## UM모델 Grib파일 정보

【 2014. 7. 28.(월)/ 예보국 예보기술분석과 】

#### □ 파일 정보

○ 기본정보

영역	격자간격	격자수(X * Y)	예측시간	생산주기
UM 전구모델 (0E~359.648438E, 90S~90N)	동서방향 0.3515625, 남북방향 0.234375	1024(동서) *769(남북)	0~84h(3시간 간격), 90~288h(6시간 간격)	
UM 지역모델	동서방향 101.577323E부터 12km 간격 남북방향 12.217029S부터 12km 간격	491(동서) *419(남북)	0~87h(3시간 간격)	일 4회 (00, 06, 12, 18UTC)
UM 국지모델	동서방향 121.834429E부터 1.5km 간격 남북방향 32.256875N부터 1.5km 간격	602(동서) *781(남북)	0~36h(1시간 간격)	

※ 저장순서: 남→북, 서→동 으로 저장

\* 기준점 위치(x, y): UM지역(2953.737876km, 2522.911728km),UM국지(389.478893km, 618.363966km)

#### ○ 파일명명

— 전구: g512\_v070\_ergl\_{pres | unis | isen}\_h{000~288}.yyyymmddhh.gb2

— 지역: r120\_v070\_erea\_{pres | unis | isen}\_h{000~87}.yyyymmddhh.gb2

— 국지: 1015\_v070\_erlo\_{pres | unis | isen}\_h{000~36}.yyyymmddhh.gb2

#### ○ 저장변수 정보

— UM전구모델(등압면) : g512\_v070\_pres

GRIB 변수번호	약어	설명(UM 전구)	단위
0,2,9	DZDT*	Vertical Velocity (Pressure Level)	m/s
0,3,5	HGT*	Geopotential Height (Pressure Level)	gpm
0,0,0	TMP*	Temperature (Pressure Level)	K
0,2,2	UGRD*	U-component of wind	m/s
0,2,3	VGRD*	V-component of wind	m/s
0,1,1	RH**	Relative Humidity	%
0,1,194	RHICE**	RH wrt. Ice ON PLEV	%
0,0,200	WBPT***	Wet Bulb Potential Temperature	K

\* 26 level : 1000, 950, 925, 850, 700, 600, 500, 400, 300, 250, 200, 150, 100, 70, 50, 30, 20,

15, 10, 7, 5, 3, 2, 1, 0.5, 0.4hPa

\*\* 19 level: 1000, 950, 925, 850, 700, 600, 500, 400, 300, 250, 200, 150, 100, 70, 50, 30, 20,

