

Figure S-1Monthly averaged \$\theta\$ vertical profile at aggregated LCZ grids

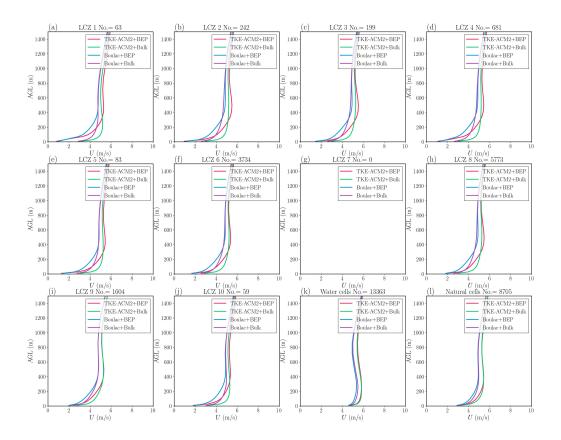


Figure S-2Monthly averaged \$U\$ vertical profile at aggregated LCZ grids

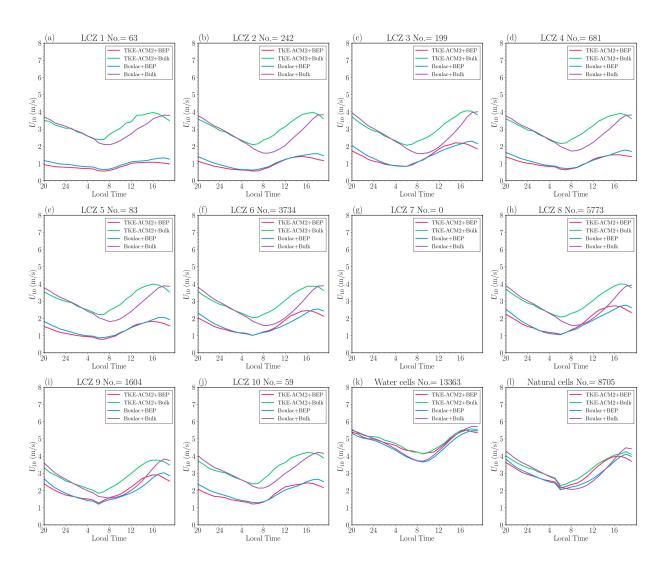


Figure S-3Monthly averaged  $U_{10}\$  diurnal cycle at aggregated LCZ grids

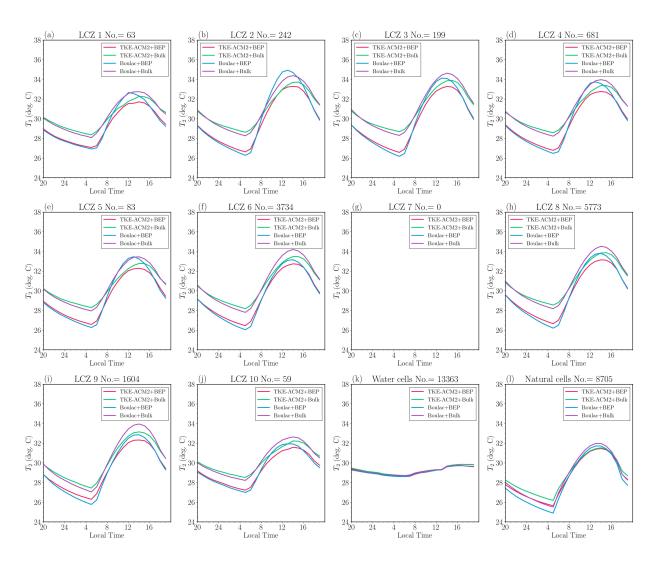


Figure S-4Monthly averaged \$T\_{2}\$ diurnal cycle at aggregated LCZ grids

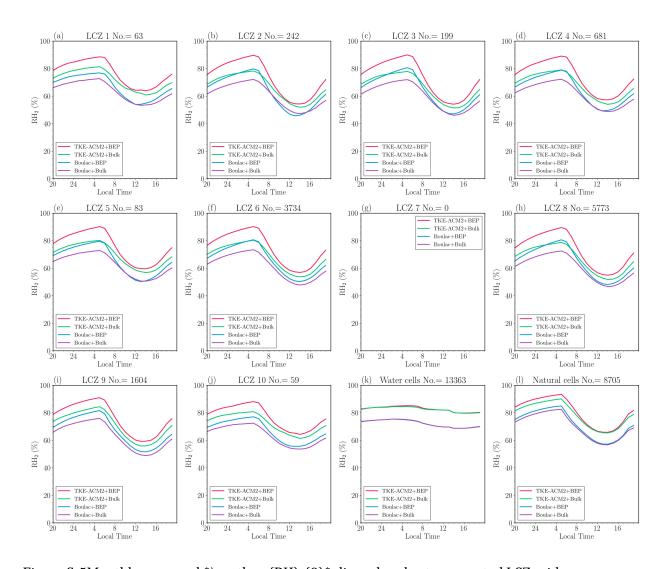


Figure S-5Monthly averaged \$\mathrm{RH}\_{2}\$ diurnal cycle at aggregated LCZ grids

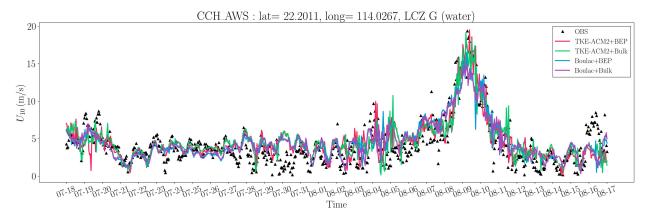


Figure S-6: \$U\_{10}\$ at CCH\_AWS station.

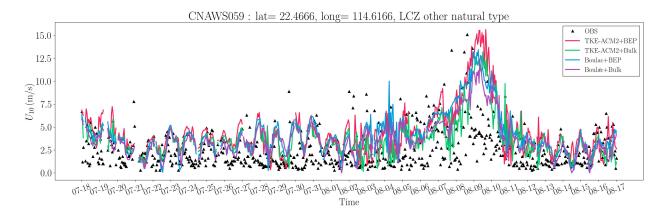


Figure S-7:  $U_{10}\$  at CNAWS059 station.

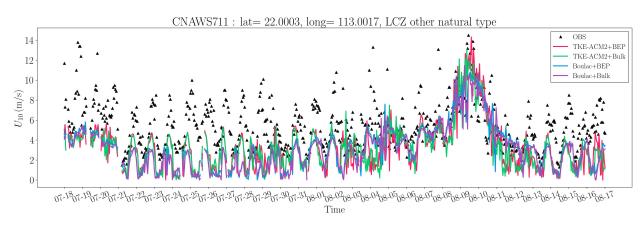


Figure S-8: \$U\_{10}\$ at CNAWS711 station.

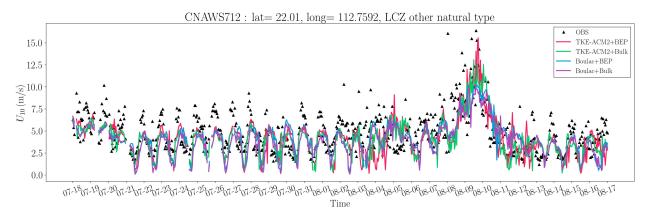


Figure S-9:  $U_{10}$  at CNAWS712 station.

