Specifications of the JMA's NWP models and Ensemble Prediction Systems (updated March 2014)

	Global Spectral Model (GSM)	One-week Ensemble Prediction System	Typhoon Ensemble Prediction System	Meso-Scale Model (MSM)	Local Forecast Model (LFM)
Forecast range	84 hours (00, 06, 18 UTC) 264 hours (12 UTC)	264 hours (00, 12 UTC)	132 hours (00, 06, 12, 18 UTC)	39 hours (00, 03, 06, 09, 12, 15, 18, 21UTC)	9 hours (00, 01, 02, 03, ... 23 UTC) (hourly)
Number of horizontal grid points and/or grid spacing (No. of truncation wave)	0.1875 deg. [TL959]	0.375 deg. [TL479]		817 x 661 (5 km at 60°N and 30°N)	1,581 x 1,301 (2 km at 60°N and 30°N)
Horizontal grid system	Reduced Gaussian grid			Lambert conformal projection	
Model domain	Globe			Japan and its surrounding areas	Japan and its surrounding areas
Vertical coordinate	sigma-p hybrid			hybrid terrain-following coordinate	
Vertical levels	100 levels up to 0.01 hPa	60 levels up to 0.1 hPa		50 levels up to 21.8 km	60 levels up to 20.2 km
Radiation process (interval for full radiation computation)	Solar and infrared (every hour)	Solar (every hour) Infrared (3 hourly)		Solar and infrared (every 15 min.) with diagnosed cloud using partial condensation scheme	
Moist physics, convection	Prognostic Arakawa-Schubert Large-scale condensation Prognostic cloud water content			3 ice bulk microphysics Modified Kain-Fritsch scheme	
PBL scheme	Mellor-Yamada level 2 Monin-Obukov similarity			Improved Mellor-Yamada level 3 (Mellor-Yamada-Nakanishi-Niino level 3)	
Gravity wave drag	Long wave drag, short wave drag			-	
Land surface model	Simple Biosphere (SiB)			Thermal diffusion scheme	
Ensemble size	-	27	25	-	
Perturbation generator	-	Singular Vector		-	
Perturbed area	-	Northern Hemisphere, tropics and Southern Hemisphere	Mid-latitude region (20 - 60°N, 100 - 180°E) and areas around tropical cyclones	-	