15, 10hPa

\*\*\* 3 level: 850, 700, 500hPa

# — UM전구모델(단일면) : g512\_v070\_unis

GRIB 변수번호	약어	설명(UM 전구)	단위
0,4,192	NDNSW	NET DOWN SURFACE SW FLUX	W/m^2
0,4,193	INSWT	INCOMING SW RAD FLUX(TOA)	W/m^2
0,4,194	OUSWT	OUTGOING SW RAD FLUX(TOA)	W/m^2
0,4,195	CUSWT	CLEAR-SKY UPWARD SW FLUX(TOA)	W/m^2
0,4,196	CDSWS	CLEAR-SKY DOWN SURFACE SW FLUX	W/m^2
0,4,197	CUSWS	CLEAR-SKY UP SURFACE SW FLUX	W/m^2
0,4,198	SWDIR	DIRECT SW FLUX (ON RHO LEVELS)	W/m^2
0,4,199	SWDIF	DIFFUSE SW FLUX (ON RHO LEVELS)	W/m^2
0,4,200	TDSWS	TOTAL DOWNWARD SURFACE SW FLUX	W/m^2
0,5,192	NDNLW	NET DOWN SURFACE LW RAD FLUX	W/m^2
0,5,193	NDLWO	NET DN LW RAD FLUX : OPEN SEA	W/m^2
0,5,194	OULWT	OUTGOING LW RAD FLUX (TOA)	W/m^2
0,5,195	CULWT	CLEAR-SKY UPWARD LW FLUX(TOA)	W/m^2
0,5,196	DLWS	DOWNWARD LW RAD FLUX	W/m^2
0,5,197	CDLWS	CLEAR-SKY DOWN SURFACE LW FLUX	W/m^2
0,1,9	NCPCP	Large-Scale Precipitation(non-convective)	kg/m^2
0,1,15	SNOL	Large-Scale Snow	kg/m^2
0,1,54	LSPRATE	Large Scale Precipitation Rate	kg/m^2/s
0,1,59	LSSRATE	Large Scale Snowfall Rate	m/s
0,3,7	HSTDV	Standard Deviation of Height	m
0,2,192	XGWSS	X COMPONENT OF GW SATURATION STRESS	N/m^2
0,2,193	YGWSS	Y COMPONENT OF GW SATURATION STRESS	N/m^2
0,0,192	HFICE	HEAT FLUX THROUGH SEA ICE	W/m^2
0,0,192	HFSOIL	HEAT FLUX FROM SURF TO DEEP SOIL LEV 1	W/m^2
0,7,192	LLRIB	LOWEST LAYER BULK RICHARDSON Number	77/111 2
0,2,2	UGRD	U-Component of Wind	m/s
0,2,3	VGRD	V-Component of Wind	m/s
0,0,194	HFSFC	SURFACE HEAT FLUX	W/m^2
0,2,194	XBLWS	X-COMP OF SURF & BL WIND STRESS	N/m^2
0,2,194	YBLWS	Y-COMP OF SURF & BL WIND STRESS	N/m^2
0,1,192	TMOFS	SURFACE TOTAL MOISTURE FLUX	Kg/m^2/S
0,2,196	WMEFO	WIND MIX ENERGY FLUX TO Ocean	W/m^2
	SHFO	SFC SENSIBLE HEAT FLUX FROM OPEN SEA	
0,0,195	ESSA	EVAPORATION FROM SOIL SURF-AMOUNT	W/m^2 Kg/m^2/TS
2,0,192	SUBS	SUBLIMINATION FROM SURFACE	
2,0,193 2,0,194	EVOS	EVAPORATION FROM OPEN SEA	Kg/m^2/TS Kg/m^2/S
0,0,10	LHTFL	Latent Heat Net Flux	W/m^2
0,0,197	SMLHF	SEA ICE MELT LH FLUX	W/m <sup>2</sup>
0,0,197	TMP	Temperature	K K
		Minimum Temperature	
0,0,5	TMIN	Minimum Temperature  Maximum Temperature	K K
0,0,4	TMAX SPFH		
0,1,0		Specific Humidity TOTAL SURF MOIST FLUX PER TIME STEP	kg/kg
0,1,196	TOMFS		kg/m^2/TS
0,1,1	RH VIS	Relative Humidity	
0,19,0		Visibility FOC. FRACTION	
0,19,193	FOGFR	FOG FRACTION	
0,0,6	DPT	Dew Point Temperature	K ov
0,19,194	PVIS5	PROBABILITY OF VISIBILITY LESS THAN 5KM	%
0,0,198	15TL	TL of 1.5m	-
0,1,193	15QT	QT of 1.5m	TA7 / ^ 2
0,0,199	SHFLT	SURFACE SENSIBLE HEAT FLUX ON TILES	W/m^2

