```
Get["QUADRUPOLE"];
(*------------ Nucleus ----------*)
quadrupoleSpin = 1.5;
larmorFrequencyMhz = 105.8731007;


(*----- Quadrupole interaction ----*)
quadrupoleOrder = 2; QCCMHz = 8; η = -1;


(*--- Rotor Euler angles in PAS ---*)
αPR = 30;     βPR = 80;        γPR = 120;


(*----------- Parameters ----------*)
startOperator = 0.4 * Iz;
ωRFkHz = 100;
spinRatekHz = 15;
powderFile = "rep100_simp";
numberOfGammaAngles = 3;
t1 = 20;
Δt = 1;
np = t1 / Δt;


(*--------- Pulse sequence ---------*)
detectelt = {{3, 2}};

fsimulation := (
   acq0;
   For [p = 1, p <= np, p++, {
      pulse[Δt, ωRFkHz];
      acq[p];
    }];
  );


(*---Execute, plot, and save simulation
  in "onePowderMAS" file--------------------*)
run;
tabgraph["onePowderMAS"];


(* ----------------------------------------------------------------- *)
```

```
Rang      t(µs)        intensity
0         0            0.
1         1            0.1966516113
2         2            0.1407515005
3         3            -0.07013333075
4         4            -0.1418308959
5         5            0.004308044472
6         6            0.1484301615
7         7            0.09519135239
8         8            -0.06704005251
9         9            -0.1129497492
10        10           0.01198907045
11        11           0.124670265
12        12           0.07777468433
13        13           -0.04395928328
14        14           -0.07373481123
15        15           0.01932615899
16        16           0.08592484193
17        17           0.03816589776
18        18           -0.04505499021
19        19           -0.04325721476
20        20           0.03423029552
```

****

Intensity (A.U.)