Subject: Refine a vector layer in ENVI Posted by envi35@yahoo.ca on Wed, 14 Jun 2006 22:25:07 GMT View Forum Message <> Reply to Message

I've come across the following problems several times, and I'm wondering if somebody know a way to fix it. I have shapefiles of lakes in a region, which was produced about 40 years ago. When I overlay the lake shapefiles to a recent Landsat image, the shapefiles do not outline the lakes exactly for the area of the lakes have changed over the years. So I want to edit the vector layer to make it fit the outline of the lakes in my Landsat image. This doesn't seem to be difficult using the Vector Parameters dialog in ENVI (Mode/Edit existing vectors). However, when I drag the nodes to move them in the desired location in the right side of the vector layer, the whole vector (or the left side of it) moves too! When I fixed all the problems in the right side and saved it to the layer, and start editting the left side, the right side of the vector layer moves again with each editting. Thus I can never make it fix a whole lake.

Does anybody have similar experience? Or is this a bug?

Thanks, Jenny

Subject: Re: Refine a vector layer in ENVI Posted by cpadwick on Fri, 16 Jun 2006 15:37:01 GMT View Forum Message <> Reply to Message

I'm wondering if it's something specific to either the shapefile or the Landsat image. Can you find out the projection info for both files you are using?

Chris

Jenny wrote:

> Hi Chris,

>

- > Thanks for your reply. I'm using ENVI 4.2 too. I just repeated what you
- > tried and the vector is fine like you said, the nodes didn't move. I'm
- > wondering if it has something to do with my old shapefiles. I'll try
- > more and keep you posted.

>

- > Regards,
- > Jenny

>

- > cpadwick@ittvis.com wrote:
- >> Hi Jenny,

```
>>
>> I just tried a test with ENVI 4.2 and was not able to repeat the
>> behavior you described. Here's what I tried:
>> -open bhtmref.img in the default data directory
>> -display it
>> -click Overlay->Vectors. Vector parameters comes up
>> -click File->Create New Layer. Choose layer name and output file,
>> click ok.
>> -Available Vectors List comes up. Load the new layer into the display.
>> -in the Vector Parameters Dialog, click Mode->Add New Vectors
>> -draw some polygons on the screen and save them
>> -Click Mode->Edit Existing Vectors
>> -select a vector and move its nodes around. When finished right
>> click->Accept Changes
>>
>> The nodes stay where I placed them, and I don't notice any movement
   like you described. What version of ENVI are you working with?
>>
>> Chris
>>
>>
>>
>>
>> Jenny wrote:
>>> I've come across the following problems several times, and I'm
>>> wondering if somebody know a way to fix it. I have shapefiles of lakes
>>> in a region, which was produced about 40 years ago. When I overlay the
>>> lake shapefiles to a recent Landsat image, the shapefiles do not
>>> outline the lakes exactly for the area of the lakes have changed over
>>> the years. So I want to edit the vector layer to make it fit the
>>> outline of the lakes in my Landsat image. This doesn't seem to be
>>> difficult using the Vector Parameters dialog in ENVI (Mode/Edit
>>> existing vectors). However, when I drag the nodes to move them in the
>>> desired location in the right side of the vector layer, the whole
>>> vector (or the left side of it) moves too! When I fixed all the
>>> problems in the right side and saved it to the layer, and start
>>> editting the left side, the right side of the vector layer moves again
>>> with each editting. Thus I can never make it fix a whole lake.
>>>
>>> Does anybody have similar experience? Or is this a bug?
>>> Thanks,
>>> Jenny
```

Subject: Re: Refine a vector layer in ENVI

View Forum Message <> Reply to Message

Hi Chris, you are absolutely right about the projections! The Landsat image was in UTM, and the shapefiles in Stereographic. I just reprojected the Landsat TM to Stereographic too, and it works fine now!

May I ask you more question: Is there a way to reduce the number of nodes of a vector all at once? there are many nodes assocated with my vector, it takes a while to adjust only a apart of it. I don't care too much about the final accuracy of my vector layer as long as it shows the right outline of the lakes.

It would be great if ITT could add more functions to the Vector Paranmeter dialog in the next version of ENVI. Such as to shift the whole vector layer a bit.

