

RESEARCH TOOLS 2011

LECTURE 9

2011-Sept-27

Kurt Schwehr

<http://schwehr.org>

UNH CCOM/JHC

emacs org-babel, shell scripting in babel, Google Earth

Tuesday, September 27, 11

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<http://vislab-ccom.unh.edu/~schwehr/Classes/2011/esci895-researchtools/>

Applications Places System

emacs23@ubuntu

Index of /~schwehr/rt - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Index of /~schwehr/rt

http://vislab-ccom.unh.edu/~schwehr/rt/

Most Visited Getting Started Latest Headlines

- pass: !rt2011vm

Lectures:

NOTE: The table has been re-ordered so that the newest items are at the top.

No.	Date	Title/Notes	Audio/Podcast	Present	Video
9	2011-09-27	babel, bash, Google Earth, QGIS, and a movie in Firefox [org]			
Vid 4	2011-09-26	Emacs part 4: yet more emacs			YouTube
Vid 3	2011-09-25	Emacs part 3: org-mode and org-babel			YouTube
Vid 2	2011-09-25	Emacs part 2: more advanced emacs			YouTube
Vid 1	2011-09-24	Emacs part 1: emacs keyboard introduction and sample text			YouTube H264
8	2011-09-22	More emacs and script files [org]	mp3 m4a ogg	pdf key ppt	

http://vislab-ccom.unh.e...src/9-bash-scripting.org

Welcome to GNU Emacs, one con

Emacs Tutorial Learn
Emacs Guided Tour Overv
View Emacs Manual View t
Absence of Warranty GNU E
Copying Conditions Condit
Ordering Manuals Purcha

To start... [Open a File](#) [Open I](#)
To quit a partially entered comm

This is GNU Emacs 23.2.1 (i686-p
of 2011-04-04 on rothera, modifi
Copyright (C) 2010 Free Software Foundatio

If an Emacs session crashed rece
to recover the files you were edit

-U:%%- *GNU Emacs* All L5 (Fundamental)-----
For information about GNU Emacs and the GNU system, type C-h C-a.

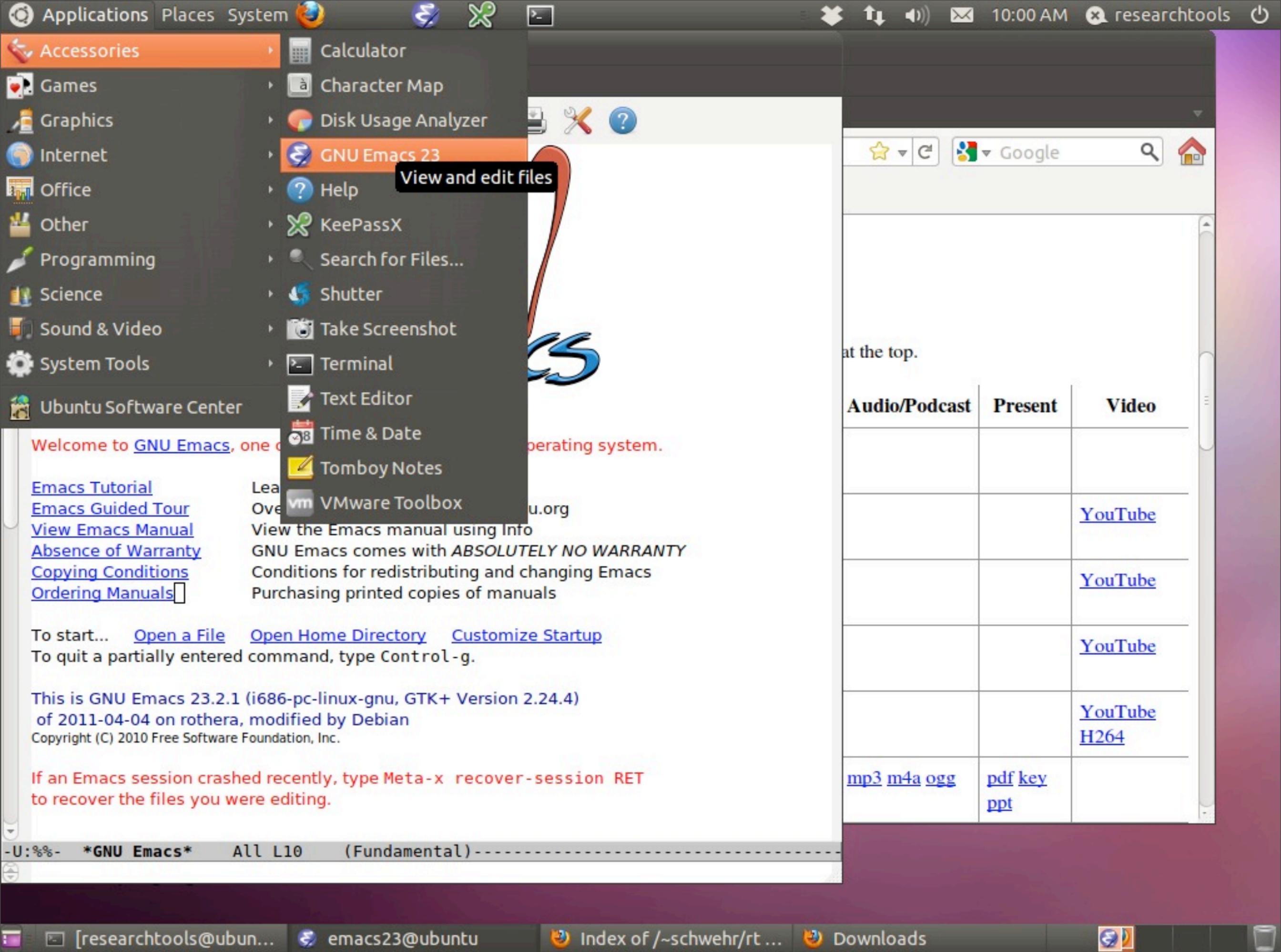
[researchtools@ubun... emacs23@ubuntu Index of /~schwehr/rt ...

