

$$t_{legal} = t_{solar} + (\lambda_{zona} - \lambda_{local}) \times \frac{12}{\pi} - t_{EoT}$$

$\lambda_{zona}[\text{rad}] = \text{longitude do meridiano de refer\^encia da zona hor\^aria}$
(0° no caso do meridiano de Greenwich)

$\lambda_{local}[\text{rad}] = \text{longitude do local}$

$$t_{EoT} = \frac{9.87 \times \sin(4\pi \times J') - 7.53 \times \cos(2\pi \times J') - 1.5 \times \sin(2\pi \times J')}{60}$$

$$J' = \frac{J - 81}{364}$$