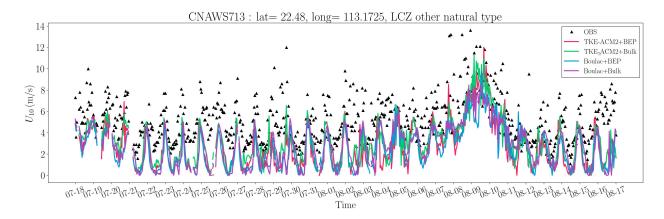


Figure S-10: \$U\_{10}\$ at CNAWS713 station.

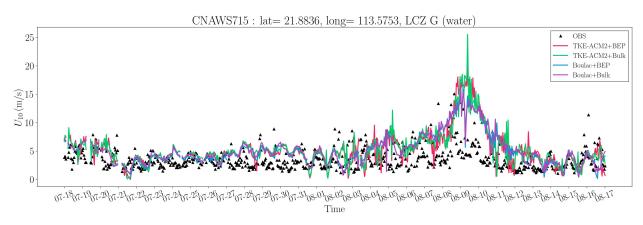


Figure S-11:  $U_{10}$  at CNAWS715 station.

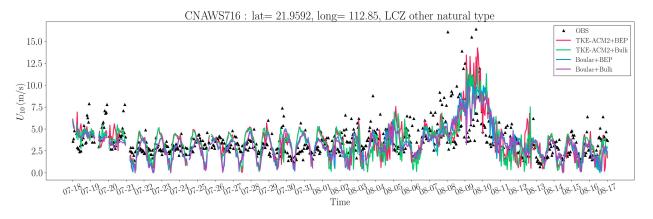


Figure S-12:  $U_{10}\$  at CNAWS716 station.

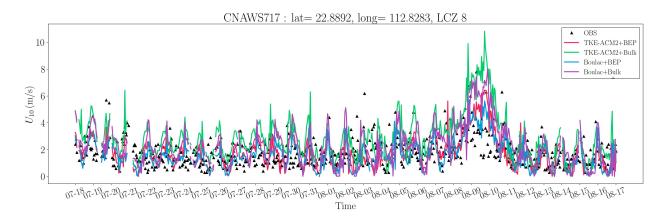


Figure S-13: \$U\_{10}\$ at CNAWS717 station.

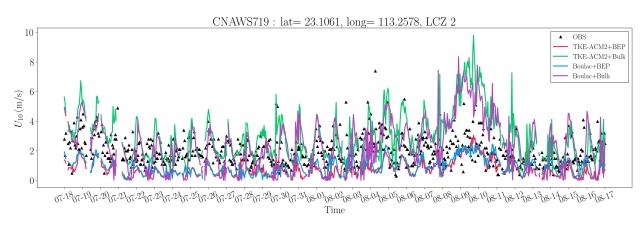


Figure S-14: \$U\_{10}\$ at CNAWS719 station.

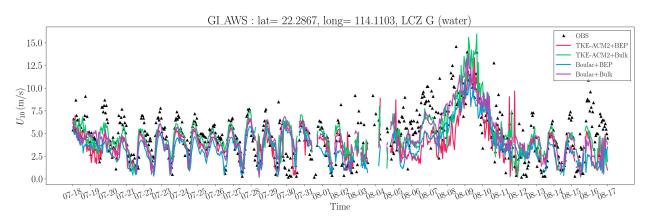


Figure S-15:  $U_{10}\$  at GI\_AWS station.

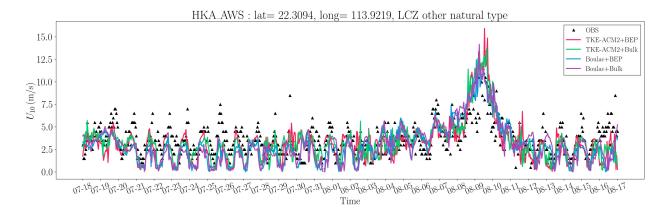


Figure S-16: \$U\_{10}\$ at HKA\_AWS station.

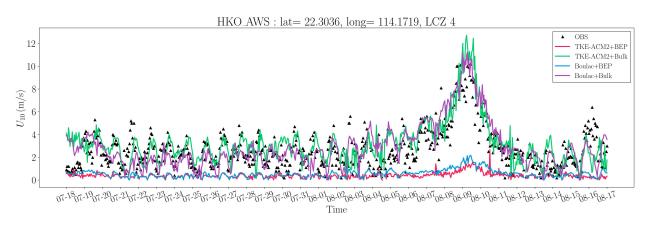


Figure S-17: \$U\_{10}\$ at HKO\_AWS station.

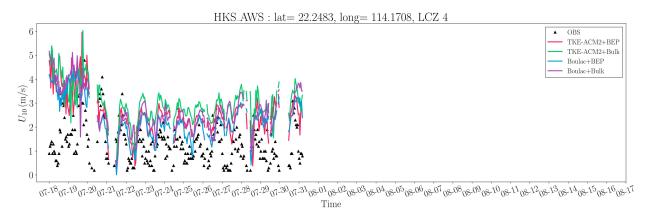


Figure S-18: \$U\_{10}\$ at HKS\_AWS station.

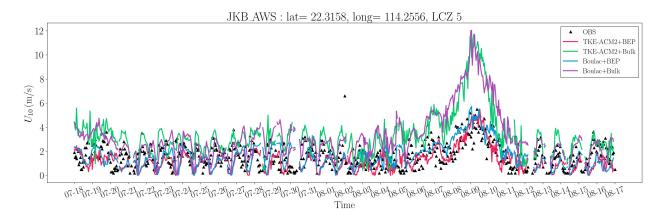


Figure S-19: \$U\_{10}\$ at JKB\_AWS station.

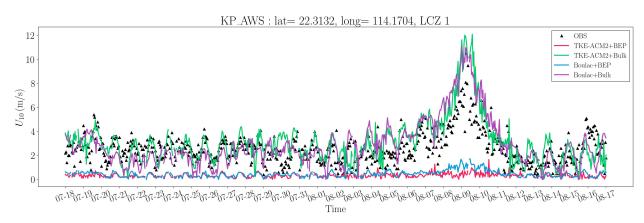


Figure S-20: \$U\_{10}\$ at KP\_AWS station.

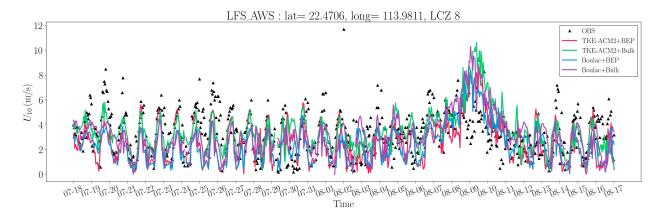


Figure S-21:  $U_{10}\$  at LFS\_AWS station.