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Download the org-mode lecture notes for number 9:

<http://vislab-ccom.unh.edu/~schwehr/rt/src/9-bash-scripting.org>

Open 9-bash-scripting.org in emacs



Tuesday, September 27, 11

Opening emacs if the panel icon is obscured by the VMWare toolbar

```

emacs23@ubuntu
File Edit Options Buffers Tools Operate Mark Regexp Immediate Subdir Help

/home/researchtools:
total used in directory 96228 available 11896996
drwxr-xr-x 27 researchtools researchtools 4096 2011-09-27 10:00 .
drwxr-xr-x 4 root root 4096 2011-09-01 19:33 ..
-rw-r--r-- 1 researchtools researchtools 24340 2011-09-26 10:04 5-filetype2
s-emacs.org
-rw-r--r-- 1 researchtools researchtools 13559 2011-09-27 10:00 9-bash-scr2
ipting.org
-rw-r--r-- 1 researchtools researchtools 50 2011-09-26 08:39 .bash_alia2
ses
-rw----- 1 researchtools researchtools 15947 2011-09-27 07:08 .bash_hist2
ory
-rw-r--r-- 1 researchtools researchtools 220 2011-09-01 19:33 .bash_logoz
ut
-rw-r--r-- 1 researchtools researchtools 3354 2011-09-26 08:28 .bashrc
-rw-r--r-- 1 researchtools researchtools 3353 2011-09-01 19:33 .bashrc~
drwxr-xr-x 12 researchtools researchtools 4096 2011-09-27 07:09 .cache
drwxr-xr-x 15 researchtools researchtools 4096 2011-09-26 19:37 .config
drwx----- 3 researchtools researchtools 4096 2011-09-13 11:23 .dbus
-rw-r--r-- 1 researchtools researchtools 85 2011-09-27 07:09 .dmrc
drwx----- 3 researchtools researchtools 4096 2011-09-27 08:57 .dropbox
drwx----- 14 researchtools researchtools 4096 2011-09-27 08:57 Dropbox
drwxr-xr-x 5 researchtools researchtools 4096 2011-09-15 12:09 .dropbox-d2
ist
-rw-r--r-- 1 researchtools researchtools 296 2011-09-24 22:23 .emacs
-rw-r--r-- 1 researchtools researchtools 837 2011-09-24 22:22 .emacs~
drwxr-xr-x 3 researchtools researchtools 4096 2011-09-26 07:56 .emacs.d
-rw----- 1 researchtools researchtools 16 2011-09-13 11:23 .esd_auth
-rw-r--r-- 1 researchtools researchtools 98263040 2011-09-13 10:46 examples-22
0110913.tar
drwxr-xr-x 2 researchtools researchtools 4096 2011-09-22 10:40 .fontconfi2
g
drwx----- 4 researchtools researchtools 4096 2011-09-27 07:09 .gconf

-U:%%- ~ Top L6 (Dired by name)-----
    
```

Google

at the top.