GRIB 변수번호	약어	설명(UM 전구)	단위
0,7,193	STABL	STABLE BOUNDARY LAYER INDICATOR	-
0,7,194	WMXBL	WELL MIXED BOUNDARY LAYER INDICATOR	-
0,2,21	MAXGUST	Maximum Wind Speed	m/s
0,2,30	FRICV	Frictional Velocity	m/s
0,1,10	ACPCP	Convective Precipitation	kg/m^2
0,1,14	SNOC	Convective Snow	kg/m^2
0,1,37	CPRAT	Convective Precipitation Rate	kg/m^2/s
0,1,58	CSRATE	Convective Snowfall Rate	m/s
0,6,200	PCCB	PRESSURE AT CONVECTIVE CLOUD BASE	Pa
0,6,201	PCCT	PRESSURE AT CONVECTIVE CLOUD TOP	Pa
0,6,202	IHCCB	ICAO HEIGHT OF CONVECTIVE CLOUD BASE	kft
0,6,203	IHCCT	ICAO HEIGHT OF CONVECTIVE CLOUD TOP	kft
0,1,52	TPRATE	Total Precipitation Rate	kg/m^2/s
0,7,6	CAPE	Convective Available Potential Energy	J/kg
0,6,204	LCCA	LOWEST CONVECTIVE CLOUD AMOUNT AFTER CONV	%
0,6,205	PLCCB	PRESSURE AT LOWEST CONV CLOUD BASE	Pa
0,6,206	PLCCT	PRESSURE AT LOWEST CONV CLOUD TOP	Pa
0,6,207	ILCCB	ICAO HEIGHT OF LOWEST CONV CLOUD BASE	kft
0,6,208	ILCCT	ICAO HEIGHT OF LOWEST CONV CLOUD TOP	kft
0,1,8	APCP	Total Precipitation	kg/m^2
0,7,195	UCAPE	Undilute Convective Available Potential Energy	J/kg
0,7,196	UPCIN	Undilute PARCEL Convective Inhibition	J/kg
0,6,2	CDCON	Convective Cloud Cover	%
0,1,16	SNOM	Snow Melt	kg/m^2
2,0,200	ROFL	SFC RUNOFF AMOUNT : LAND mean	Kg/m^2/TS
2,0,201	SROFL	SUB-SFC RUNOFF AMOUNT : LAND mean	kg/m^2/TS
2,0,3	SOILM	Soil Moisture Content	kg/m^2
2,0,202	CWC	CANOPY WATER CONTENT	Kg/m^2/TS
2,0,203	SMCL*	SOIL MOISTURE CONTENT IN A LAYER	Kg/m2/TS
2,0,2	TSOIL	Soil Temperature Validation to deprecate	K
0,6,3	LCDC	Low Cloud Cover	%
0,6,4	MCDC	Medium Cloud Cover	%
0,6,5	HCDC	High Cloud Cover	%
0,6,210	CB25	CLOUD BASE FOR >2.5 OCTA KFT	%
0,6,211	CB45	CLOUD BASE FOR >4.5 OCTA KFT	%
0,6,212	TCAR	TOTAL CLOUD AMOUNT RANDOM OVERLAP	%
0,6,213	TCAM	TOTAL CLOUD AMOUNT MAX/RANDOM OVERLP	%
0,6,216	WBFLH	WET BULB FREEZING LEVEL HEIGHT	m
0,6,217	TCTH	TOTAL CLOUD TOP HEIGHT(KFT)	kft
0,2,197	50MU	50m-WIND U-COMPONENT	m/s
0,2,198	50MV	50m-WIND V-COMPONENT	m/s
0,3,1	PRMSL	Pressure Reduced to MSL	Pa
0,1,197	SNOAL	SNOW AMOUNT OVER LAND AFT TSTP	m
0,0,0	TMP	surface Temperature	K
0,3,18	HPBL	Planetary Boundary Layer Height	m
2,0,1	SFCR	Surface Roughness	m
2,0,0	LAND	Land Cover (0=sea, 1=land)	-
1,0,192	FRICE	FRACTION OF SEA ICE	%
0,3,6	DIST	Orography	m
0,3,0	PRES	surface Pressure	Pa

\* 토양 4층 : 10cm, 35cm, 1m, 3m

## — UM전구모델(등온위면) : g512\_v070\_isen

GRIB 변수번호	약어	설명(UM 전구)	단위
0,2,225	UTHETA*	U COMPONENT WIND AT THETA SURFACE	m/s
0,2,226	VTHETA*	V COMPONENT WIND AT THETA SURFACE	m/s
0,2,227	PTHETA*	PRESSURE AT THETA SURFACE	Pa
0,1,235	QTHETA*	SPECIFIC HUMIDITY AT THETA SURFACE	kg/kg
0,1,236	RHTHETA*	RELATIVE HUMIDITY AT THETA SURFACE	%
0,2,229	PVTHETA*	POTENTIAL VORTICITY AT THETA SURFACE	km^2/kg/s

