

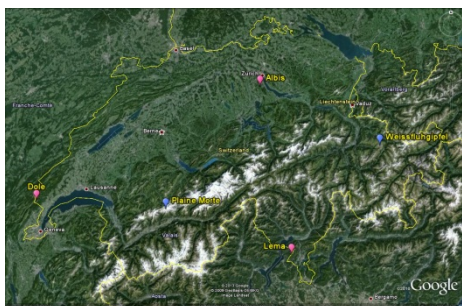


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RAD4ALP, THE NEW SWISS DOPPLER POLARIMETRIC WEATHER RADAR NETWORK: DATA QUALITY AND FIRST RESULTS

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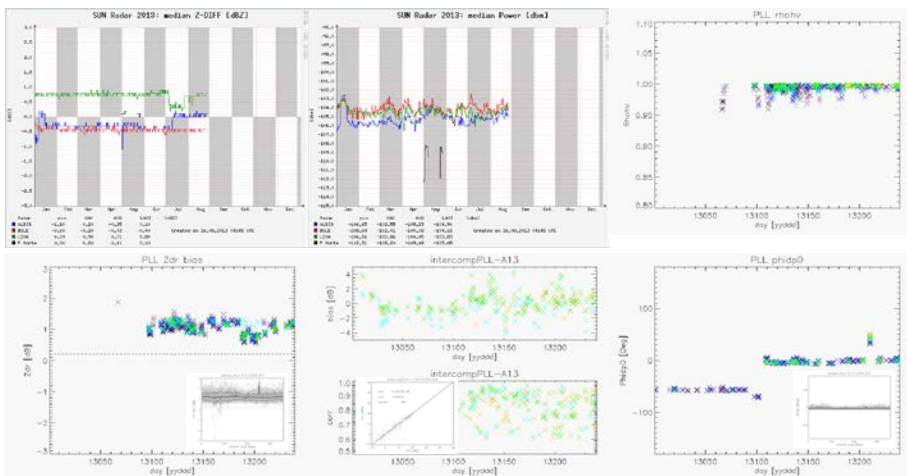
Salient Aspects

- Full access to source code
- 2 new radar sites: Better Coverage
- ROEL: Better Sensitivity
- Polarimetry: Better Accuracy
- Central Processing: Increased Flexibility
- Parallel Processing chains



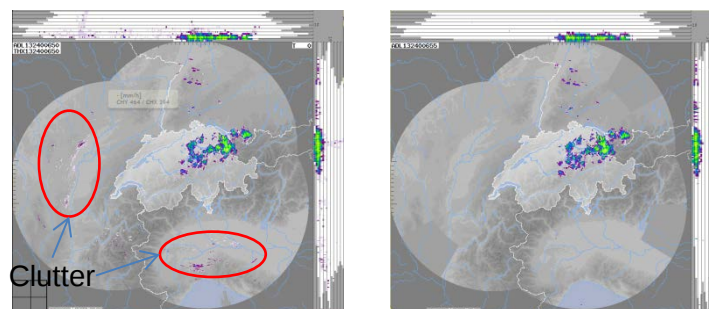
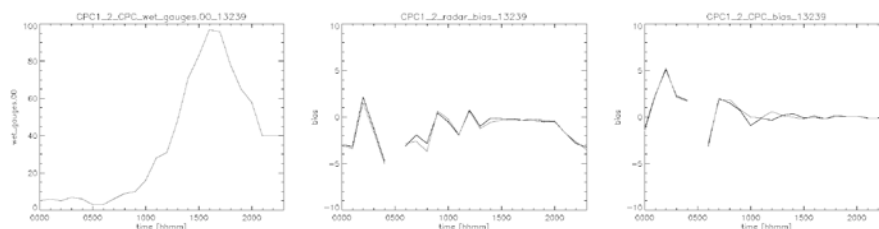
Monitoring

- Sun hits, polarimetric variables and Z_h inter-comparison used
- Good stability, No radome influence, good antenna characteristics



Polarimetry in Clutter Suppression

- DT Filter adapted to use polarimetry
- New criteria based on thresholds on ρ_{HV} , Z_{dr} in low Z_h and textures of ρ_{HV} , Z_{dr} , ϕ_{DP} and Z_h



Conclusions:

- Monitoring Tools implemented
- Clutter Suppression improved without impacting QPE
- Data quality satisfactory

Outlook:

- Use polarimetry in QPE
- Hydrometeor classification