Subject: where on indices based on a variable condition without many loops
Posted by havok2063 on Mon, 07 Apr 2014 22:28:09 GMT
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I'm looking for a non-loop or single loop solution to the following problem. I need to select "good" indices of a 2d-array based on two conditions.

The original code was this

```
good = where(error NE 999 AND abs(diff) LT radius, ngood)
```

where error and diff are 2d-arrays of rough size 4000x700 and radius is a scalar = 2.0. this returned a reformed 1-d array of indices that satisfied the conditions of the where on the 2-d array.

Now I need to replace the scalar radius with an array of (not all) varying numbers, e.g. [2.0,2.0,3.0,2.0,4.0].
These new values reference certain subsets inside the row dimension [0:699] of the 2-d array, e.g. element 0 in radius applies to elements [*,0:31] in the 2-d array, element 1 applies to [*,32:60] , etc, etc. I do know what the indices are that mark these subsets.

I still need "good" to be a 1-d returned array of the correct indices in the full 2-d array satisfying the above conditions.

I've been testing various loop ideas that could work, but how do I remap the indices in the individual subsets returned in the loop iterations to the right indices in the full array?

I feel like the solution involves value_locate, histogram, and unique , but I haven't quite been able to converge.

Any ideas? Thanks.