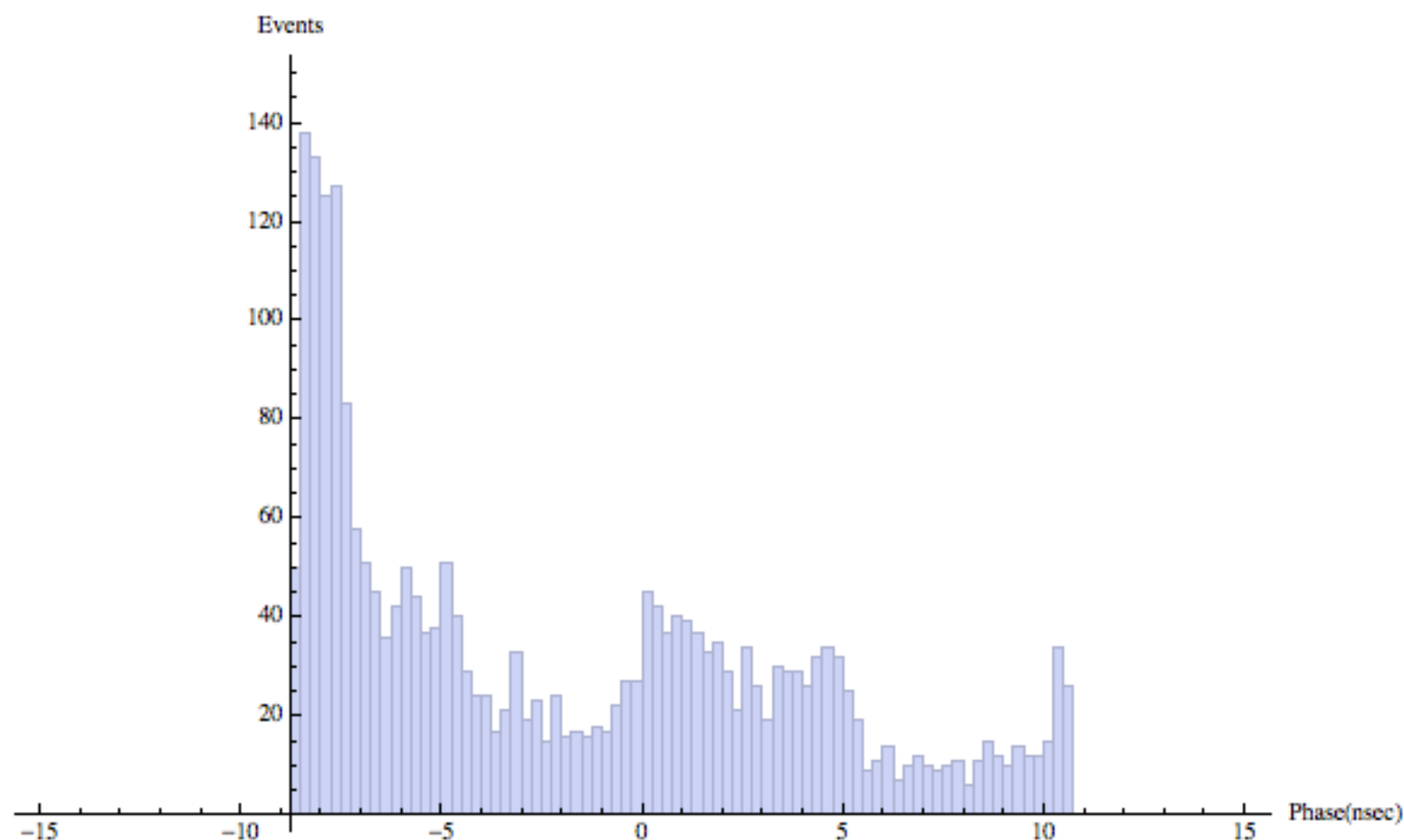


Decoding for Segmented mode data

```
In[647]:= nsegment = 10; nloop = 25; nchan = 4; ichan = 4;  
Clear[v]; v = ConstantArray[0, {2500, 4002}];  
(*Do[cannel index- but for moment only channel 4*)  
Do[(*loop index*)  
  Do[(*segemt index*)  
    nev = iseg + 10 * (iloop - 1);  
    trace = scopedata[[10 * (ichan - 1) + iseg + 40 * (iloop - 1)]];  
    v[[nev]] = Drop[trace, 3];  
    , {iseg, 1, 10, 1}];  
  , {iloop, 1, 250, 1}];
```

```
In[650]:= model = a * a Sin[.318 (t - b)];  
fitphase = Table[FindFit[Transpose[{time, (v[[iev]] + .4)}], model, {a, b}, t] /. Rule -> List, {iev, 1, 2500}];
```

```
In[725]:= phase = Table[fitphase[[i, 2, 2]], {i, 2500}];  
ampl = Table[fitphase[[i, 1, 2]], {i, 2500}];  
Histogram[phase, {-15, 15, .25}, AxesLabel -> {"Phase(nsec)", "Events"}, ImageSize -> Large]
```



Out[727]=