Overlaying by inference?

An alternative to the r.combine command is the r.infer command, which makes a map called ***infer*** based on rules supolied by the user. It is a relatively simple command with a complex structure(?). You’re attempting to do 3 things in order:

1) find cells on a GRASS map layer that meet certain criteria (IFMAP, ANDIFMAP, IFNOTMAP,ANDIFNOTMAP)
2) assigning cells that meet those criteria to a hypothesis (THEN)
3) and finally, assigning a value (and optionally, a category label) in the newly created map called infer to those cells that meet the selection criteria (THENMAPHYP)

One can run the IF statement on the hypotheses created by THEN to make the steps more complex.

Heed the warning in the manual pages about how the command only searches through each set of IFMAP statements until it finds a match, but then it won’t search again unless you call up a new if statement (see top of page 342 of manual pages).

NOTE
The nice things about this program are
1) that it allows you to run in test mode (type y or n to simulate whether the cell is yes or no the query and it will tell you what the result would be) and
2) that you don’t have to create all the intermeadiate maps necessary when you use r.combine,

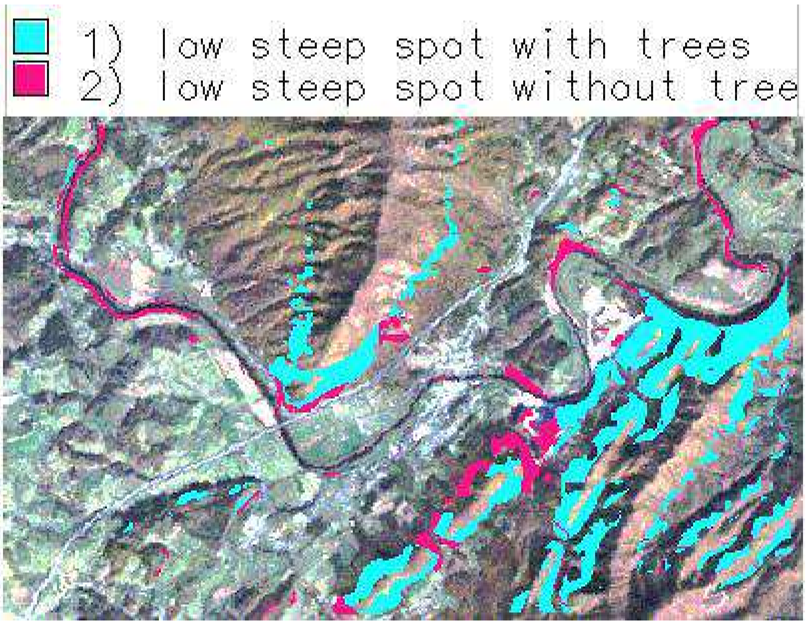
but the ROTTEN thing about this command is that you have to create a file with the logic statements *before you begin the command*. To do that you’ll have to use a UNIX editor (and I’m not going to show you how to do that !), use ’jot’ when you’re logged onto gilbert itself, or make a file on a Mac and fetch over.

For example in the demo location I’ve created a file that will look for good hawk spots. It looks like this

```
! this is a comment line, starts with !
IFMAP slope 20-58
ANDIFMAP dem 200-500
THEN low steep spot
!
IF low steep spot
IFMAP land.use 2
!that’s the forest cover category
THENMAPHYP 1 low steep spot with trees
!
IF low steep spot
IFNOTMAP land.use 2
THENMAPHYP 2 low steep spot without trees
```

It is stored in my "home" directory in the public_html directory so that you can get a it.

To run infer and use this file type
r.infer
and when it asks for the file containing the rules type
/usr/people/dharbor/public_html/rules.file
and answer no the the verbose and test options. Displyaing the created map
d.rast infer
you should see this (I’ve put it on top of the false.color map)



Good luck.

NOTE: the manual page is incorrect for the command line optional entry. Type r.infer help to get the correct version. (use 'file' not 'rulesfile')

When you're done, go back the theTutorial Page

HELP: send e-mail to harbor