\* 16 level : 275, 280, 285, 290, 295, 300, 305, 310, 315, 320, 325, 330, 335, 340, 345, 350

## — UM지역모델(등압면) : r120\_v070\_pres

GRIB 변수번호	약어	설명(UM지역)	단위
0,2,14	PVORT**	Potential Vorticity Theta Surface	Km2kg-1s-1
0,2,9	DZDT*	Vertical Velocity (Pressure Level)	m/s
0,2,2	UGRD*	U-component of wind	m/s
0,2,3	VGRD*	V-component of wind	m/s
0,3,5	HGT*	Geopotential Height (Pressure Level)	gpm
0,0,0	TMP*	Temperature (Pressure Level)	K
0,1,194	RHICE*	RH wrt. Ice ON PLEV	%
0,1,1	RH*	Relative Humidity	%
0,0,200	WBPT***	Wet Bulb Potentail Temp	K

\* 24 level : 1000, 975, 950, 925, 900, 875, 850, 800, 750, 700, 650, 600, 550, 500, 450, 400,

350, 300, 250, 200, 150, 100, 70, 50hPa

\*\* 3 level : 330, 315, 300K (등온위면)

\*\*\* 3 level: 850, 700, 500hPa

#### — UM지역모델(단일면) : r120\_v070\_unis

GRIB 변수번호	약어	설명(UM지역)	단위
0,4,192	NDNSW	NET DOWN SURFACE SW FLUX	W/m^2
0,4,193	INSWT	INCOMING SW RAD FLUX(TOA)	W/m^2
0,4,194	OUSWT	OUTGOING SW RAD FLUX(TOA)	W/m^2
0,4,195	CUSWT	CLEAR-SKY UPWARD SW FLUX (TOA)	W/m^2
0,4,196	CDSWS	CLEAR-SKY DOWN SURFACE SW FLUX	W/m^2
0,4,197	CUSWS	CLEAR-SKY UP SURFACE SW FLUX	W/m^2
0,4,198	SWDIR	DIRECT SW FLUX (ON RHO LEVELS)	W/m^2
0,4,199	SWDIF	DIFFUSE SW FLUX (ON RHO LEVELS)	W/m^2
0,4,200	TDSWS	TOTAL DOWNWARD SURFACE SW FLUX	W/m^2
0,5,192	NDNLW	NET DOWN SURFACE LW RAD FLUX	W/m^2
0,5,193	NDLWO	NET DN LW RAD FLUX : OPEN SEA	W/m^2
0,5,194	OULWT	OUTGOING LW RAD FLUX (TOA)	W/m^2
0,5,195	CULWT	CLEAR-SKY UPWARD LW FLUX (TOA)	W/m^2
0,5,196	DLWS	DOWNWARD LW RAD FLUX : SURFACE	W/m^2
0,5,197	CDLWS	CLEAR-SKY DOWN SURFACE LW FLUX	W/m^2
0,1,9	NCPCP	Large-Scale Precipitation (non-convective)	kg/m^2
0,1,15	SNOL	Large-Scale Snow	kg/m^2

