

Discussion on System & Verification Aspects

- OOPS
- Phasing & system maintenance
- Optimisation, efficiency, benchmarking
- System intercomparison, verification
- Interoperability

OOPS

- Timeline/Organisation form unclear
 - a wish for synchronisation so that partners are not left behind along the road
- The topic will be dealt with during the coordination meeting in June

Phasing, system maintenance

- Positive feeling on improved phasing condition
- Phasing: HIRLAM intends to act more by extended and early participation
 - 2 x 2 person/weeks at each phasing + remote contribution
- Problems with uninitialised variables
 - The problem is known. Solving the problem maybe a huge task but a good manner propagation is called for. Bound check and NaN option not sufficient.
- Use of 1D model?
 - Available in Mitrallette but not updated per cycle
- Portability issues etc.
 - HIRLAM adaptation often starts with seeing problem at ECMWF platform. Problem with B-level parallelisation etc. Benifit of dealing with some of the typical portability issues at early stage.
- HIRLAM aim to spend more efforts to make alive mitrallet at C1A
- CY36T1 aimed for extended quality check. 36T2 will be seen as a technical cycle by HIRLAM
- What are reference cycles?
 - ECMWF/partners: CY3x: CY 36r2 -> CY 36t1
 - ALADIN/HIRLAM: CY3xTy: CY36T1bf5 -> HARMONIE 36h1.x
- Coding norms to be updated with OOPS

Optimisation, efficiency, benchmarking

- How can AROME be made faster?
 - OpenMP for SURFEX interface a high priority
- o/i need restructuring, especially the gathering of fields
 - In longer run probably, instead of FA, writing to more than one single PE (e.g. use of GRIB/FDB).
 - Changing of field format is not a trivial matter, (design work/operational constraint?)
 - Solution to be discussed between specialists
- Benchmark and profiling
 - An interest group and discussion suggested
 - Agree on shared data set, namelist. (FMI, AEMET, met.no problemsize, MF with RAPS...)
 - Share of scripts & tools associated with Dr Hook profiling

Monitoring & Comparison

- LACE has a database with pre-extracted data. The database is maintained but not active
 - HIRLAM may take a look at the used data format and produce sample
- Ongoing bilateral talk about testing common software among some partners for
 - Sanity check; looking at usability for extended context
- Care needed to avoid overly demanding data exchange or overlapp with similar activities

Interoperability

- ALADIN interoperability tools on HIRLAM -
> ALADIN conversion interesting for HIRLAM. The latter has gl tool as starting point. Interoperability convergence with tools to be kept in mind.