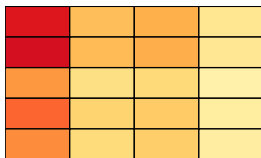
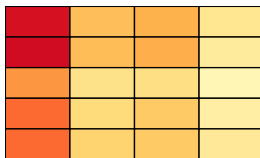


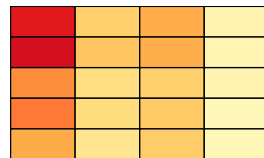
overall



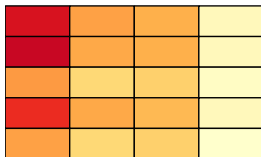
Europe:France



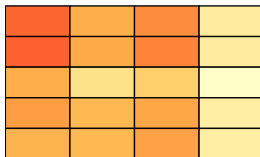
Europe:Germany



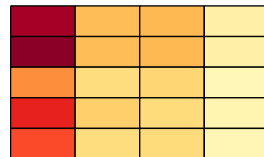
Europe:Italy



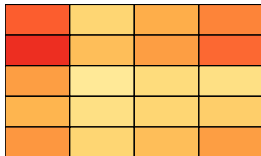
Europe:UK



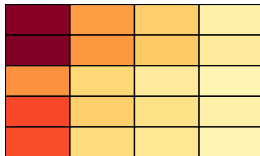
Europe:others



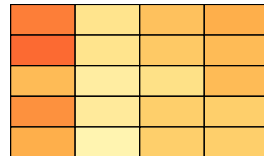
Japan



Russia



USA



Q17*:MPI Aspects

| | | | | |
|----------------|-----|------|------|-----|
| Point-to-point | 0 | 0.47 | 0.95 | 1.4 |
| Collectives | 1.9 | 2.4 | 2.8 | 3.3 |
| Communicator | 3.8 | 4.3 | 4.7 | 5.2 |
| Datatypes | 5.7 | 6.1 | 6.6 | 7.1 |
| with OpenMP | 7.6 | 8 | 8.5 | 9 |

Apps

Parallelize

Tuning

OS/R

Q8*:Role