VADEMECUM

In the basic paper we have agreed to use the following units of measure which we call the Planck system of measure:

Ptu – Planck time unit

Psu – Planck space unit

Peu – Planck energy unit

With the following SI conversion formulas:

1 Ptu = 5.391 · 10^{-44} s; => 1 s = $\frac{10^{44}}{5{,}39124}$Ptu

1 Peu = 6.626075 · 10^{-34} J; => 1 J = $\frac{10^{34}}{6{,}626075}$Few

1 Psu = 1.616229 · 10^{-35}m => 1 m = $\frac{10^{35}}{1{,}616229}$Psu

$\frac{1\ Peu}{1\ Ptu} \approx$ 1.2290 ·10^{10} W –

$\frac{1\ Psu}{1\ Ptu} = \frac{1{,}616229 \cdot 10^{-35}\ m}{5{,}39124 \cdot 10^{-44}\ s}$ = 299,787,989.40 $\frac{m}{s}$ = c,

i.e. the speed of light in a vacuum (Wikipedia considers your 299782458 m/s to be a more accurate value, it follows that at least one of the values 1 Psu or 1 Ptu should be recalculated)

To perform the calculations, I will use the following values:

h = 6.626075 ·10^{-34} [J · s], Planck's constant;

G = 6.67408 · 10^{-11} [m^3 kg^{-1} s^{-2}] the gravitational constant;

1 Psu = $\sqrt{\frac{\hbar G}{c^3}}$ = 1.616229 · 10^{-35} m, where ħ = $\frac{h}{2\,\pi}$ is the Dirac constant;

M_s = 1.989 ·10^{30} kg – mass of the sun;

Proton mass: 1.673 ·10^{-27} kg;

$RS_=$ 2 · $\frac{G \cdot M}{c^2}$ Schwarzschild radius;

SC_a = 365.2425 · 24 · 60 · 60 = 31,556,952 seconds/year.