Subject: Re: All day FFT....
Posted by Martin Downing on Thu, 07 Feb 2002 09:15:45 GMT
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"Robert Stockwell" <rgs1967@hotmail.com> wrote in message
news:3C61BC7C.4030904@hotmail.com...
> Paul van Delst wrote:
>
>> Hey there,
>
>
> My guess, regarding slowness, is "Prime Number" (number of points
> in your time series). Try zeropadding up to, or truncating
> down to, a nice factorable number.
>
> I've attached my hackware factors.pro which will return the
> factors of a number. (and its recursive, COOL!)`
>

Hi Bob,
Inspired, I wrote a more compact version of your function which will work on long64 too
cheers

Martin
ps: probably is already in the jpl/cm/df library anyway!

```
function ifactors, num, factor_start = factor_start
;+
; Returns the prime factors of an integer
; inspired by Bob Stockwell
; MRD 7/2/2002
;-
 maxfac = sqrt(abs(num))
 if n_elements(factor_start) eq 0 then begin
  if maxfac gt 1073741824 then factor_start =  long64(2) else factor_start =
2L
 endif
 ; find the lowest factor and return that plus the result of factoring the
remainder
;stop
 for f = factor_start, maxfac do begin
  if num mod f eq 0 then begin
   return, [f, ifactors(num/f, factor_start = f)]
  endif
 endfor

 ; or return if prime
```

```
 return, [num,1]
end
```