

International Workshop on “fine-scale rainfall estimation”

Leuven, 16 April 2012



Workshop topics

- Topic 1: X-band and C-band radar calibration : methods and experiences
- Topic 2: X-band versus C-band performance : experiences
- Topic 3: Integration of X-band, C-band and rain gauge measurements : methods and experiences
- Topic 4: Fine-scale rainfall estimation : recommendations and guidelines



Workshop focus

- On interfacing between radar meteorology / technology and application in urban hydrology
- On high resolution radar (X-band, super-resolution C-band) and interfacing with larger scale C-band
- On fine-scale rainfall estimation (later workshop: nowcasting/forecasting and integration with NWP)
- On interfacing between research and practise



Workshop topics

- Topic 1: X-band and C-band radar calibration : methods and experiences
 - 1.1. calibration of reflectivity, differential reflectivity, differential phase, ... single vs. dual polarization
 - 1.2. adjustment to rain gauges: useful? methods? experiences?
 - 1.3. monitoring/maintenance of the radar system (e.g. routine checks of radar parameters & variables)



Workshop topics

- Topic 2: X-band versus C-band performance : experiences
 - 2.1 limitations/differences of X-band and C-band radars in rain rate estimation performance: influence of attenuation, clutter, maximum effective range, detection capability, stability, ...
 - 2.2 accuracy estimation of rain rate estimation (e.g. taking rain gauge observations as reference?) methods? typical results?



Workshop topics

- Topic 3: Integration of X-band, C-band and rain gauge measurements : methods and experiences
: methods to merge different rainfall products from different sources (X-band, C-band and rain gauges) to come to a most reliable fine-scale rainfall estimate for urban drainage applications
 - 3.1 mosaicking radars of different wavelengths, with focus on nesting Xpol in Cpol
 - 3.2 radar - rain gauge merging



Workshop topics

- Topic 4: Fine-scale rainfall estimation : recommendations and guidelines
: formulate general conclusions, based on the outcomes from the discussions on topics 1, 2 and 3. I will prepare an outline with main recommendations during the workshop, to be further discussed at the end of the workshop

