

□ 한국형수치모델(KIM) 표준화 데이터 변수목록(전구/지역/국지)

○ KIM-전지구모델/단일면

생산요소	변수이름	변수명	연직고도	단위	유효 자릿수
기압 (고도)	Surface pressure	ps	surface	Pa	정수
	Mean sea level pressure	psl	mean sea level	Pa	정수
	Freezing level height	frl	0°C isotherm	m	1자리
	Wet bulb temperature freezing level height	wbfrlh	lowest level of the wet bulb zero	m	1자리
기온	Sea surface temperature	sst	surface	K	2자리
	Surface temperature	tsfc	surface	K	2자리
	2m temperature	t2m	2 m above ground	K	2자리
	2m max temperature	tmax	2 m above ground	K	2자리
	2m min temperature	tmin	2 m above ground	K	2자리
바람	10m zonal wind	u10m	10 m above ground	m/s	2자리
	10m meridional wind	v10m	10 m above ground	m/s	2자리
	10m gust:max wind speed	gust	10 m above ground	m/s	2자리
	80m zonal wind	u80m	80 m above ground	m/s	2자리
	80m meridional wind	v80m	80 m above ground	m/s	2자리
습도	2m relative humidity	rh2m	2 m above ground	%	2자리
	2m relative humidity with respect to water	rh2m_liq	2 m above ground	%	2자리
	2m mixing ratio	qv2m	2 m above ground	kg/kg	6자리
	2m specific humidity	q2m	2 m above ground	kg/kg	6자리
	Dew Point Temperature	td2m	2 m above ground	K	2자리
	Evapotranspiration rate	evptrnr	-	kg/(m ² s)	8자리
강수	Precipitation flux	pr	surface	kg/(m ² s)	6자리
	Large scale precipitation amount	precl	surface	kg/m ²	2자리
	Convective precipitation amount	precc	surface	kg/m ²	2자리
	Precipitation amount	prec_acc	surface	kg/m ²	1자리
	Large scale rainfall amount	rainl_acc	surface	kg/m ²	1자리
	Convective rainfall amount	rainc_acc	surface	kg/m ²	1자리
강설	Large scale snowfall amount	snowl_acc	surface	kg/m ²	1자리
	Convective snow amount	snowc_acc	surface	kg/m ²	1자리
	Snow Depth	snowd	surface	m	2자리
	Snow Density	sndens	surface	kg/m ³	2자리
	Snow water equivalent	weasd	surface	kg/m ²	1자리
	Snow fraction	srflag	surface	Proportion, 0~1	2자리
운량 운고 운저	Low Cloud Cover	lclld	entire atmosphere (considered as a single layer)	Proportion, 0~1	2자리
	Medium Cloud Cover	mcld	entire atmosphere	Proportion,	2자리

