

# Priorities for the future (1)

- ❑ Long-term (>20 years), good quality ozone data required to assess trends
  - Understanding trends is necessary to understand LRT contributions - and the anthropogenic part of it.
- ❑ Determine main driving forces for changes in ozone profile and trends  
(e.g. 1960 – 2000: Emission changes only explain 30-50 % of ozone changes at baseline stations )
- ❑ Determine trends and projections (including climate dependent receptor scenarios) in ozone exposure proxies and impacts
- ❑ Europe: analyse changes of ozone concentration frequencies due to regional and extra-regional emission perturbations (HTAP 2)
- ❑ Apply new regional tools to global models to gain new insights and learn from regional differences (e.g. TOAR data: present to CLRTAP)
- ❑ Test if  $O_x$  ( $O_3+NO_2$ ) can facilitate understanding of trends & attribution

# Priorities for the future (2)

- ❑ Vegetation: flux-based approach (allows incorporation CC & N interactions):
  - Identification of crops, ecosystems and regions/areas globally most vulnerable to ozone pollution and climate change (including extreme events); impacts on biodiversity
  - Collate evidence; need for experiments with current O<sub>3</sub> profile;
  - Inform agricultural community (primarily interested in soil moisture and N impacts) of ozone impacts on crop yield
  
- ❑ Mediterranean: apply Med.-specific flux-effects relationships and model parameterisation in risk assessments (e.g. EMEP model)
  - Effect soil moisture important
  - EMEP/WGE working group to assess feasibility and scope
  
- ❑ Health: New indicator required for chronic ozone impacts: SOMO10 or continue with SOMO35? Evidence needed to support indicator.

# Additional comments

- ❑ Can we do more in Europe to mitigate ozone concentrations and impacts?
  - Yes, but comes at a cost
  - What can we learn more from past data to improve predictions in the future (e.g. Eurodelta trend analysis)?
  - Translate concentration/deposition trends into impacts, and for both assess % contribution from local pollution and from baseline/LRT.
- ❑ Imbalance in progress made with LRT modelling and data we have for impacts for current ozone profile (many impacts data from 1970s/80s which high ozone peaks, not enough data on impacts of rising baseline concentration).
- ❑ Don't forget how ozone impacts on vegetation feed back to the climate and surface ozone concentrations