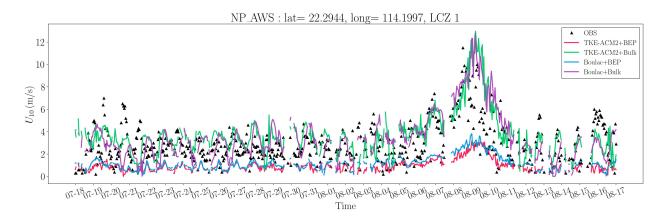


Figure S-22: \$U\_{10}\$ at NP\_AWS station.

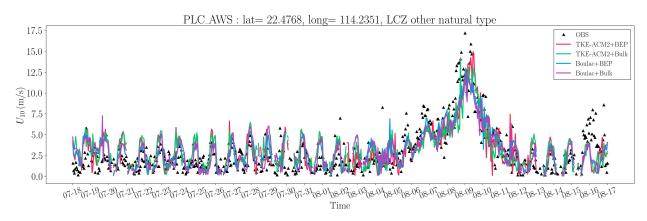


Figure S-23: \$U\_{10}\$ at PLC\_AWS station.

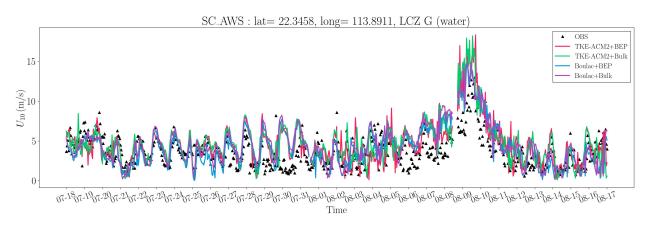


Figure S-24:  $U_{10}$  at SC\_AWS station.

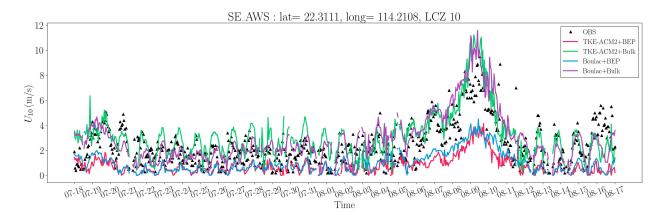


Figure S-25: \$U\_{10}\$ at SE\_AWS station.

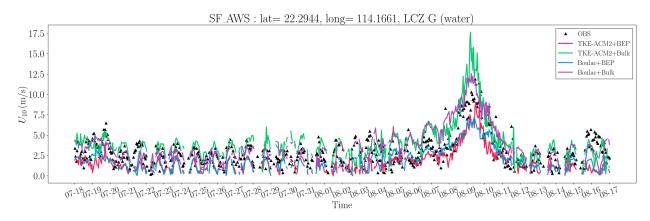


Figure S-26:  $U_{10}$  at SF\_AWS station.

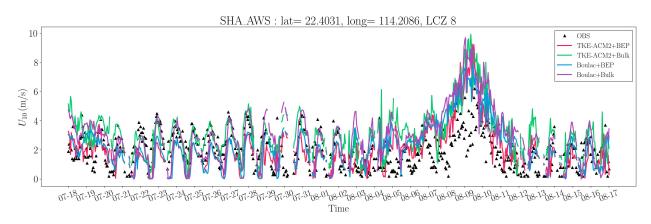


Figure S-27:  $U_{10}$  at SHA\_AWS station.

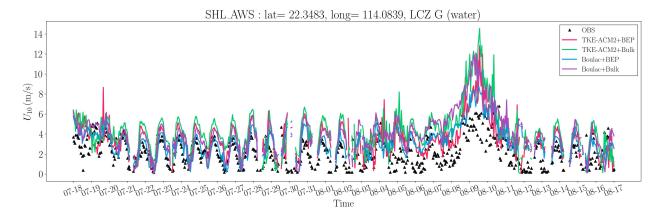


Figure S-28: \$U\_{10}\$ at SHL\_AWS station.

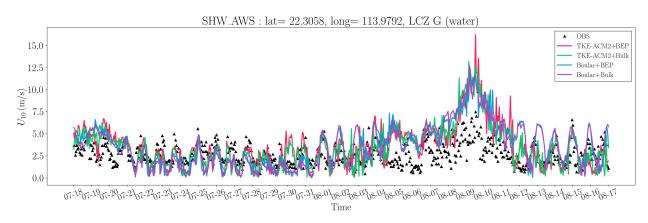


Figure S-29:  $U_{10}\$  at SHW\_AWS station.

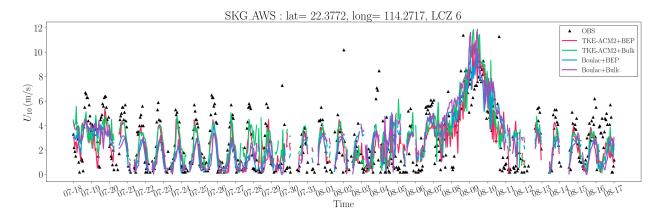


Figure S-30:  $U_{10}\$  at SKG\_AWS station.

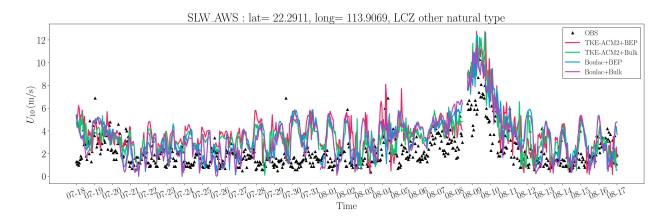


Figure S-31: \$U\_{10}\$ at SLW\_AWS station.

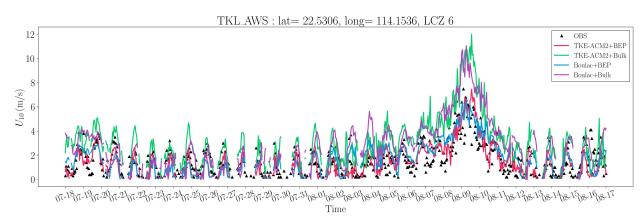


Figure S-32: \$U\_{10}\$ at TKL\_AWS station.

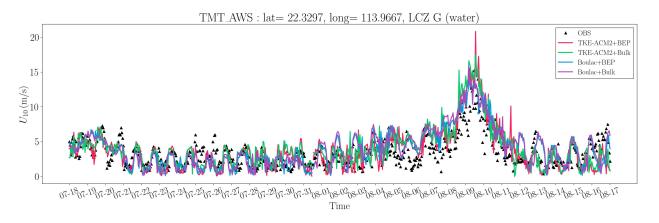


Figure S-33: \$U\_{10}\$ at TMT\_AWS station.

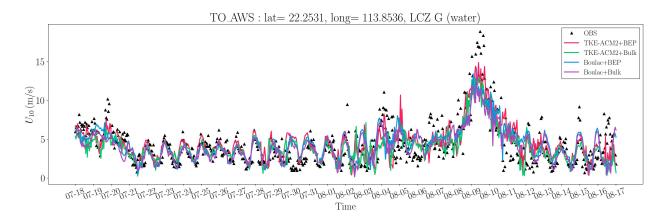


Figure S-34: \$U\_{10}\$ at TO\_AWS station.