GRIB 변수번호	약어	설명(UM지역)	단위
0,1,54	LSPRATE	Large Scale Precipitation Rate	kg/m^2/s
0,1,59,0	LSSRATE	Large Scale Snowfall Rate	m/s
0,3,7	HSTDV	Standard Deviation of Height	m
0,2,192	XGWSS	X COMPONENT OF GW SATURATION STRESS	N/m^2
0,2,193	YGWSS	Y COMPONENT OF GW SATURATION STRESS	N/m^2
0,0,192	HFICE	HEAT FLUX THROUGH SEA ICE	W/m^2
0,0,193	HFSOIL	HEAT FLUX FROM SURF TO DEEP SOIL LEV 1	W/m^2
0,7,192	LLRIB	LOWEST LAYER BULK RICHARDSON Number	-
0,2,2	UGRD	U-Component of Wind	m/s
0,2,3	VGRD	V-Component of Wind	m/s
0,0,194	HFSFC	SURFACE HEAT FLUX	W/m^2
0,2,194	XBLWS	X-COMP OF SURF & BL WIND STRESS	N/m^2
0,2,195	YBLWS	Y-COMP OF SURF & BL WIND STRESS	N/m^2
0,1,192	TMOFS	SURFACE TOTAL MOISTURE FLUX	Kg/m^2/S
0,2,196	WMEFO	WIND MIX ENERGY FLUX TO Ocean	W/m^2
0,2,196	SHFO	SFC SENSIBLE HEAT FLUX FROM OPEN SEA	W/m^2
2,0,192	ESSA	EVAPORATION FROM SOIL SURF-AMOUNT	Kg/m <sup>2</sup> /TS
2,0,192	SUBS	SUBLIMINATION FROM SURFACE	
	EVOS	EVAPORTION FROM OPEN SEA	$Kg/m^2/TS$
2,0,194			Kg/m^2/S
0,0,10	LHTFL	Latent Heat Net Flux	W/m^2
0,0,197	SMLHF	SEA-ICE MELT LH FLUX	W/m^2
0,0,0	TMP*	surface Temperature	K
0,0,5	TMIN	Minimum Temperature	K
0,0,4	TMAX	Maximum Temperature	K
0,1,0	SPFH	Specific Humidity	kg/kg
0,1,196	TOMFS	TOTAL SURF MOIST FLUX PER TIME STEP	kg/m^2/TS
0,1,1	RH	Relative Humidity	%
0,19,0	VIS	Visibility	m
0,19,193	FOGFR	FOG FRACTION	%
0,0,6	DPT	Dew Point Temperature	K
0,19,194	PVIS5	PROBABILITY OF VIS LESS THAN 5KM	%
0,0,198	15TL	TL of 1.5m	-
0,1,193	15QT	QT of 1.5m	-
0,0,199	SHFLT	SURFACE SENSIBLE HEAT FLUX ON TILES	W/m^2
0,7,193	STABL	STABLE BOUNDARY LAYER INDICATOR	-
0,7,194	WMXBL	WELL MIXED BOUNDARY LAYER INDICATOR	-
0,2,21	MAXGUST	Maximum Wind Speed	m/s
0,2,30	FRICV	Frictional Velocity	m/s
0,1,10	ACPCP	Convective Precipitation	kg/m^2
0,1,14	SNOC	Convective Snow	kg/m^2
0,1,37	CPRAT	Convective Precipitation Rate	kg/m^2/s
0,1,58	CSRATE	Convective Snowfall Rate	m/s
0,6,200	PCCB	PRESSURE AT CONVECTIVE CLOUD BASE	Pa
0,6,201	PCCT	PRESSURE AT CONVECTIVE CLOUD TOP	Pa
0,6,202	IHCCB	ICAO HEIGHT OF CONVECTIVE CLOUD BASE	kft
0,6,203	IHCCT	ICAO HEIGHT OF CONVECTIVE CLOUD TOP	kft
0,1,52	TPRATE	Total Precipitation Rate	kg/m^2/s
0,7,6	CAPE	Convective Available Potential Energy	J/kg
0,6,204	LCCA	LOWEST CONV CLOUD AMOUNT AFTER CONV	%
0,6,205	PLCCB	PRESSURE AT LOWEST CONV CLOUD BASE	Pa
0,6,206	PLCCT	PRESSURE AT LOWEST CONV CLOUD TOP	Pa
0,6,207	ILCCB	ICAO HEIGHT OF LOWEST CONV CLOUD BASE	kft
0,6,208	ILCCT	ICAO HEIGHT OF LOWEST CONV CLOUD TOP	kft
0,1,8	APCP	Total Precipitation	kg/m^2
0,7,195	UCAPE	Undilute Convective Available Potential Energy	J/kg
0,7,196	UPCIN	Undilute PARCEL Convective Inhibition	J/kg

