
Subject: Re: advanced image enhancement
Posted by [David Fanning](#) on Mon, 14 Oct 2002 15:30:06 GMT
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David Oesch (oesch@giub.unibe.ch) writes:

> Is there any other possibility to enhance the content of an bytarr
> image? I tried BYTSCL and HIST_EQUAL, but I'm actually looking for a Root
> enhancement, also known as a logarithmic transform, which particularly
> effective with images whose grey level distribution exhibits right
> skewness. The root enhancement stretches the dynamic range of the low
> end of the image while compressing its high end. It tends to lend an
> overall brightening to the resultant image. Has anyone implemented such
> an enhancement in IDL?

I don't have this particular algorithm coded up, but
you might find XSTRETCH handy for enhancing particular
sections of the image:

<http://www.dfanning.com/programs/xstretch.pro>

At the very least, it might give you some ideas.

Cheers,

David

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David W. Fanning, Ph.D.
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Coyote's Guide to IDL Programming: <http://www.dfanning.com/>
Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: advanced image enhancement
Posted by [David Oesch](#) on Mon, 14 Oct 2002 16:23:35 GMT
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```
<html>
<head>
</head>
<body>
thank you guys...<br>
it works fine!<br>
<br>
D<br>
<br>
Liam E. Gumley wrote:<br>
```

```
<blockquote type="cite" cite="mid:3DAAF70C.1367D29F@ssec.wisc.edu">
  <pre wrap="">"Liam E. Gumley" wrote:<br></pre>
  <blockquote type="cite">
    <pre wrap="">David Oesch wrote:<br></pre>
    <blockquote type="cite">
      <pre wrap="">Is there any other possibility to enhance the content of an bytarr<br>image? I
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    </blockquote>
    <pre wrap="">Here's a simple example of a square root enhancement:<br><br>a =
    dist(256)<br>scale = (a - min(a)) / (max(a) - min(a))<br>tv, byte(255.0 * scale) ; linear
    enhancement<br>tv, byte(255.0 * sqrt(scale)) ; square root enhancement<br><br>For extra
    credit, turn this into a function that accepts MIN, MAX,<br>BOTTOM, and NCOLORS
    keywords.<br></pre>
  </blockquote>
  <pre wrap=""><!--><br>I should have check the User Libraries first:<br><br><a
  class="moz-txt-link-freetext" href=" http://www.astro.washington.edu/deutsch-bin/getpro/library13
  .html?SQRTSCL"> http://www.astro.washington.edu/deutsch-bin/getpro/library13
  .html?SQRTSCL</a><br><br>Cheers,<br>Liam.<br>Practical IDL Programming<br><a
  class="moz-txt-link-freetext"
  href="http://www.gumley.com/">http://www.gumley.com/</a><br></pre>
</blockquote>
<br>
<pre class="moz-signature" cols="$mailwrapcol">--
```

David Oesch - Remote Sensing Research Group

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Hallerstr. 12 Fax : +49 (0)89 2443 43780

CH - 3012 Bern Mail: <a class="moz-txt-link-abbreviated"

href="mailto:David.Oesch@giub.unibe.ch">David.Oesch@giub.unibe.ch

Switzerland <a class="moz-txt-link-freetext"

href="http://www.giub.unibe.ch/remsen">http://www.giub.unibe.ch/remsen

Remote Sensing is...

Staying as far away from the problem as possible.

- G. Archer, World Bank

</pre>

</body>
</html>

Subject: Re: advanced image enhancement
Posted by [Liam E. Gumley](#) on Mon, 14 Oct 2002 16:51:03 GMT
[View Forum Message](#) <> [Reply to Message](#)

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Cheers,
Liam.
Practical IDL Programming
<http://www.gumley.com/>

Subject: Re: advanced image enhancement
Posted by [Liam E. Gumley](#) on Mon, 14 Oct 2002 16:55:40 GMT
[View Forum Message](#) <> [Reply to Message](#)

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I should have check the User Libraries first:

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Liam.
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