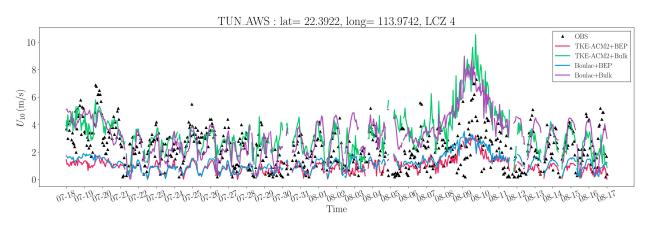


Figure S-35:  $U_{10}$  at TUN\_AWS station.

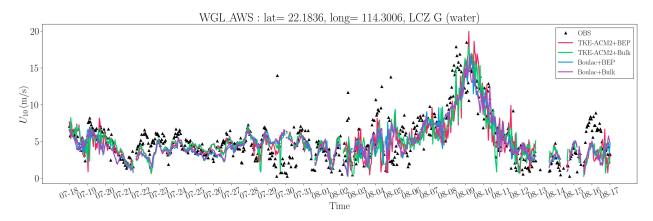


Figure S-36: \$U\_{10}\$ at WGL\_AWS station.

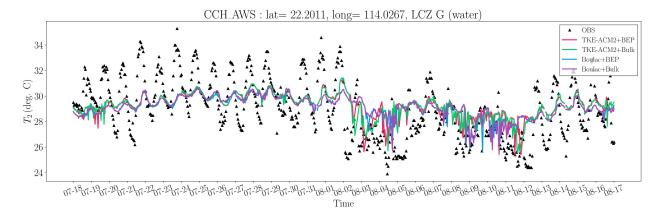


Figure S-37: \$T\_{2}\$ at CCH\_AWS station.

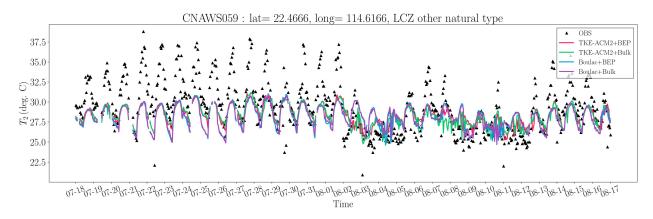


Figure S-38: \$T\_{2}\$ at CNAWS059 station.

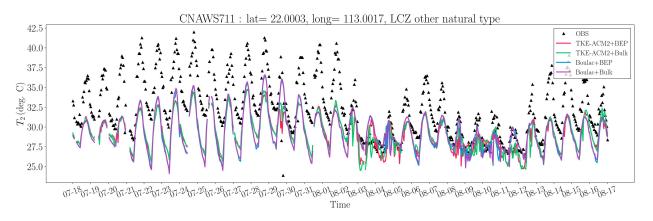


Figure S-39: \$T\_{2}\$ at CNAWS711 station.

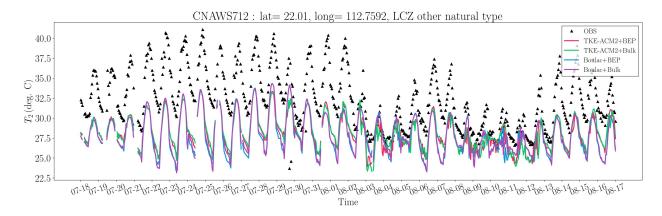


Figure S-40: \$T\_{2}\$ at CNAWS712 station.

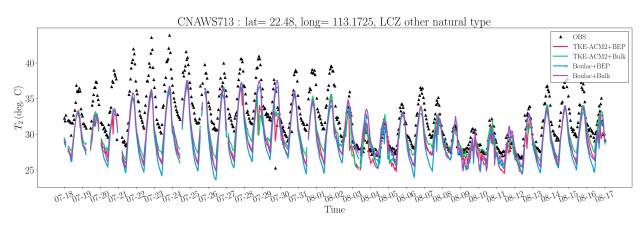


Figure S-41:  $T_{2}\$  at CNAWS713 station.

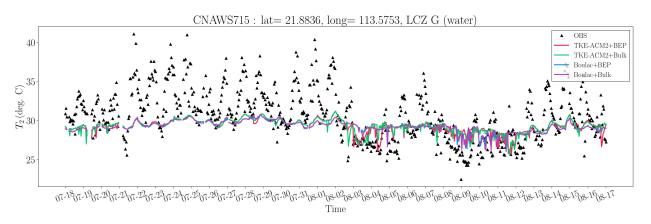


Figure S-42: \$T\_{2}\$ at CNAWS715 station.

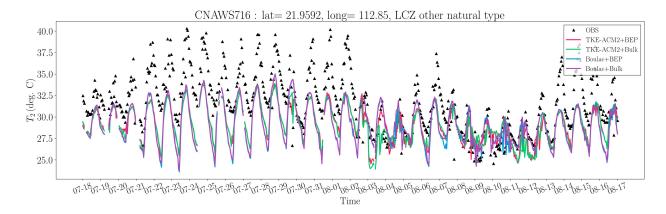


Figure S-43: \$T\_{2}\$ at CNAWS716 station.

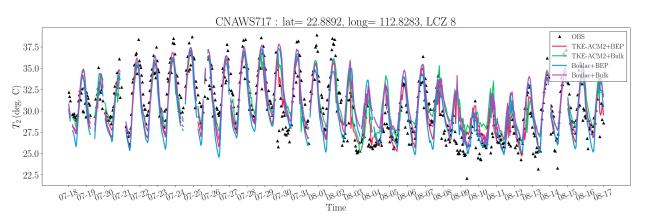


Figure S-44: \$T\_{2}\$ at CNAWS717 station.

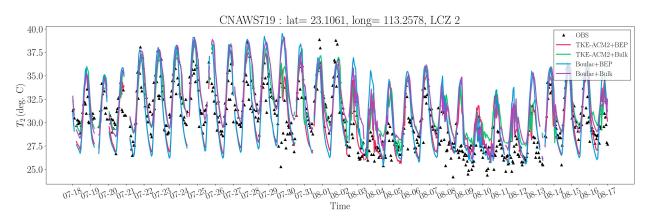


Figure S-45: \$T\_{2}\$ at CNAWS719 station.

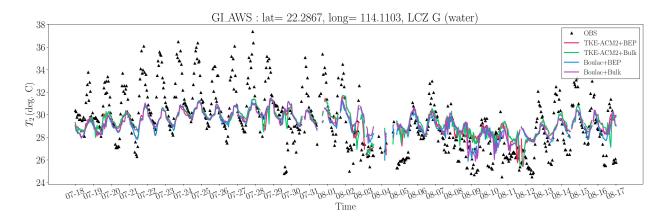


Figure S-46: \$T\_{2}\$ at GI\_AWS station.

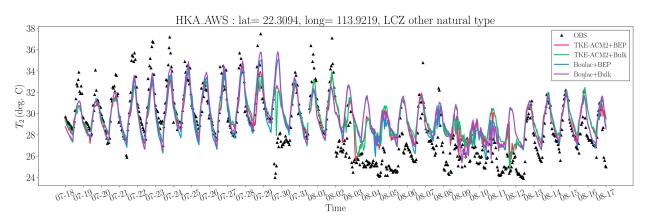


Figure S-47:  $T_{2}$  at HKA\_AWS station.

