GLOSSARY OF TERMS
FOR THE
ASCE STANDARDIZED REFERENCE EVAPOTRANSPIRATION EQUATION

C_d	denominator constant that changes with reference type and calculation time step (s m^{-1})
C_n	numerator constant that changes with reference type and calculation time step (K mm s^3 Mg^{-1} d^{-1} or K mm s^3 Mg^{-1} h^{-1})
D_M	day of the month (1-31)
ET	Evapotranspiration (mm d^{-1} or mm h^{-1})
ET_c	Crop evapotranspiration
ET_{os}	Reference ET for a *short* crop with an approximate height of *0.12* m (similar to clipped grass) (mm d^{-1} or mm h^{-1})
ET_{ref}	Reference Evapotranspiration (mm d^{-1} or mm h^{-1})
ET_{rs}	Reference ET for a *tall* crop with an approximate height of *0.50* m (similar to full-cover alfalfa) (mm d^{-1} or mm h^{-1})
ET_{sz}	Standardized Reference Evapotranspiration Equation
G	soil heat flux density at the soil surface (MJ m^{-2} d^{-1} for daily time steps or MJ m^{-2} h^{-1} for hourly time steps)
G_{day}	daily soil heat flux density (MJ m^{-2} d^{-1})
$G_{hr\ daytime}$	hourly soil heat flux density during daytime (MJ m^{-2} h^{-1})
$G_{hr\ nighttime}$	hourly soil heat flux density during nighttime (MJ m^{-2} h^{-1})
G_{month}	monthly soil heat flux density (MJ m^{-2} d^{-1})
G_{sc}	solar constant (4.92 MJ m^{-2} h^{-1})
J	day of the year (1 – 365)
J_{month}	month of the year (1 –12)
K_{ab}	coefficient derived from the a_s and b_s coefficients of the Angstrom formula (unitless)
K_B	the clearness index for direct beam radiation (unitless)
K_c	crop coefficient
K_{co}	crop coefficient for use with ET_{os}
K_{cr}	crop coefficient for use with ET_{rs}
K_D	the transmissivity index for diffuse radiation (unitless)
K_G	coefficient used to calculate hourly soil heat flux (unitless)
K_t	atmospheric turbidity coefficient (unitless)
K_{time}	units conversion, equal to 86,400 s d^{-1} for ET in mm d^{-1} and equal to 3600 s h^{-1} for ET in mm h^{-1}
K_o	average difference between T_{min} and mean daily T_{dew} (^oC)

LAI	leaf area index = area (one-sided) of leaves per unit area of ground surface (m^2 m^{-2})
LAI_{active}	active (sunlit) leaf area index, m^2 (leaf area) m^{-2} (soil surface)
L_m	longitude of the measurement site (expressed as positive degrees west of Greenwich, England)
L_z	longitude of the center of the local time zone (expressed as positive degrees west of Greenwich, England)
M	number of the month (1-12)
N	maximum duration of sunshine or daylight hours (h)
P	atmospheric pressure at station elevation z (kPa)
P_o	atmospheric pressure at sea level = 101.3 (kPa)
R	specific gas constant = 287 (J kg^{-1} K^{-1})
R_a	extraterrestrial radiation (MJ m^{-2} d^{-1}) or (MJ m^{-2} h^{-1})
RH	relative humidity (%)
RH_{max}	daily maximum relative humidity (%)
RH_{mean}	mean daily relative humidity
RH_{min}	daily minimum relative humidity (%)
R_{lu}	long-wave radiation emitted from the surface
R_{ld}	long-wave radiation emitted from the atmosphere
R_n	net radiation at the crop surface (MJ m^{-2} d^{-1} or MJ m^{-2} h^{-1})
R_{nl}	net long-wave radiation (MJ m^{-2} d^{-1} or MJ m^{-2} h^{-1}), defined as being positive upwards and negative downwards
R_{ns}	net short-wave radiation (MJ m^{-2} d^{-1} or MJ m^{-2} h^{-1}), defined as being positive downwards and negative upwards
R_s	measured or calculated solar radiation (MJ m^{-2} d^{-1}) or (MJ m^{-2} h^{-1})
R_{so}	clear-sky radiation (MJ m^{-2} d^{-1}) or (MJ m^{-2} h^{-1})
S_c	seasonal correction for solar time (h)
T	mean daily or hourly air temperature at 1.5 to 2.5-m height (°C)
T_{dew}	dew point temperature (°C)
T_{dry}	dry bulb temperature (°C)
T_{hr}	mean hourly air temperature (°C)
T_K	mean absolute temperature (K)
$T_{K\ hr}$	mean absolute temperature during the hour (K)
T_{Ko}	reference temperature at elevation z_o (K)
$T_{K\ max}$	maximum absolute temperature during the 24-hour period (K)
$T_{K\ min}$	minimum absolute temperature during the 24-hour period (K)
T_{Kv}	mean virtual temperature for period (K)
T_{hr}	mean hourly air temperature (°C)
T_{max}	daily maximum air temperature (°C)
T_{mean}	mean air temperature for the time period of calculation (°C)
T_{min}	daily minimum air temperature (°C)
T_{month}	monthly mean air temperature (°C)
T_{wet}	wet bulb temperature (°C)
W	precipitable water in the atmosphere (mm)