GRIB 변수번호	약어	설명(UM지역)	단위
0,6,2	CDCON	Convective Cloud Cover	%
0,1,16	SNOM	Snow Melt	kg/m^2
2,0,200	ROFL	SFC RUNOFF AMOUNT : LAND mean	Kg/m^2/TS
2,0,201	SROFL	SUB-SFC RUNOFF AMOUNT : LAND mean	kg/m^2/TS
2,0,3	SOILM	Soil Moisture Content	kg/m^2
2,0,202	CWC	CANOPY WATER CONTENT	Kg/m^2/TS
2,0,203	SMCL*	SOIL MOISTURE CONTENT IN A LAYER	Kg/m2/TS
2,0,2	TSOIL*	Soil Temperature(Validation to deprecate)	K
0,6,3	LCDC	Low Cloud Cover	%
0,6,4	MCDC	Medium Cloud Cover	%
0,6,5	HCDC	High Cloud Cover	%
0,6,210	CB25	CLOUD BASE FOR >2.5 OCTA KFT	%
0,6,211	CB45	CLOUD BASE FOR >4.5 OCTA KFT	%
0,6,212	TCAR	TOTAL CLOUD AMOUNT RANDOM OVERLAP	%
0,6,213	TCAM	TOTAL CLOUD AMOUNT MAX/RANDOM OVERLAP	%
0,6,216	WBFLH	WET BULB FREEZING LEVEL HEIGHT	m
0,6,217	TCTH	TOTAL CLOUD TOP HEIGHT	kft
0,2,197	50MU	50m-WIND U-COMPONENT	m/s
0,2,198	50MV	50m-WIND V-COMPONENT	m/s
0,3,1	PRMSL	Pressure Reduced to MSL	Pa
0,1,197	SNOAL	SNOW AMOUNT OVER LAND AFT TSTP	m
0,3,18	HPBL	Planetary Boundary Layer Height	m
2,0,1	SFCR	Surface Roughness	m
2,0,0	LAND	Land Cover (0=sea, 1=land)	-
1,0,192	FRICE	Fraction of Sea Ice	%
0,3,6	DIST	Orography	m
0,3,0	PRES	surface Pressure	Pa

\* TMP : surface, 1.5m above ground \* 토양 4층 : 10cm, 35cm, 1m, 3m

## — UM지역모델(등온위면) : r120\_v070\_isen

GRIB 변수번호	약어	설명(UM 지역)	단위
0,2,225	UTHETA*	U COMPONENT WIND AT THETA SURFACE	m/s
0,2,226	VTHETA*	V COMPONENT WIND AT THETA SURFACE	m/s
0,2,227	PTHETA*	PRESSURE AT THETA SURFACE	Pa
0,1,235	QTHETA*	SPECIFIC HUMIDITY AT THETA SURFACE	kg/kg
0,1,236	RHTHETA*	RELATIVE HUMIDITY AT THETA SURFACE	%
0,2,229	PVTHETA*	POTENTIAL VORTICITY AT THETA SURFACE	km^2/kg/s

\* 16 level : 275, 280, 285, 290, 295, 300, 305, 310, 315, 320, 325, 330, 335, 340, 345, 350

## — UM국지모델(등압면) : 1015\_v070\_pres

GRIB 변수번호	약어	설명(UM국지)	단위
0,2,9	DZDT*	Vertical Velocity (Pressure Level)	m/s
0,2,2	UGRD*	U-component of wind	m/s
0,2,3	VGRD*	V-component of wind	m/s
0,3,5	HGT*	Geopotential Height (Pressure Level)	gpm
0,0,0	TMPprs*	Temperature (Pressure Level)	K
0,1,194	RHICEprs*	RH wrt. Ice ON PLEV	%
0,1,1	RHprs*	Relative Humidity	%