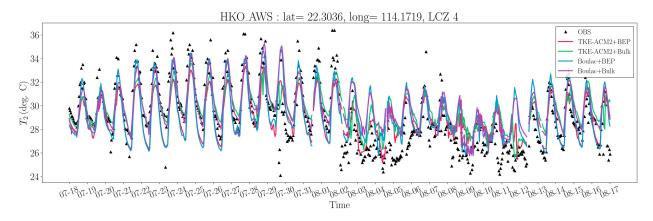


Figure S-48: \$T\_{2}\$ at HKO\_AWS station.

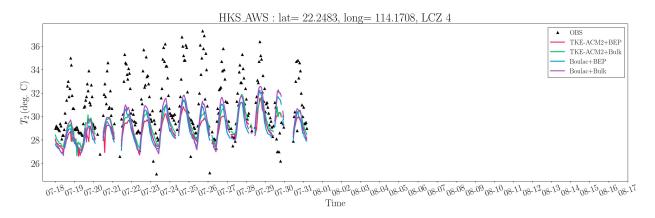


Figure S-49: \$T\_{2}\$ at HKS\_AWS station.

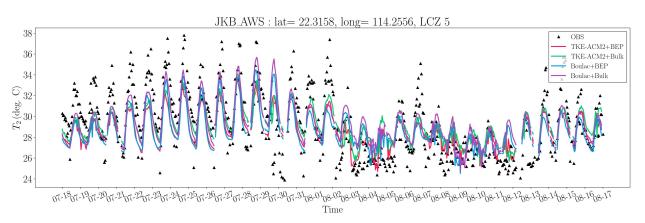


Figure S-50:  $T_{2}$  at JKB\_AWS station.

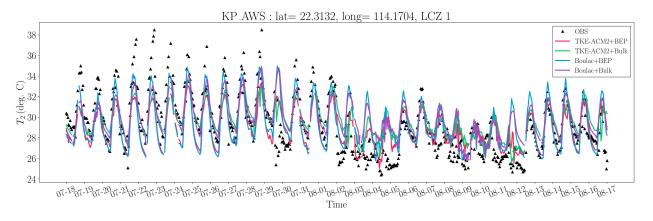


Figure S-51: \$T\_{2}\$ at KP\_AWS station.

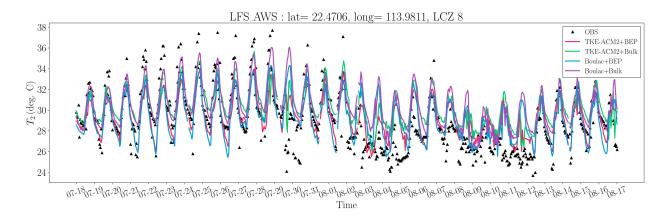


Figure S-52: \$T\_{2}\$ at LFS\_AWS station.

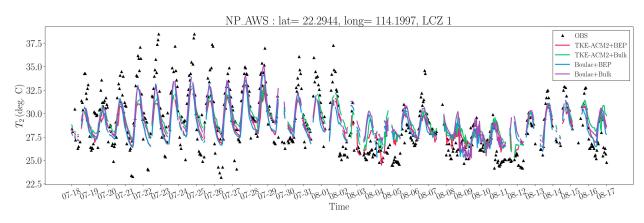


Figure S-53:  $T_{2}$  at NP\_AWS station.

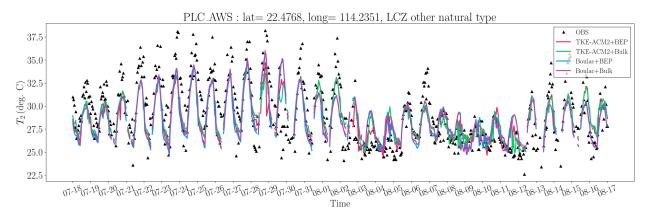


Figure S-54: \$T\_{2}\$ at PLC\_AWS station.

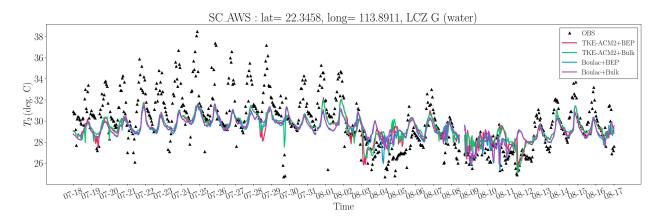


Figure S-55: \$T\_{2}\$ at SC\_AWS station.

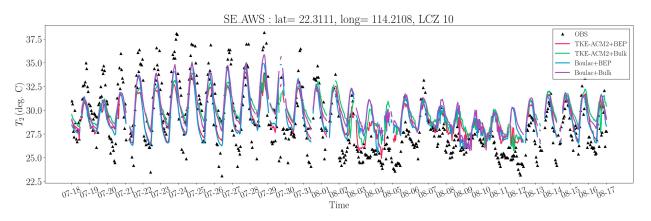


Figure S-56: \$T\_{2}\$ at SE\_AWS station.

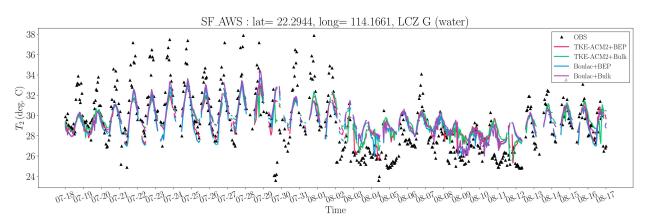


Figure S-57:  $T_{2}$  at SF\_AWS station.

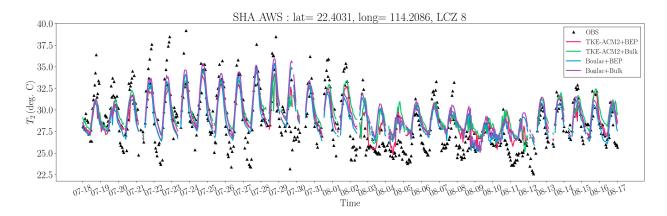


Figure S-58: \$T\_{2}\$ at SHA\_AWS station.

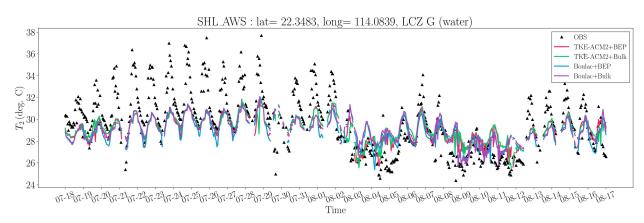


Figure S-59: \$T\_{2}\$ at SHL\_AWS station.

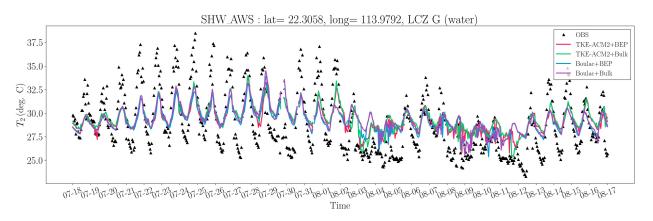


Figure S-60: \$T\_{2}\$ at SHW\_AWS station.