Y	number of the year (for example 1996 or 96)
a_{psy}	coefficient depending on the type of ventilation of the wet bulb of a psychrometer ($°C^{-1}$)
a_s	coefficient of the Angstrom formula (unitless)
b_s	coefficient of the Angstrom formula (unitless)
c_p	specific heat of the air, (MJ kg^{-1} $^oC^{-1}$)
d	zero plane displacement height, (m)
daytime	hourly or shorter period when $R_n \geq 0$
d_r	inverse relative distance earth-sun (unitless)
e_a	mean actual vapor pressure at 1.5 to 2.5-m height (kPa)
$e^o(T)$	saturation vapor pressure function (kPa)
e_s	saturation vapor pressure at 1.5 to 2.5-m height (kPa)
f_{cd}	cloudiness function (unitless)
$f_{cd\ \beta>0.3}$	cloudiness function for the time period prior to when sun angle β (in the afternoon or evening) falls below 0.3 radians (unitless)
g	gravitational acceleration = 9.807 ($m\ s^{-2}$)
h	reference vegetation height (m)
k	von Karman's constant, 0.41, (dimensionless)
k_{Rs}	adjustment coefficient for predicting R_s from air temperature ($°C^{-0.5}$)
n	recorded duration of sunshine during a day (h)
nighttime	hourly or shorter period when $R_n < 0$
r_a	aerodynamic resistance ($s\ m^{-1}$)
r_l	bulk stomatal resistance of a well-illuminated leaf ($s\ m^{-1}$)
r_s	surface resistance ($s\ m^{-1}$)
t	standard clock time at the midpoint of the period
t_l	length of the calculation period (h)
u_2	mean daily or hourly wind speed at 2-m height ($m\ s^{-1}$)
u_z	wind speed at height z ($m\ s^{-1}$)
z	weather site elevation above mean sea level (m)
z_h	height of air temperature and humidity measurements (m)
z_o	elevation at reference level (i.e., sea level) (m)
z_{om}	roughness length governing momentum transfer (m)
z_{oh}	roughness length for transfer of heat and vapor (m)
z_w	height corresponding to wind speed (m)
α	”alpha” = albedo or canopy reflection coefficient (unitless)
α_l	constant lapse rate moist air = 0.0065 ($K\ m^{-1}$)
β	“beta” = angle of the sun above the horizon (radians)
γ	“gamma” = psychrometric constant ($kPa\ °C^{-1}$)
γ_{psy}	psychrometric constant for the psychrometer ($kPa\ °C^{-1}$)
Δ	“delta” = slope of the saturation vapor pressure-temperature curve ($kPa\ °C^{-1}$)
δ	“delta” = solar declination (radians)

ε	"epsilon" = ratio of the molecular weight of water vapor to dry air (unitless) ($\varepsilon = 0.622$)
λ	"lambda" = latent heat of vaporization (MJ/kg)
φ	"phi" = latitude (radians)
ρ_a	"rho" = air density (Kg m^{-3})
ρ_w	water density (Mg m^{-3}) (taken as 1.0 Mg m^{-3})
σ	"sigma" = Stefan-Boltzmann constant ($4.901\ 10^{-9}$ MJ K^{-4} m^{-2} d^{-1})
ω	"omega" solar time angle (radians), solar noon = 0.
ω_s	sunset hour angle (radians)
ω_1	solar time angle at beginning of hourly or shorter period (radians)
ω_2	solar time angle at end of hourly or shorter period (radians)