Many thanks, Jenny

```
cpadwick@ittvis.com wrote:
```

- > I'm wondering if it's something specific to either the shapefile or the
- > Landsat image. Can you find out the projection info for both files you
- > are using?
- > Chris
- *-* OII

>

- > Jenny wrote:
- >> Hi Chris,
- >>
- >> Thanks for your reply. I'm using ENVI 4.2 too. I just repeated what you
- >> tried and the vector is fine like you said, the nodes didn't move. I'm
- >> wondering if it has something to do with my old shapefiles. I'll try
- >> more and keep you posted.
- >>
- >> Regards,
- >> Jenny
- >>
- >> cpadwick@ittvis.com wrote:
- >>> Hi Jenny,
- >>>
- >>> I just tried a test with ENVI 4.2 and was not able to repeat the
- >>> behavior you described. Here's what I tried:
- >>>
- >>> -open bhtmref.img in the default data directory
- >>> -display it

```
>>> -click Overlay->Vectors. Vector parameters comes up
>>> -click File->Create New Layer. Choose layer name and output file,
>>> click ok.
>>> -Available Vectors List comes up. Load the new layer into the display.
>>> -in the Vector Parameters Dialog, click Mode->Add New Vectors
>>> -draw some polygons on the screen and save them
>>> -Click Mode->Edit Existing Vectors
>>> -select a vector and move its nodes around. When finished right
>>> click->Accept Changes
>>>
>>> The nodes stay where I placed them, and I don't notice any movement
>>> like you described. What version of ENVI are you working with?
>>>
>>> Chris
>>>
>>>
>>>
>>>
>>> Jenny wrote:
>>>> I've come across the following problems several times, and I'm
>>> wondering if somebody know a way to fix it. I have shapefiles of lakes
>>> in a region, which was produced about 40 years ago. When I overlay the
>>>> lake shapefiles to a recent Landsat image, the shapefiles do not
>>> outline the lakes exactly for the area of the lakes have changed over
>>>> the years. So I want to edit the vector layer to make it fit the
>>> outline of the lakes in my Landsat image. This doesn't seem to be
>>> difficult using the Vector Parameters dialog in ENVI (Mode/Edit
>>> existing vectors). However, when I drag the nodes to move them in the
>>> desired location in the right side of the vector layer, the whole
>>> vector (or the left side of it) moves too! When I fixed all the
>>> problems in the right side and saved it to the layer, and start
>>> editting the left side, the right side of the vector layer moves again
>>>> with each editting. Thus I can never make it fix a whole lake.
>>>>
>>> Does anybody have similar experience? Or is this a bug?
>>>>
>>>> Thanks,
>>>> Jenny
```

Subject: Re: Refine a vector layer in ENVI Posted by cpadwick on Tue, 27 Jun 2006 20:38:01 GMT View Forum Message <> Reply to Message

Hi Jenny,

ENVI lets you move newly added vectors as a whole, but not ones you are editing...the assumption being that your vector layers may be off as a

whole and that might be better handled with a warp operation instead.

hope that helps,

Chris

```
Jenny wrote:
> Hi Chris, you are absolutely right about the projections! The Landsat
> image was in UTM, and the shapefiles in Stereographic. I just
 reprojected the Landsat TM to Stereographic too, and it works fine now!
>
>
> May I ask you more question: Is there a way to reduce the number of
> nodes of a vector all at once? there are many nodes assocated with my
> vector, it takes a while to adjust only a apart of it. I don't care too
> much about the final accuracy of my vector layer as long as it shows
 the right outline of the lakes.
> It would be great if ITT could add more functions to the Vector
> Paranmeter dialog in the next version of ENVI. Such as to shift the
> whole vector layer a bit.
>
> Many thanks,
> Jenny
>
>
> cpadwick@ittvis.com wrote:
>> I'm wondering if it's something specific to either the shapefile or the
>> Landsat image. Can you find out the projection info for both files you
>> are using?
>>
>> Chris
>> Jenny wrote:
>>> Hi Chris,
>>>
>>> Thanks for your reply. I'm using ENVI 4.2 too. I just repeated what you
>>> tried and the vector is fine like you said, the nodes didn't move. I'm
>>> wondering if it has something to do with my old shapefiles. I'll try
>>> more and keep you posted.
>>> Regards,
>>> Jenny
>>>
>>> cpadwick@ittvis.com wrote:
>>>> Hi Jenny,
>>>>
```

```
>>>> I just tried a test with ENVI 4.2 and was not able to repeat the
>>>> behavior you described. Here's what I tried:
>>>>
>>> -open bhtmref.img in the default data directory
>>>> -display it
>>> -click Overlay->Vectors. Vector parameters comes up
>>> -click File->Create New Layer. Choose layer name and output file,
>>>> click ok.
>>> -Available Vectors List comes up. Load the new layer into the display.
>>> -in the Vector Parameters Dialog, click Mode->Add New Vectors
>>> -draw some polygons on the screen and save them
>>> -Click Mode->Edit Existing Vectors
>>> -select a vector and move its nodes around. When finished right
>>> click->Accept Changes
>>>>
>>> The nodes stay where I placed them, and I don't notice any movement
>>> like you described. What version of ENVI are you working with?
>>>> Chris
>>>>
>>>>
>>>>
>>>>
>>>> Jenny wrote:
>>>> > I've come across the following problems several times, and I'm
>>> > wondering if somebody know a way to fix it. I have shapefiles of lakes
>>>> > in a region, which was produced about 40 years ago. When I overlay the
>>> > lake shapefiles to a recent Landsat image, the shapefiles do not
>>>> outline the lakes exactly for the area of the lakes have changed over
>>>> > the years. So I want to edit the vector layer to make it fit the
>>>> outline of the lakes in my Landsat image. This doesn't seem to be
>>> > difficult using the Vector Parameters dialog in ENVI (Mode/Edit
>>>> existing vectors). However, when I drag the nodes to move them in the
>>> > desired location in the right side of the vector layer, the whole
>>>> vector (or the left side of it) moves too! When I fixed all the
>>>> problems in the right side and saved it to the layer, and start
>>>> editting the left side, the right side of the vector layer moves again
>>>> with each editting. Thus I can never make it fix a whole lake.
>>>> > Does anybody have similar experience? Or is this a bug?
>>>> >
>>>> > Thanks.
>>>> > Jenny
```