생산요소	변수이름	변수명	연직고도	단위	유효 자릿수
			(considered as a single layer)	0~1	
	High Cloud Cover	hclد	entire atmosphere (considered as a single layer)	Proportion, 0~1	2자리
	Total Cloud Cover	tclد	atmos col.	Proportion, 0~1	2자리
	Convective Cloud Cover	tclدc	entire atmosphere (considered as a single layer)	Proportion, 0~1	2자리
	Air pressure at convective cloud base	ccb	convective cloud bottom level	Pa	정수
	Air pressure at convective cloud top	cct	convective cloud top level	Pa	정수
land/ice mask	Land Cover	slmsk	surface	0=sea 1=land 2=seaice	정수
	Ice Cover	seaice	surface	Proportion, 0~1	2자리
경계층	Planetary Boundary Layer Regime	pbltype	planetary boundary layer	-	정수
	Planetary Boundary Layer Height	hpbl	planetary boundary layer	m	1자리
마찰	Frictional Velocity	ustar	0 m above ground	m/s	4자리
	Surface Roughness	znt	surface	m	4자리
토양수분	Soil Moisture	soilm	0-0.1 m below ground	kg/m ³	3자리
	Soil Moisture	soilm	0.1-0.4 m below ground	kg/m ³	3자리
	Soil Moisture	soilm	0.4-1 m below ground	kg/m ³	3자리
	Soil Moisture	soilm	1-2 m below ground	kg/m ³	3자리
지층온도	Soil Temperature	soilt	0-0.1 m below ground	K	2자리
	Soil Temperature	soilt	0.1-0.4 m below ground	K	2자리
	Soil Temperature	soilt	0.4-1 m below ground	K	2자리
	Soil Temperature	soilt	1-2 m below ground	K	2자리
플럭스	Sensible Heat Net Flux	shtfl	surface	W/m ²	1자리
	Latent Heat Net Flux	lhtfl	surface	W/m ²	1자리
	Net Short Wave Radiation Flux	rss	surface	W/m ²	1자리
	Net Long Wave Radiation Flux	rls	surface	W/m ²	2자리
	Downward Long-Wave Rad. Flux	dlwrsfc	surface	W/m ²	2자리
	Downward Short-Wave Radiation Flux	dswrsfc	surface	W/m ²	1자리
	Upward Long-Wave Rad. Flux	ulwrtoa	top of atmosphere	W/m ²	2자리
	Downward Short-Wave Radiation Flux	dswrtoa	top of atmosphere	W/m ²	1자리
surface stress	Eastward Turbulent Surface Stress	tauu	surface	Pa	3자리
	Northward Turbulent Surface Stress	tauv	surface	Pa	3자리
지형	topography	topo	surface	m	1자리

○ KIM-전지구모델/등압면

연직층 (24개층)	1000 975 950 925 900 875 850 800 750 700 650 600 550 500 450 400 350 300 250 200 150 100 70 50 hPa			
생산요소	변수이름	변수명	단위	유효 자릿수
기압	Geopotential Height	hgt	m	정수
기온	Air temperature	T	K	2자리
바람	Zonal wind	u	m/s	2자리
	Meridional wind	v	m/s	2자리
	Vertical wind	w	m/s	3자리
습도	Relative Humidity	rh	%	2자리
	Specific Humidity	q	kg/kg	6자리
	Relative Humidity With Respect to Water	rh_liq	%	2자리
구름물리 량	Cloud Liquid Water Content	tqc	kg/kg	7자리
	Rain Water Content	tqr	kg/kg	6자리
	Cloud Ice Content	tqi	kg/kg	7자리
	Snow Content	tqs	kg/kg	6자리
	Area Cloud Fraction in Each Layer	cld	1	2자리
	Bulk Cloud Fraction in Each Layer	cldbld	1	2자리

