

APPENDIX B

jd: Julian Day

m: Month {required from the PLC}

y: Year {required from the PLC}

d: Day {required from the PLC}

hour: Hour in Universal Time {required from the PLC}

n: The difference between current Julian Day and Julian Day 2000)

L: Mean longitude of the Sun

g: Mean anomaly of the Sun

l: Ecliptic longitude of the Sun

ep: Obliquity of the ecliptic

ra: Right ascension

δ : Declination

gmst: Greenwich mean sidereal time

lmst: Local mean sidereal time

long: Geographical longitude

Φ : Geographical latitude

ω : Hour angle

θ_z : Zenith distance

γ : Solar azimuth

ρ : Actual position of Sun (+ve indicates East of verticle)

EarthMeanRadius = 6371.01 km

AstronomicalUnit = 149597890 km