Subject: Re: Refine a vector layer in ENVI Posted by envi35@yahoo.ca on Tue, 18 Jul 2006 17:06:30 GMT Hi Chris, Thanks! Hope there will be more vector functions in the next version of ENVI! Jenny cpadwick@ittvis.com wrote: > Hi Jenny, > ENVI lets you move newly added vectors as a whole, but not ones you are > editing...the assumption being that your vector layers may be off as a whole and that might be better handled with a warp operation instead. hope that helps, > > Chris > > Jenny wrote: >> Hi Chris, you are absolutely right about the projections! The Landsat >> image was in UTM, and the shapefiles in Stereographic. I just reprojected the Landsat TM to Stereographic too, and it works fine now! >> >> >> May I ask you more question: Is there a way to reduce the number of >> nodes of a vector all at once? there are many nodes assocated with my >> vector, it takes a while to adjust only a apart of it. I don't care too >> much about the final accuracy of my vector layer as long as it shows >> the right outline of the lakes. >> >> It would be great if ITT could add more functions to the Vector >> Paranmeter dialog in the next version of ENVI. Such as to shift the >> whole vector layer a bit. >> >> Many thanks, >> Jenny >> >> >> >> cpadwick@ittvis.com wrote: >>> I'm wondering if it's something specific to either the shapefile or the >>> Landsat image. Can you find out the projection info for both files you >>> are using? >>> >>> Chris >>> >>> Jenny wrote: >>>> Hi Chris,

```
>>>>
>>> Thanks for your reply. I'm using ENVI 4.2 too. I just repeated what you
>>>> tried and the vector is fine like you said, the nodes didn't move. I'm
>>> wondering if it has something to do with my old shapefiles. I'll try
>>> more and keep you posted.
>>>>
>>>> Regards,
>>>> Jenny
>>>>
>>> cpadwick@ittvis.com wrote:
>>>> > Hi Jenny,
>>>> >
>>>> > I just tried a test with ENVI 4.2 and was not able to repeat the
>>>> > behavior you described. Here's what I tried:
>>> > -open bhtmref.img in the default data directory
>>> > -display it
>>> > -click Overlay->Vectors. Vector parameters comes up
>>>> - click File->Create New Layer. Choose layer name and output file,
>>>> > click ok.
>>> > -Available Vectors List comes up. Load the new layer into the display.
>>> > -in the Vector Parameters Dialog, click Mode->Add New Vectors
>>> > -draw some polygons on the screen and save them
>>> > -Click Mode->Edit Existing Vectors
>>>> > -select a vector and move its nodes around. When finished right
>>> > click->Accept Changes
>>>> >
>>>> The nodes stay where I placed them, and I don't notice any movement
>>>> > like you described. What version of ENVI are you working with?
>>>> >
>>>> > Chris
>>>> >
>>>> >
>>>> >
>>>> >
>>>> > Jenny wrote:
>>> > > I've come across the following problems several times, and I'm
>>> > wondering if somebody know a way to fix it. I have shapefiles of lakes
>>> > > in a region, which was produced about 40 years ago. When I overlay the
>>>> > lake shapefiles to a recent Landsat image, the shapefiles do not
>>>> > outline the lakes exactly for the area of the lakes have changed over
>>>> > the years. So I want to edit the vector layer to make it fit the
>>>> > outline of the lakes in my Landsat image. This doesn't seem to be
>>> > difficult using the Vector Parameters dialog in ENVI (Mode/Edit
>>>> > existing vectors). However, when I drag the nodes to move them in the
>>> > desired location in the right side of the vector layer, the whole
>>>> > vector (or the left side of it) moves too! When I fixed all the
>>>> > problems in the right side and saved it to the layer, and start
```

```
>>> > > editting the left side, the right side of the vector layer moves again
>>> > with each editting. Thus I can never make it fix a whole lake.
>>>> >>
>>>> > Does anybody have similar experience? Or is this a bug?
>>>> >>
>>>> > Thanks,
>>>> > Jenny
```