Subject: How can I optimize this?
Posted by hldevil on Thu, 18 Sep 2008 09:46:30 GMT
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Hi,

I'm looking for a way of optimizing a chunk of IDL code. The following code snippet is part of a larger program. What it does is basically test in some Anti-Coincidence Tables if a certain threshold energy is met. Those AC-Events which meet the condition have their frame times compared with my actual event list. If a AC frame equals an event frame the event frame is thrown away. I've tried doing it with array operations but always end up of having the problem that the AC and frame array have different lengths, so just selecting via WHERE doesn't work. Any help is very much appreciated since this part really slows the whole program

```
;four different AC sets, each with each own threshhold energy

ACdeleteIDs=[WHERE((myFitsAC.AC EQ 0) AND (myFitsAC.PI GT
ACEnergies[i])),WHERE((myFitsAC.AC EQ 1) AND (myFitsAC.PI GT
ACEnergies[j])),WHERE((myFitsAC.AC EQ 2) AND (myFitsAC.PI GT
ACEnergies[k])),WHERE((myFitsAC.AC EQ 3 AND myFitsAC.PI GT
ACEnergies[l]))]

;the AC events which are above threshold
ACdeletes=myFitsAC[ACdeleteIDs]

;keep the original data for the next loop
myFitsHED2=myFitsHED
myFitsLED2=myFitsLED

;filter event list
FOR z=0L, n_elements(ACdeletes)-1 DO BEGIN

 del=WHERE(myFitsHED.time EQ ACdeletes[z].time, cnt)
 IF cnt GT 0 THEN myFitsHED2[del].time=-1

 del=WHERE(myFitsLED.time EQ ACdeletes[z].time, cnt)
 IF cnt GT 0 THEN myFitsLED2[del].time=-1

ENDFOR

myFitsHED2=myFitsHED2[WHERE(myFitsHED2.time NE -1)]
myFitsLED2=myFitsLED2[WHERE(myFitsLED2.time NE -1)]
```