\* 24 level : 1000, 975, 950, 925, 900, 875, 850, 800, 750, 700, 650, 600, 550, 500, 450, 400, 350, 300, 250, 200, 150, 100, 70, 50hPa

#### — UM국지모델(단일면) : 1015\_v070\_unis

GRIB 변수번호	약어	설명(UM국지)	단위
0,4,192	NDNSW	NET DOWN SURFACE SW FLUX	W/m^2
0,4,198	SWDIR	DIRECT SW FLUX (ON RHO LEVELS)	W/m^2
0,4,199	SWDIF	DIFFUSE SW FLUX (ON RHO LEVELS)	W/m^2
0,4,200	TDSWS	TOTAL DOWNWARD SURFACE SW FLUX	W/m^2
0,5,192	NDNLW	NET DOWN SURFACE LW RAD FLUX	W/m^2
0,5,194	OULWT	OUTGOING LW RAD FLUX (TOA)	W/m^2
0,5,196	DLWS	DOWNWARD LW RAD FLUX(SURFACE)	W/m^2
0,1,9	NCPCP	Large-Scale Precipitation (non-convective)	kg/m^2
0,1,15	SNOL	Large-Scale Snow	kg/m^2
0,1,54	LSPRATE	Large Scale Precipitation Rate	kg/m^2/s
0,1,59	LSSRATE	Large Scale Snowfall Rate	m/s
0,3,196	HPBLA	BOUNDARY LAYER DEPTH AFTER B. LAYER	m
0,0,193	HFSOIL	HEAT FLUX FROM SURF TO DEEP SOIL LEV 1	W/m^2
0,7,192	LLRIB	LOWEST LAYER BULK RICHARDSON Number	-
0,2,2	UGRD	U-Component of Wind	m/s
0,2,3	VGRD	V-Component of Wind	m/s
0,0,194	HFSFC	SURFACE HEAT FLUX	W/m^2
0,2,194	XBLWS	X-COMP OF SURF & BL WIND STRESS	N/m^2
0,2,195	YBLWS	Y-COMP OF SURF & BL WIND STRESS	N/m^2
0,0,10	LHTFL	Latent Heat Net Flux	W/m^2
0,0,0	TMP	Temperature	K
0,0,5	TMIN	Minimum Temperature	K
0,0,4	TMAX	Maximum Temperature	K
0,1,0	SPFH	Specific Humidity	kg/kg
0,1,196	TOMFS	TOTAL SURF MOIST FLUX PER TIME STEP	kg/m^2/TS
0,1,1	RH	Relative Humidity	%
0,19,0	VIS	Visibility	m
0,19,193	FOGFR	FOG FRACTION	%
0,0,6	DPT	Dew Point Temperature	K
0,19,194	PVIS5	PROBABILITY OF VISIBILITY LESS THAN 5KM	%
0,0,198	15TL	TL of 1.5M	-
0,1,193	15QT	QT of 1.5M	-
0,19,192	VISIP	VISIBILITY AT 1.5M(INCL PRECIP)	m
0,0,199	SHFLT*	SURFACE SENSIBLE HEAT FLUX ON TILES	W/m^2
0,19,195	HTBM	TURBULENT MIXING HEIGHT AFTER B. LAYER	m
0,6,196	SCST	STRATOCUM. OVER STABLE BL INDICATOR	%
0,6,197	DSCNC	DECOUPLED SC. NOT OVER CU. INDICATOR	%
0,6,198	DSCOC	DECOUPLED SC. OVER CU. INDICATOR	%

