



*An overview of operational ALADIN applications
January 2005*

1. Model characteristics

| Partner <i>Model</i> | Δx (km) | L | Δt (s) | Gridpoints C+I / C+I+E | Grid type | SW corner (lat , lon) | NE corner (lat , lon) | Coupling model |
|---------------------------------|--------------------|----|-------------------|---|--|----------------------------------|----------------------------------|--------------------------|
| AUSTRIA | 9.6 | 45 | 415 | 289 × 259 300 × 270 | quadratic | 33.99N, 2.17E | 55.62N, 39.07E | ARPEGE |
| BELGIUM <i>BE</i> | 7.0 | 41 | 300 | 229 × 229 240 × 240 | linear | 43.17N, 5.84W | 57.25N, 17.08E | ALADIN- FRANCE ARPEGE |
| BULGARIA <i>BG</i> | 12.0 | 41 | 514 | 79 × 63 90 × 72 | quadratic | 39.79N, 20.01E | 46.41N, 31.64E | ARPEGE |
| CROATIA <i>LACE</i> | 12.2 | 37 | 514 | 229 × 205 240 × 216 | quadratic | 33.99N, 2.18E | 55.62N, 39.08E | ARPEGE |
| CROATIA <i>HRn8</i> | 8.0 | 37 | 327 | 169 × 149 180 × 160 | quadratic | 39.00N, 5.25E | 49.57N, 22.30E | ALADIN-LACE |
| <i>CROATIA Dyn Adap (6)</i> | 2.0 | 15 | 60 | 72 × 72 80 × 80 | <i>Senj, Karlovac, Maslenica, Split, Dubrovnik, Osijek</i> | | | <i>ALADIN-HRn8</i> |
| CZECH R. <i>CE</i> | 9.0 | 43 | 360 | 309 × 277 320 × 288 | linear | 33.99N, 2.18E | 55.62N, 39.08E | ARPEGE |
| FRANCE | 9.5 | 41 | 415 | 289 × 289 300 × 300 | linear | 33.14N, 11.84W | 56.96N, 25.07E | ARPEGE |
| HUNGARY <i>HU</i> | 6.5 | 37 | 270 | 421 × 373 432 × 384 | quadratic | 34.15N, 2.35E | 55.3N, 38.7E | ARPEGE |
| <i>HUNGARY Dyn Adap</i> | 2.4 | 15 | | 239 × 169 250 × 180 | | | | <i>ALADIN-HU</i> |
| MOROCCO <i>NORAF</i> | 31 | 37 | 900 | 189 × 289 200 × 300 | quadratic | 1.93S, 35.35W | 44.86N, 57.22E | ARPEGE |
| MOROCCO <i>ALBACHIR</i> | 16.7 | 37 | 675 | 169 × 169 180 × 180 | quadratic | 18.13N, 19.99W | 43.11N, 9.98E | ALADIN-NORAF |
| POLAND | 13.5 | 31 | | 169 × 169 180 × 180 | quadratic | 41.42N, 5.56E | 61.16N, 40.19E | ARPEGE |
| PORTUGAL | 12.7 | 31 | 600 | 79 × 89 90 × 100 | quadratic | 34.94N, 12.42W | 44.97N, 0.71W | ARPEGE |
| ROMANIA | 10.0 | 41 | | 89 × 89 100 × 100 | quadratic | 41.91N, 20.68E | 49.80N, 32.12E | ARPEGE |
| <i>ROMANIA Dyn Adap (2)</i> | 2.5 | 26 | 60 | 89 × 109 / 100 × 120 89 × 89 / 100 × 100 | | 43.47N, 27.88E 44.50N, 23.61E | 45.90N, 30.67E 46.48N, 26.43E | <i>ALADIN-Romania</i> |
| SLOVAKIA <i>SHMU</i> | 9.0 | 37 | 400 | 309 × 277 320 × 288 | quadratic | 33.99N, 2.19E | 55.63N, 39.06E | ARPEGE |
| SLOVENIA <i>SI</i> | 9.5 | 37 | 400 | 258 × 244 270 × 256 | quadratic | 34.00N, 2.18E | 54.82N, 33.37E | ARPEGE |
| <i>SLOVENIA Dyn Adap</i> | 2.5 | 17 | 60 | 148 × 108 160 × 120 | 44.57 N, 12.18 E – 46.98N, 16.92E | | | <i>ALADIN-SI</i> |
| TUNISIA | 12.5 | 41 | 568 | 117 × 151 120 × 162 | quadratic | 27.42N, 2.09E | 44.16N, 18.37E | ARPEGE |

