soil
- Landscape (topography)
- Water regime (supply)
- Climate, weathering
- Plant communities
- Animal communities
- Natural history (both pre- and post accidental)
- Etc etc etc

COMET

"The situation is more complex than originally envisioned"