

Data configuration of JMA mesoscale analysis

Horizontal grid number: 719 (x-direction), 575 (y-direction)

Horizontal resolution: 5 km

Model top height: 21.801km (No48 layer: ~ 21.36km)

Map projection: Lambert (Standard latitude: 30N, 60N, Standard longitude: 140E)

Grid point of (489, 409) corresponds to 30N, 140E.

Model plain data of JMA mesoscale analysis

File name: jma_ma_met_hybrid-coordinate_YYYYMMddhhmm.grib2bin

Element		Unit	Layer	Grib code
U	x-wind speed on Lambert projection	m/s	1,2, --, 48	0,2,2
V	y-wind speed on Lambert projection	m/s	1,2, --, 48	0,2,3
W	z-wind speed	m/s	1,2, --, 48	0,2,9
Z	height *	m	surface, 1,2, --, 48	0,3,5
PT	potential temperature	K	1,2, --, 48	0,0,2
QV	water vapor mixing ratio (specific humidity)	kg/kg	1,2, --, 48	0,1,2
QC	cloud water mixing ratio	kg/kg	1,2, --, 48	0,1,22
QR	rain water mixing ratio	kg/kg	1,2, --, 48	0,1,24
QCI	cloud ice mixing ratio	kg/kg	1,2, --, 48	0,1,23
QS	snow mixing ratio	kg/kg	1,2, --, 48	0,1,25
QG	graupel mixing ratio	kg/kg	1,2, --, 48	0,1,32
P	pressure	Pa	surface, 1,2, --, 48	0,3,0
PSEA	sea level pressure	Pa	surface	0,3,1
RAIN	previous 3-hour accumulated precipitation amount	kg/m ²	surface	0,1,8

*) Terrain height of model is stored as surface in Z.

Surface land data of JMA mesoscale analysis

File name: jma_ma_land-surface_YYYYMMddhhmm.grib2bin

Element		Unit	Grib code
TUGD	soil temperature (4 layers) *	K	2,0,2
KIND	surface kind (1-4) **		2,192,0

*) depth of layers: 0.04m, 0.15m, 0.40m, 0.60m

***) 1: no snow on land, 2: no ice over the sea, 3: snow on land, 4: ice over the sea

Surface ocean data of JMA mesoscale analysis

File name: jma_ma_ocean_sst_YYYYMMddhhmm.grib2bin

Element		Unit	Grib code
SST	sea surface temperature	K	10,3,0