2. Practical implementation

| Partner / Model | Computer / Proc. | Library | Forecast/ Coupling | Other applications |
|----------------------------|-----------------------|---------|--|--|
| AUSTRIA | SGI Origin 3400 28 | AL25T2 | <ul style="list-style-type: none"> • 48h forecast twice a day • synchronous 3h-coupling | <ul style="list-style-type: none"> • post-processing every 1h |
| BELGIUM <i>BE</i> | SGI Origin 3400 16 | AL25T2 | <ul style="list-style-type: none"> • 60h forecast twice a day • synchronous 3h-coupling | <ul style="list-style-type: none"> • post-processing every 1h |
| BULGARIA <i>BG</i> | LINUX PC 2 | AL25T1 | <ul style="list-style-type: none"> • 48h forecast twice a day • synchronous 6h-coupling | <ul style="list-style-type: none"> • post-processing every 3h |
| CROATIA <i>LACE</i> | SGI Origin 3400 16 | AL25T1 | <ul style="list-style-type: none"> • 48h forecast twice a day • synchronous 3h-coupling | <ul style="list-style-type: none"> • post-processing every 3h |
| CROATIA <i>HRn8</i> | SGI Origin 3400 16 | AL25T1 | <ul style="list-style-type: none"> • 48h forecast twice a day • synchronous 3h-coupling | <ul style="list-style-type: none"> • post-processing every 3h • dynamical adaptation of wind |
| CZECH R. <i>CE</i> | NEC SX6B 4 | AL25T1 | <ul style="list-style-type: none"> • 54h forecast twice a day • synchronous 3h-coupling | <ul style="list-style-type: none"> • post-processing every 1h • hourly diagnostic analyses • dfi-blending |
| FRANCE | VPP 5000 2 | AL28T2 | <ul style="list-style-type: none"> • 4 or 5 forecasts a day, up to 54 h max. • synchronous 3h-coupling | <ul style="list-style-type: none"> • post-processing every 1h • coupling files every 3 hours • hourly diagnostic analyses |
| HUNGARY <i>HU</i> | IBM p655 32 | AL15 | <ul style="list-style-type: none"> • 48h forecast once a day • synchronous 3h-coupling | <ul style="list-style-type: none"> • post-processing every 1h • hourly diagnostic analyses • dynamical adaptation of wind |
| MOROCCO <i>NORAF</i> | IBM RS6000 SP | AL25T1 | <ul style="list-style-type: none"> • 72h forecast twice a day • lagged 6h-coupling | <ul style="list-style-type: none"> • post-processing every 6h |
| MOROCCO <i>ALBACHIR</i> | IBM RS6000 SP | AL25T1 | <ul style="list-style-type: none"> • 72h forecast twice a day • synchronous 3h-coupling | <ul style="list-style-type: none"> • post-processing every 3h |
| POLAND | SGI Origin 2000 8 | AL15 | <ul style="list-style-type: none"> • 48h forecast twice a day • synchronous 6h-coupling | <ul style="list-style-type: none"> • post-processing every 3h |
| PORTUGAL | DEC Alpha XP1000 | AL12 | <ul style="list-style-type: none"> • 48h forecast twice a day • synchronous 6h-coupling | <ul style="list-style-type: none"> • post-processing every 1h |
| ROMANIA | SUN Ent. 4500 | AL15 | <ul style="list-style-type: none"> • 48h forecast twice a day • synchronous 6h-coupling | <ul style="list-style-type: none"> • post-processing every 3h • dynamical adaptation of wind |
| SLOVAKIA <i>SHMU</i> | IBM p690 32 | AL25T2 | <ul style="list-style-type: none"> • 48h forecast twice a day • synchronous 3h-coupling | <ul style="list-style-type: none"> • post-processing every 1h |
| SLOVENIA <i>SI</i> | LINUX Cluster 22 | AL25T1 | <ul style="list-style-type: none"> • 48h forecast twice a day • synchronous 3h-coupling | <ul style="list-style-type: none"> • post-processing every 1h • dynamical adaptation of wind & precipitations |
| TUNISIA | IBM p690 | AL26T1 | <ul style="list-style-type: none"> • 48h forecast twice a day • synchronous 3h-coupling | <ul style="list-style-type: none"> • post-processing every 3h |

3. Porting new versions

Most teams have started or are now starting to update their operational libraries, moving to cycles 28T1 or 28T3. Here is the present status.

Let's recall that useful informations are available in the previous Newsletter and in the mail

sent par Maria DERKOVA on December 1st.

| Partner | AL28T1 | AL28T3 | |
|----------|--|----------------------------|--------|
| Austria | ported | | |
| Belgium | ported | pre-operational validation | |
| Bulgaria | ported | ported | |
| Croatia | both ported, but the availability and the cost of Prague's physics may prevent from an upgrade of operations | | |
| Czech R. | ported | pre-operational validation | |
| France | ported | 28T2 operational | ported |
| Hungary | ported | | |
| Morocco | pre-operational validation | | |
| Poland | should start in March (once more CPUs available) | | |
| Portugal | no | no | |
| Romania | ported | pre-operational validation | |
| Slovakia | ported | pre-operational validation | |
| Slovenia | ported (or nearly) | | |
| Tunisia | ported | | |

4. Conclusion

These tables are temporary ones, since significant changes in operations are scheduled for the next months by many partners. More details hereafter !

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