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Subject: Can this be solved in a better way?

Posted by [Ingo Salzmann](#) on Thu, 12 Dec 2002 09:59:17 GMT

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Hi!

I am developing software for x-ray diffraction pole figure analysis in order to simulate the position of the peaks in the pole figures. Therefore I'm often concerned with arrays like 'allindices\_local' generated by this function below. Its dimension is always different and there are if..then conditions during the array construction. Meanwhile the whole stuff works fine, but I'm sure that I could have optimized many things using IDL array operations...

Maybe you could give me a hint how to optimize a code like the one below ... in front of all the way to concentrate arrays seems to me a bit quick'n dirty ;-)

\*\*\*\*\*

```
FUNCTION AutoGenerateHKL, info
```

```
  i = info.crystaltrigger - 1 ; is just an integer
```

```
  dummy = 0
```

```
  FOR h = info.hmin[i],info.hmax[i] DO BEGIN
```

```
    FOR k = info.kmin[i],info.kmax[i] DO BEGIN
```

```
      FOR l = info.lmin[i],info.lmax[i] DO BEGIN
```

```
        IF (dummy EQ 0) THEN BEGIN
```

```
          dummy = 1
```

```
          allindices_local =
```

```
          [info.hmin[i],info.kmin[i],info.lmin[i],1,info.higherharm[i] ]
```

```
          ENDIF ELSE BEGIN
```

```
            IF (NOT((h EQ 0) AND (k EQ 0) AND (l EQ 0))) THEN allindices_local =  
            [[allindices_local], [h,k,l,1,info.higherharm[i]]]
```

```
          ENDELSE
```

```
        ENDFOR
```

```
      ENDFOR
```

```
    ENDFOR
```

```
  RETURN, allindices_local
```

```
END
```

\*\*\*\*\*

Thanx for your effort

Regards,

Ingo

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