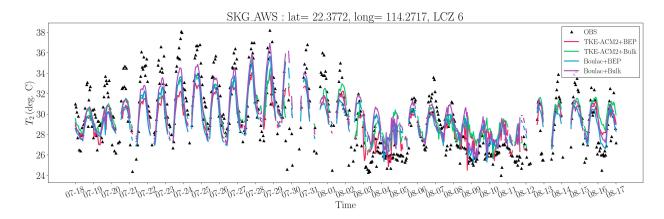


Figure S-61:  $T_{2}$  at SKG\_AWS station.

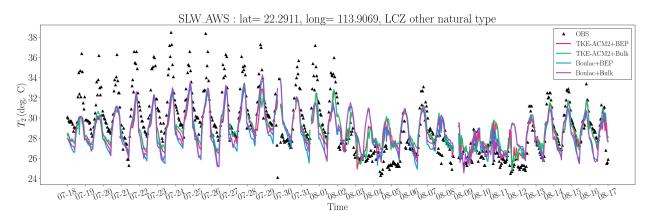


Figure S-62: \$T\_{2}\$ at SLW\_AWS station.

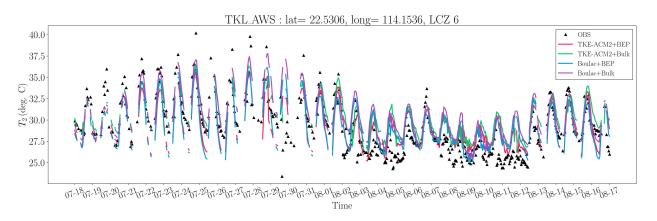


Figure S-63: \$T\_{2}\$ at TKL\_AWS station.

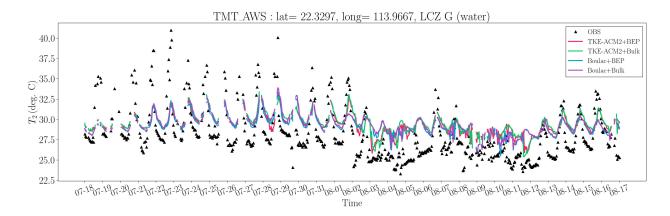


Figure S-64: \$T\_{2}\$ at TMT\_AWS station.

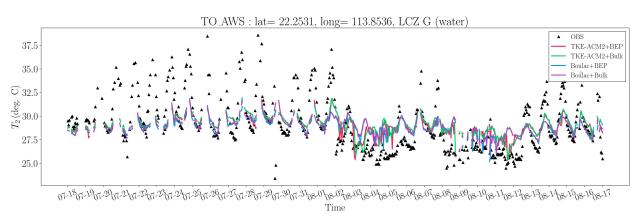


Figure S-65: \$T\_{2}\$ at TO\_AWS station.

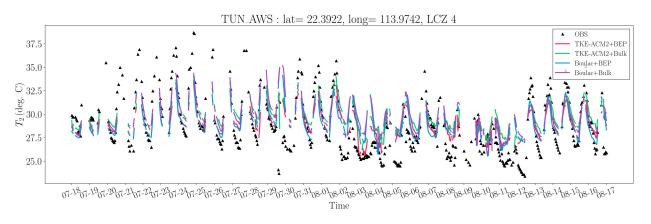


Figure S-66: \$T\_{2}\$ at TUN\_AWS station.

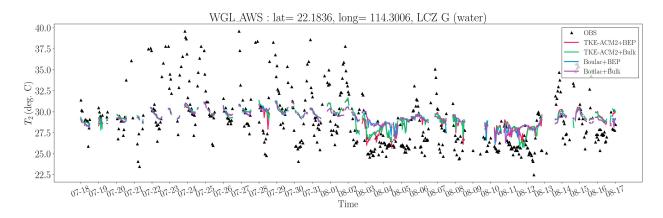


Figure S-67: \$T\_{2}\$ at WGL\_AWS station.

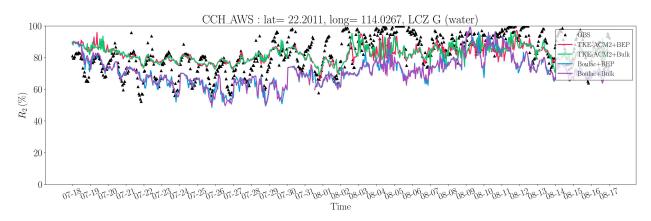


Figure S-68: \$RH\_{2}\$ at CCH\_AWS station.

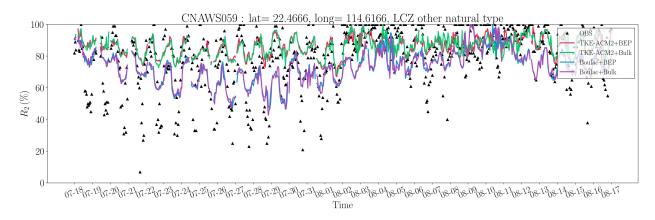


Figure S-69: \$RH\_{2}\$ at CNAWS059 station.

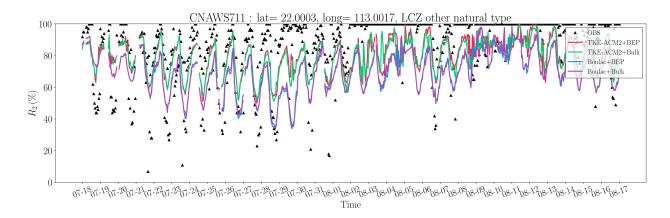


Figure S-70: \$RH\_{2}\$ at CNAWS711 station.

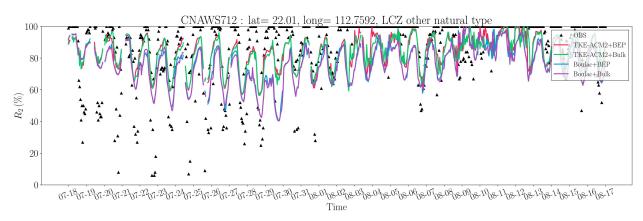


Figure S-71: \$RH\_{2}\$ at CNAWS712 station.

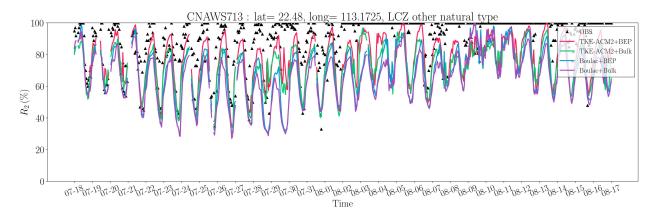


Figure S-72: \$RH\_{2}\$ at CNAWS713 station.

