

APPENDIX 2.2.2. CHARACTERISTICS OF GLOBAL DETERMINISTIC NUMERICAL WEATHER PREDICTION SYSTEM

1. System	
System name (Version)	CMA_GFS4.0
Date of implementation	May 2023
2. Configuration	
Horizontal resolution (Grid spacing)	12.5 km
Vertical resolution (model top)	0.1 hpa
Forecast length (initial time)	10 days
Coupling to ocean/wave/sea ice models	None
Integration time step	300 seconds
3. Initial conditions	
Data assimilation method	4DVAR
4. Surface boundary conditions	
Treatment of SST	Use OSTIA daily sea surface temperature and sea ice concentration product
Land surface analysis	None
5. Other details	
Soil scheme	CoLM
Radiation	RRTMG
Large-scale dynamics	Fully compressible, non-hydrostatic, SI-SL, lat-lon grid
Boundary layer parameterization	MRF
Convection parameterization	New Simplified Arakawa Schubert
Cloud scheme	Prognostic cloud cover scheme, large scale microphysics cloud and double moment cloud microphysics scheme
6. Further information	
Operational contact point	hujk@cma.gov.cn
URLs for system documentation	http://www.wmc-bj.net
URL for list of products	http://www.wmc-bj.net

Note: WMO-NO.485 APPENDIX 2.2.2.