Definitions of release condition variables
(based on REDIPHEM Online Help)

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Substance	: The name of the released substance (text)
Release type	: Jet, cyclone, pool or puff
Stability class	: Pasquill-Gifford class expressed as one or two characters: A B DE
Obstacletype	: None, fence, channel, box, circel, wall, city, arch, crossing, canyon. Adjectives: circular, linear, porous.
Nobs	: The number of obstacles
Releasestart	: The start of the release (in seconds)
Releaseduration,	: The duration of the release in seconds. A large number indicates that the duration was longer than the recorded time series. For puffs the release duration is usually set to 1 second.
Releaserate	: Measured in kg/s. For puffs it is
Releasedmass	: The total mass released.
Initialconc	: The concentration of pure contaminant in the released gas.
Nozzlediameter	: The diameter of the source
Poolfraction	: The rain out fraction of the released mass.
Xrelease,Yrelease ,Zrelease	: Source coordinates
A_release	: Direction of release (degrees from N)
B_release	: Inclination of release (degrees from horizontal)
Idealwinddirection	: The desireable wind direction (degrees from N). Note that that 270 means that the wind blows from west towards east.
Xorientation	: The direction of the X-axis in degrees from N. 270 means that the axis points towards W.
Exittemperature	: The temperature in centigrade measured before flashing. In most cases equal to the storage temperature.
Exitpressure	: Pressure in Bar measured just before exit.
Atmtemp	: Mean atmospheric temperature (C).
Atmpress	: Mean atmospheric pressure (Bar).
Atmrelhum	: Mean atmospheric relative humidity. A number between 0 and 1.
Windspeed	: Mean windspeed in m/s measured at the reference height.
Zref	: Reference height in m.
Winddirection	: Average wind direction (degrees from N)
Cloudiness	: A number between 0 and 1 indicating cloud cover.
MOlength	: The Monin-Obukov length scale in m.
Phase	: A number between 0 and 1 indicating the mass fraction of the released mass in liquid phase.
Moleweight	: An EFFECTIVE molar weight which takes thermo-dynamics into account. For a precise definition see the REDIPHEM report.
Slope	: Tan(s), where s is the slope angle of the

terrain.

Ustar	: The friction velocity in m/s.
Z0	: The surface roughness in m.
Lc	: Characteristic length scale in m (see report)
Tc	: Characteristic time scale in s (see report)

Additional Notes :

The release rate range is specified for continuous releases. The total mass released is specified for instantaneous releases.

'Phase' is the mass fraction on liquid form of the released substance prior to release. It is a number between 0 and 1, where 0 indicates a purely gasous release and 1 indicates a release of pure liquid (which may flash immediately after).

The effective molar weight is calculated as the molar weight of an ideal simulant gas. The simulant gas simulates lean adiabatic mixtures of the actual substance. Confer report for more details.

The non-dimensional windspeed is determined by the use of the characteristic scales of length and time. See report for more details.