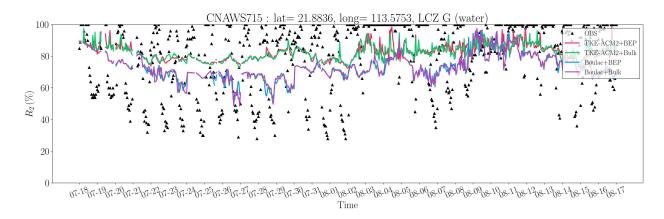


Figure S-73:  $RH_{2}\$  at CNAWS715 station.

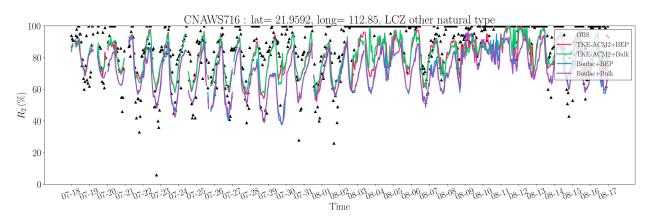


Figure S-74:  $RH_{2}$  at CNAWS716 station.

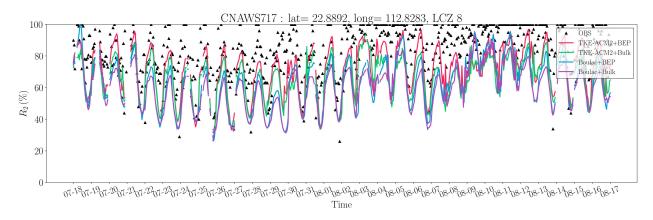


Figure S-75: \$RH\_{2}\$ at CNAWS717 station.

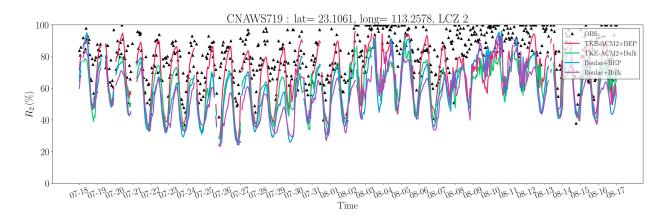


Figure S-76: \$RH\_{2}\$ at CNAWS719 station.

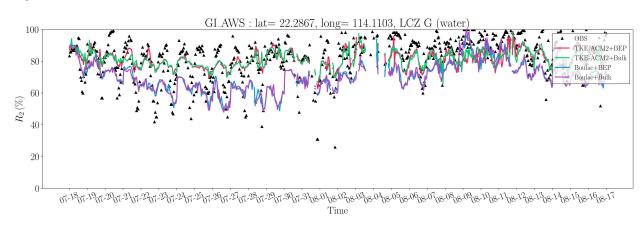


Figure S-77:  $RH_{2}\$  at  $GI_{AWS}$  station.

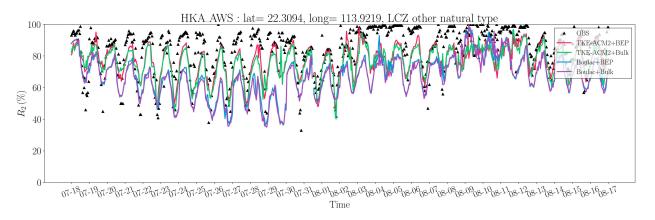


Figure S-78: \$RH\_{2}\$ at HKA\_AWS station.

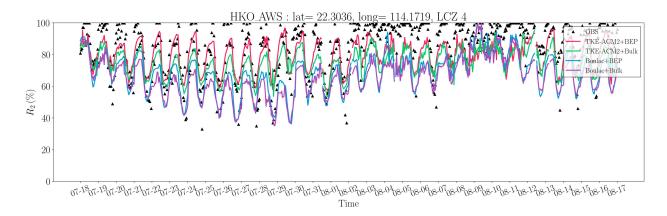


Figure S-79: \$RH\_{2}\$ at HKO\_AWS station.

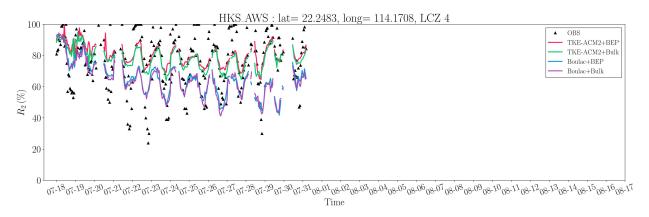


Figure S-80: \$RH\_{2}\$ at HKS\_AWS station.

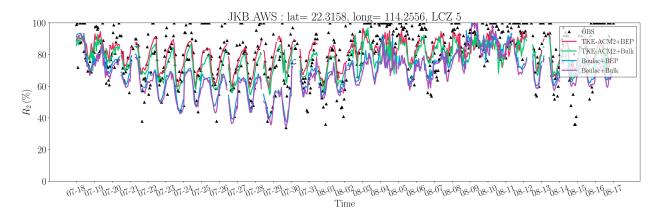


Figure S-81:  $RH_{2}$  at JKB\_AWS station.

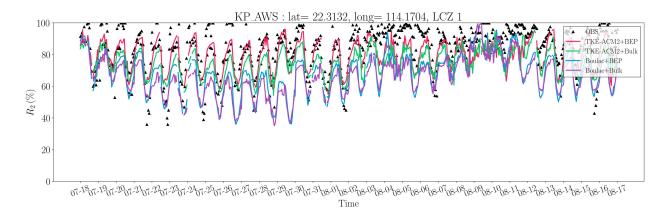


Figure S-82: \$RH\_{2}\$ at KP\_AWS station.

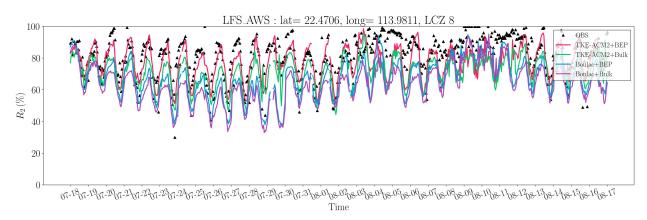


Figure S-83:  $RH_{2}\$  at LFS\_AWS station.

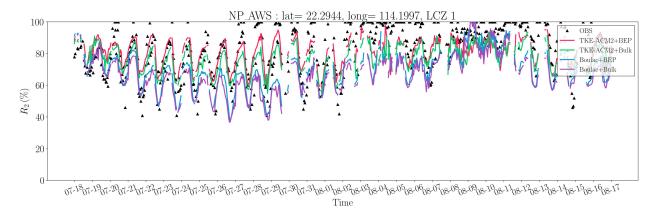


Figure S-84: \$RH\_{2}\$ at NP\_AWS station.

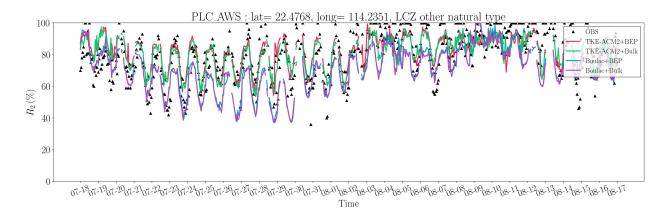


Figure S-85: \$RH\_{2}\$ at PLC\_AWS station.