GRIB 변수번호	약어	설명(UM국지)	단위
0,5,198	NETTL*	SURFACE NET RADIATION ON TILES	W/m^2
0,0,201	STOT*	SURFACE TEMP ON TILES	K
2,0,195	HCNP**	CANOPY HEIGHT ON PFTS	m
2,0,196	WCNP**	CANOPY WATER ON PFTS	Kg/m^2
2,0,197	T15T*	1.5m TEMPERATURE OVER TILES	K
2,0,198	SH15*	1.5m SPECIFIC HUMIDITY OVER TILES	kg/kg
0,6,199	HDLB	HEIGHT OF DECOUPLED LAYER BASE	m
2,0,199	STCP**	STOMATAL CONDUCTANCE ON PFTS	W/m^2
0,2,21	MAXGUST	Maximum Wind Speed	m/s
0,3,193	CBLT	COMBINED BOUNDARY LAYER TYPE	-
0,1,16	SNOM	Snow Melt	kg/m^2
2,0,203	SMCL***	SOIL MOISTURE CONTENT IN A LAYER	Kg/m2/TS
2,0,2	TSOIL***	Soil Temperature(Validation to deprecate)	K
2,0,204	ROFR	SURFACE RUNOFF RATE	Kg/m^2/S
2,0,205	SROFR	SUB-SURFACE RUNOFF RATE	kg/m^2/S
0,6,209	VLCDC	Very Low Cloud Cover	%
0,6,3	LCDC	Low Cloud Cover	%
0,6,4	MCDC	Medium Cloud Cover	%
0,6,5	HCDC	High Cloud Cover	%
0,6,210	CB25	CLOUD BASE FOR >2.5 OCTA KFT	%
0,6,211	CB45	CLOUD BASE FOR >4.5 OCTA KFT	%
0,6,212	TCAR	TOTAL CLOUD AMOUNT - RANDOM OVERLAP	%
0,6,213	TCAM	TOTAL CLOUD AMOUNT - MAX/RANDOM OVERLP	%
0,6,214	CFB10	CLOUD FRACTION BELOW 1000FT ASL	%
0,6,215	LCB	LOW CLOUD BASE(FT ASL)	ft
0,6,216	WBFLH	WET BULB FREEZING LEVEL HEIGHT	m
0,6,217	TCTH	TOTAL CLOUD TOP HEIGHT	kft
0,2,197	50MUmax	50m-WIND U-COMPONENT	m/s
0,2,197	50MUmin	50m-WIND U-COMPONENT	m/s
0,2,198	50MVmax	50m-WIND V-COMPONENT	m/s
0,2,198	50MVmin	50m-WIND V-COMPONENT	m/s
0,3,1	PRMSL	Pressure Reduced to MSL	Pa
0,1,197	SNOAL	SNOW AMOUNT OVER LAND AFT TSTP	m
0,0,0	TMP	surface Temperature	K
0,3,18	HPBL	Planetary Boundary Layer Height	m
2,0,1	SFCR	Surface Roughness	m
2,0,0	LAND	Land Cover (0=sea, 1=land)	-
1,0,192	FRICE	FRACTION OF SEA ICE	%
0,3,6	DIST	Orography	m
0,3,0	PRES	Surface Pressure	Pa

<sup>\* 9</sup> tiles : broad leaf, grass(c3, c4), needle leaf, shrub, city, water, bare soil, ice

## — UM국지모델(등온위면) : 1015\_v070\_isen

GRIB 변수번호	약어	설명(UM 국지)	단위
0,2,225	UTHETA*	U COMPONENT WIND AT THETA SURFACE	m/s
0,2,226	VTHETA*	V COMPONENT WIND AT THETA SURFACE	m/s
0,2,227	PTHETA*	PRESSURE AT THETA SURFACE	Pa
0,1,235	QTHETA*	SPECIFIC HUMIDITY AT THETA SURFACE	kg/kg
0,1,236	RHTHETA*	RELATIVE HUMIDITY AT THETA SURFACE	%
0,2,229	PVTHETA*	POTENTIAL VORTICITY AT THETA SURFACE	km^2/kg/s

<sup>\* 16</sup> level : 275, 280, 285, 290, 295, 300, 305, 310, 315, 320, 325, 330, 335, 340, 345, 350

<sup>\*\* 5</sup> pfts : broad leaf, grass(c3, c4), needle leaf, shrub

<sup>\*\*\*</sup> 토양 4층 : 10cm, 35cm, 1m, 3m