

Pseudo-Time

$$(1) \quad \tau(t) = \int_0^t \frac{dt}{\mu(p) c_t(p)}$$

where

$\mu(p)$	dynamic fluid viscosity
$c_t(p)$	total compressibility

It is widely used in [Pressure Diffusion @model](#) and transient data analysis ([PTA](#) / [RTA](#)) of [strongly compressible fluids](#).

The name "[Pseudo-Time](#)" is misnomer as [Pseudo-Time](#) is not actually a [time](#) in terms of physical property and has a different [dimension](#).

The value of [Normalized Pseudo-Time](#) differs from [Pseudo-Time](#) by a constant multiplier but represents an actually [time](#) in terms of physical property and has the same [dimension](#).

See also

[Physics](#) / [Mechanics](#) / [Continuum mechanics](#) / [Fluid Mechanics](#) / [Fluid Dynamics](#) / [Pressure Diffusion](#) / [Pressure Diffusion @model](#)

[Petroleum Industry](#) / [Upstream](#) / [Subsurface E&P Disciplines](#) / [Well Testing](#) / [Pressure Testing](#)

[[Normalized Pseudo-Time](#)]