※ 연직 상층 7층(30, 20, 10, 7, 5, 3, 1hPa) 자료 별도 생산

○ KIM-지역모델/단일면

생산요소	변수설명	변수명	층정보	단위	유효 자릿수
기압	Sea level pressure	MSLP	Mean sea level	Pa	정수
	Surface pressure	PSFC	surface	Pa	정수
기온	Surface skin temperature	TSKIN	surface	K	2자리
	Temperature at 2 m	T2	2m above ground	K	2자리
	Sea surface temperature	SST	surface	K	2자리
지중온도	Soil temperature	SOILT	4개층 0.1, 0.3, 0.6, 1.0m underground	K	2자리
바람	Wind speed (gust)	GUST	single-layer	m/s	2자리
	Zonal wind at 10 m	U10	10m above ground	m/s	2자리
	Zonal wind at 80 m	U80	80m above ground	m/s	2자리
	Zonal wind at 140 m	U140	140m above ground	m/s	2자리
	Zonal wind at 220 m	U220	220m above ground	m/s	2자리
	Meridional wind at 10 m	V10	10m above ground	m/s	2자리
	Meridional wind at 80 m	V80	80m above ground	m/s	2자리
	Meridional wind at 140 m	V140	140m above ground	m/s	2자리
	Meridional wind at 220 m	V220	220m above ground	m/s	2자리
	Maximum wind speed at 10m height in dianostic output interval	SPDUV10MAX	10m above ground	m/s	2자리
	Mean wind speed at 10m height in dianostic output interval	SPDUV10MEAN	10m above ground	m/s	2자리
	Frictional velocity in similarity theory	UST	Surface	m/s	2자리
습도	Relative humidity at 2 m	RH2	2m above ground	%	2자리
강수	ACCUMULATED TOTAL CUMULUS PRECIPITATION	RAINC	surface	mm	2자리
	ACCUMULATED TOTAL GRID SCALE PRECIPITATION	RAINNC	surface	mm	2자리
	ACCUMULATED TOTAL (CUMULUS + GRID SCALE) PRECIPITATION	RAIN	surface	mm	2자리
강설	ACCUMULATED TOTAL GRID SCALE SNOW AND ICE	SNOW	surface	mm	2자리
	ACCUMULATED TOTAL GRID SCALE GRAUPEL	GRAUPEL	surface	mm	2자리
경계층	Planetary boundary layer height	PBLH	surface	m	1자리
플럭스	Shortwave surface downward direct irradiance from FARMS	SWDDIR2	surface	W/m ²	2자리
	Shortwave surface downward diffuse irradiance from FARMS	SWDDIF2	surface	W/m ²	2자리
	Shortwave surface downward direct normal irradiance from FARMS	SWDDNI2	surface	W/m ²	2자리
	Accumulated downwelling shortwave flux at bottom	ACSWDNB	surface	MJ/m ²	2자리
	Latent heat flux at the surface	LH	surface	W/m ²	2자리
	Upward heat flux at the surface	HFX	surface	W/m ²	2자리
	TOA OUTGOING LONG WAVE	OLR	Top of atmosphere	W/m ²	2자리
시정	Visibility	VIS	single-layer	m	정수
	Fog fraction	FOGFRAC	single-layer	-	2자리
안정도	Maximum CAPE	MCAPE	single-layer	J/kg	1자리
	Maximum CIN	MCIN	single-layer	J/Kg	2자리

생산요소	변수설명	변수명	층정보	단위	유효 자릿수
토양수분	Soil Moisture	SOILM	4개층 0.1, 0.3, 0.6, 1.0m underground	m ³ /m ³	2자리
운량	Low Cloud Cover	LCDC	single-layer	Proportion, 0~1	2자리
	Medium Cloud Cover	MCDC	single-layer	Proportion, 0~1	2자리
	High Cloud Cover	HCDC	single-layer	Proportion, 0~1	2자리

○ KIM-지역모델/등압면

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생산요소	변수설명	변수명	단위	유효 자릿수
기압	Geopotential height	GPH	m	정수
기온	Temperature	T	K	2자리
바람	Zonal wind	U	m/s	2자리
	Meridional wind	V	m/s	2자리
	Vertical velocity	W	m/s	3자리
습도	Relative Humidity	RH	%	2자리
구름물리량	Cloud fraction	CLDFRA	-	2자리
	Water vapor mixing ratio	QVAPOR	kg/kg	6자리
	Cloud Water Mixing Ratio	QCLOUD	kg/kg	7자리
	Rain water Mixing Ratio	QRAIN	kg/kg	7자리
	Ice Water Mixing Ratio	QICE	kg/kg	7자리
	Snow Mixing Ratio	QSNOW	kg/kg	7자리
	Graupel mixing ratio	QGRAUP	kg/kg	7자리

○ KIM-국지모델/단일면

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습도	Relative humidity at 2 m	RH2	2m above ground	%	2자리
강수	ACCUMULATED TOTAL CUMULUS PRECIPITATION	RAINNC	surface	mm	2자리
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