
WGNE Computer table

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Overview

- Computer upgrades since last year
- Forecast system upgrades since last year
- Discussion items

Many thanks to all contributors! The list is significantly more complete than last year.



- **DWD: +30% nodes for NEC SX Aurora**
- **HMC (Russia): T-Platforms V6000 replaces old SGI and RSC Tornado computers; in addition, Cray XC40 is in operation**
- **NRL: SGI 8600 replaces Dell; HPE/Cray EX is going to replace Cray XC40**
- **ECCC: +50% nodes for Cray XC40**
- **IMD (India) Cray XC40 has replaced IBM (probably earlier than this year)**
- **ECMWF is still waiting for the new Bull computer in Bologna**
- **For more details please see updated WGNE table at meteoinfo.ru**



- **NCEP: doubling of vertical resolution (64 → 127 levels) in deterministic system, coupling with wave model (number of cores more than x4)**
- **HMC (Russia): approx. doubling of horizontal and vertical resolution to $0.1^\circ \times 0.08^\circ$, L104 in deterministic system; more EPS members**
- **JMA: vertical resolution increase from 100 to 128 levels**
- **DWD: ICON replaced COSMO model for regional NWP**

upgrades planned for 2022

- **UKMO: ocean-atmosphere coupling**
- **DWD: increase of vertical resolution from 90 to 120 levels, horizontal EPS resolution from 40/20 km to 26/13 km**
- **ECMWF: EPS resolution upgrade from TCo639 to TCo1023/1279**
- **MF: EPS resolution upgrade from TL1198 to TL1798**



- Only a small fraction of the participating centers provides information on sustained performance (and I understand that measuring it is difficult if not provided by system-internal hardware counters). Shall we remove it from the WGNE table?
- How do your storage/archiving systems keep up with increasing compute power?
- Who plans purchasing a GPU computer in the next procurement?

