pwl20.xbe

Attributes

```
xbe name=pwl20 evaluate=yes limit_tstep=yes
# pwl20 source
Jacobian: constant
input_vars:
output_vars: y
aux_vars:
iparms: n=2
sparms:
rparms:
+  t1 =1  t2 =2  t3 =3  t4 =4  t5 =5
+  t6 =6  t7 =7  t8 =8  t9 =9  t10=10
+  t11=11 t12=12 t13=13 t14=14 t15=15
+  t16=16 t17=17 t18=18 t19=19 t20=20
+  v1 =1  v2 =2  v3 =3  v4 =4  v5 =5
+  v6 =6  v7 =7  v8 =8  v9 =9  v10=10
+  v11=11 v12=12 v13=13 v14=14 v15=15
+  v16=16 v17=17 v18=18 v19=19 v20=20
stparms:
igparms:
outparms: y
```

Description

`pwl20.xbe` is used to generate a piecewise linear waveform with up to 20 "break points". The parameters have the following meaning:

`n`: Number of break points.

`t1`, `t2`, etc.: Time of break point 1, 2, etc.

`v1`, `v2`, etc.: Value of `y` at the corresponding break point. `y` is made constant (equal to `v1`) before `t1`. Also, `y` is made constant after the n^{th} break point.

An example is shown in the following figure.

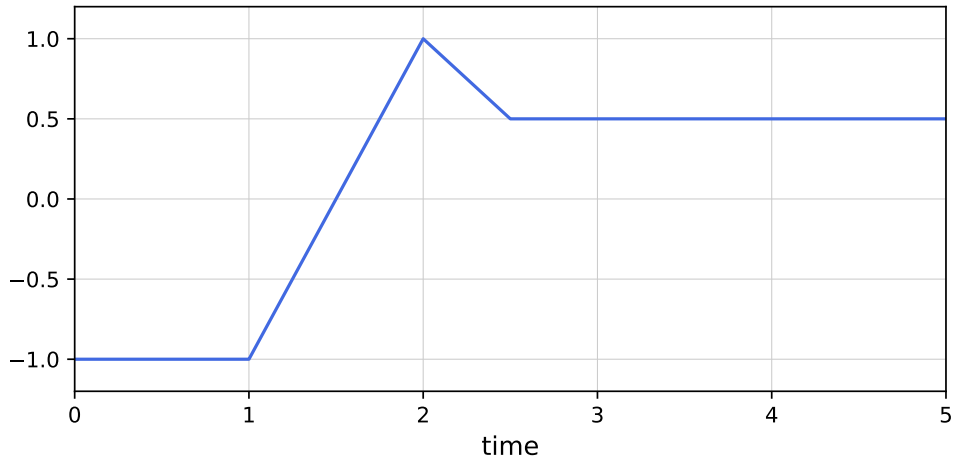

Figure 1: $y(t)$ obtained with $\mathtt{n}=3$, $\mathtt{t1}=1$, $\mathtt{t2}=2$, $\mathtt{t3}=2.5$, $\mathtt{v1}=-1$, $\mathtt{v2}=1$, $\mathtt{v3}=0.5$.