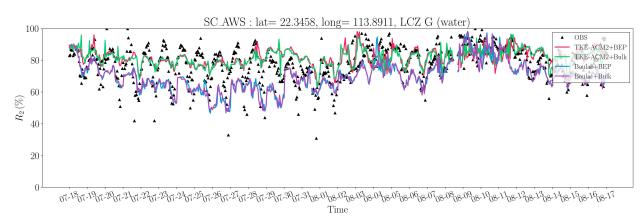


Figure S-86: \$RH\_{2}\$ at SC\_AWS station.

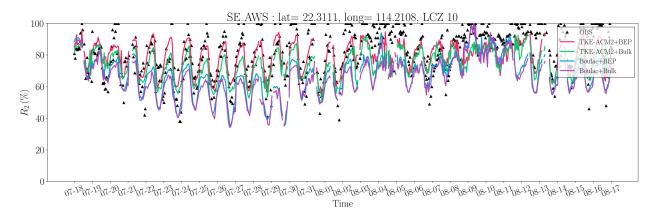


Figure S-87: \$RH\_{2}\$ at SE\_AWS station.

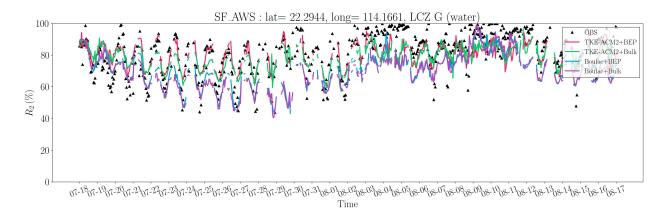


Figure S-88: \$RH\_{2}\$ at SF\_AWS station.

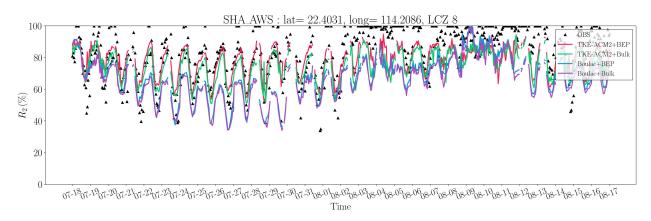


Figure S-89: \$RH\_{2}\$ at SHA\_AWS station.

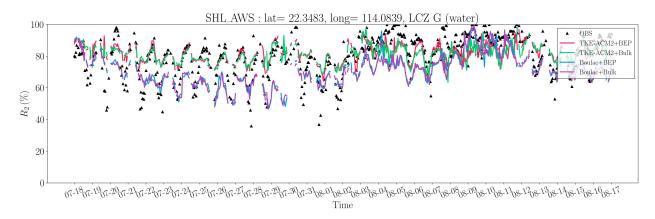


Figure S-90: \$RH\_{2}\$ at SHL\_AWS station.

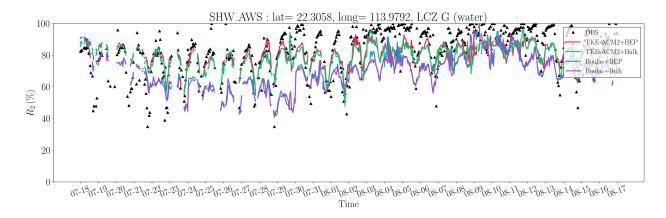


Figure S-91: \$RH\_{2}\$ at SHW\_AWS station.

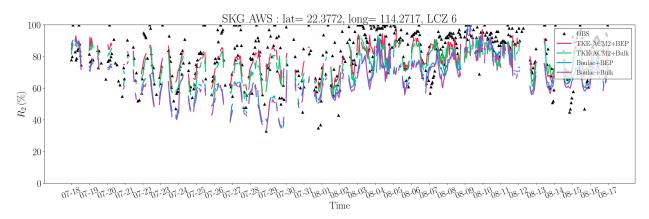


Figure S-92: \$RH\_{2}\$ at SKG\_AWS station.

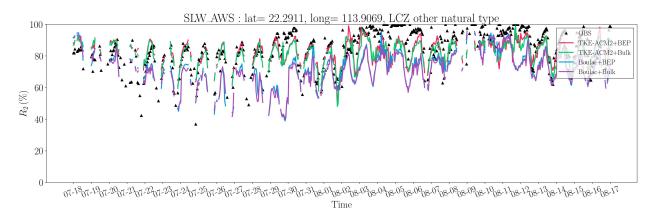


Figure S-93: \$RH\_{2}\$ at SLW\_AWS station.

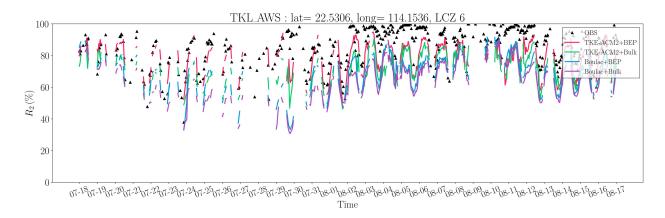


Figure S-94: \$RH\_{2}\$ at TKL\_AWS station.

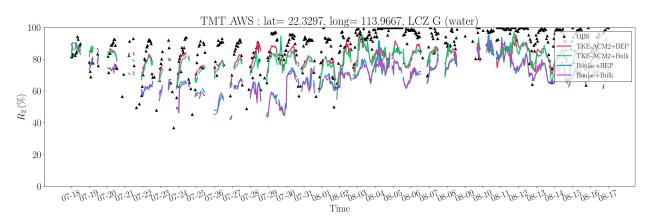


Figure S-95: \$RH\_{2}\$ at TMT\_AWS station.

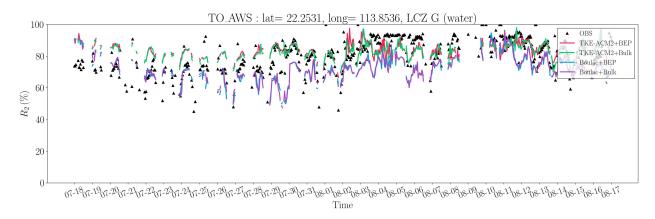


Figure S-96: \$RH\_{2}\$ at TO\_AWS station.

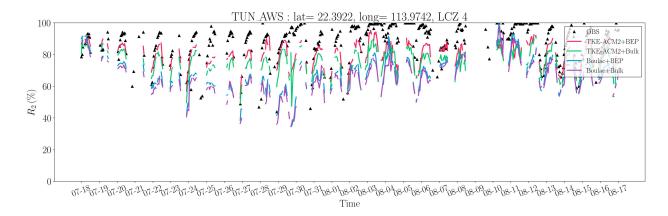


Figure S-97: \$RH\_{2}\$ at TUN\_AWS station.

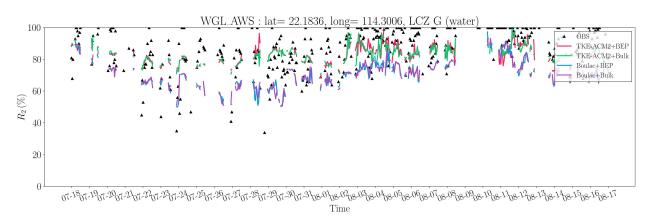


Figure S-98: \$RH\_{2}\$ at WGL\_AWS station.