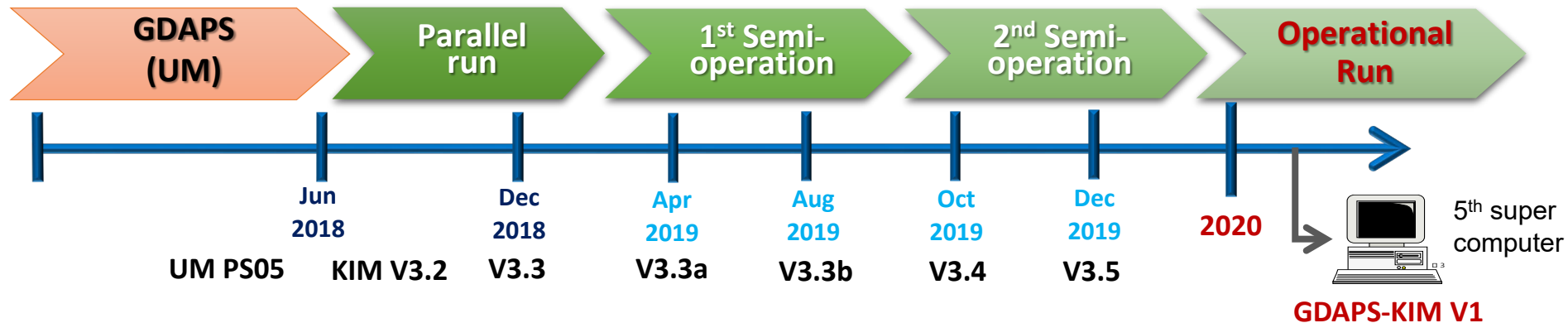


Progress and Plans for KMA NWP system



KMA's new global model (GDAPS-KIM) : R2O2R



❖ *GDAPS-KIM : Cubed sphere, $ne360np3$ (~12 km), 91 levels (top = 1 Pa), Hybrid-4dEnVar*

Major update

UM PS05(40) : UMv10.8(17km→10km), RTTOV(v9 →v11.3), Add AMSR2/MT-SAPHIR/MWHS, new BGE

KIM v3.2: Add MT-SAPHIR & ATMS upper ch., **VarBC**(AMSU-A), Ensemble BGE localization

KIM v3.3 : **IAU application**, RTTOV(v10.2→11.3), Add GOES-R AMV, VarBC(MHS)

KIM v3.3a/b : I/O changes, IASI/CrIS QC, code optimization, bug fixes

KIM v3.4 : Add AMSR2, GNSSRO QC update(obs error), BGE ensemble ratio/vertical mode change

KIM v3.5 : Add FY-3C & all-sky radiance module, Use MW over land, VarBC(ATMS, IASI), ENS(50km→32km)

GK-2A was launched successfully in 5 Dec. 2018. The preliminary results show a positive impact on the middle and higher tropospheric humidity and wind fields.

GK-2A AMV/CSR data will be assimilated in KMA NWP system and disseminated via GTS from early 2020.