Audio/Podcast	Present	Video
		YouTube
		YouTube
		YouTube
		YouTube H264
mp3 m4a ogg	pdf key	ppt

Using "dired" to find the lecture notes

```

emacs23@ubuntu
File Edit Options Buffers Tools Org Tbl Help

#+STARTUP: showall

#+TITLE:      Class 9: org-babel, bash, Google Earth, QGIS, and a movie in Firefox
#+AUTHOR:     Kurt Schwehr
#+EMAIL:      schwehr@ccom.unh.edu
#+DATE:       <2011-09-27 Tue>
#+DESCRIPTION: Marine Research Data Manipulation and Practices
#+KEYWORDS:   emacs, org-mode
#+LANGUAGE:   en
#+OPTIONS:    H:3 num:nil toc:t \n:nil @:t ::t |:t ^:t -:t f:t *:t <:t
#+OPTIONS:    TeX:t LaTeX:nil skip:t d:nil todo:t pri:nil tags:not-in-toc
#+INFOJS_OPT: view:nil toc:nil ltoc:t mouse:underline buttons:0 path:http://orgmode.org/org-info.js
#+LINK_HOME:  http://vislab-ccom.unh.edu/~schwehr/Classes/2011/esci895-researchtools/

* Introduction

Up to this point, we have been working hard as a class to get comfortable with a powerful text editor and the terminal. We will do a little more setup today and in lecture 10 on <2011-09-29 Thu>, but we will be starting into learning Python in lecture 10. Hopefully, you will appreciate the 4 weeks of setup when working with Python in emacs.

Today we will setup org-babel so that we can execute code from inside of emacs org-mode files and write a shell script file.

http://orgmode.org/worg/org-contrib/babel/

* Extra content

The first 4 videos are available: 2011 Research Tools YouTube playlist. These supplementary videos cover using emacs. They are modelled after the videos on http://showmedo.com

---:--- 9-bash-scripting.org  Top L1  (Org)

```

Lecture notes for this class

Applications Places System 10:10 AM researchtools

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File Edit Options Buffers Tools Minibuf Help

<http://orgmode.org/worg/org-contrib/babel/>

* Extra content

The first 4 videos are available: [2011 Research Tools YouTube playlist](#). These supplementary videos cover using emacs. They are modelled after the videos on <http://showmedo.com>.

* Setup org-babel

If you try to execute a "sh" (bash shell) source code block in an org-mode file (using =C-c C-c=), you will probably see an error message like this in the mini buffer at the bottom:

```
#+BEGIN_EXAMPLE
No org-babel-execute function for sh!
#+END_EXAMPLE

#+BEGIN_SRC sh
echo hello
#+END_SRC
```

We need to setup emacs to have org-mode fully installed. Open the file [~/.emacs](#)

```
#+BEGIN_SRC emacs-lisp
; Must have org-mode loaded before we can configure org-babel
(require 'org-install)

; Some initial langauges we want org-babel to support
(org-babel-do-load-languages
 'org-babel-load-languages
```

--:**- 9-bash-scripting.org 9% L46 (Org) -----

Evaluate this sh code block on your system? (yes or no)

[researchtools@ubun... emacs23@ubuntu Index of /~schwehr/rt ... Downloads

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Using C-c C-c to execute a block of code. If babel does not have the language support installed, it will fail.

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File Edit Options Buffers Tools Org Tbl Help

<http://orgmode.org/worg/org-contrib/babel/>

* Extra content

The first 4 videos are available: [2011 Research Tools YouTube playlist](#). These supplementary videos cover using emacs. They are modelled after the videos on <http://showmedo.com>.

* Setup org-babel

If you try to execute a "sh" (bash shell) source code block in an org-mode file (using =C-c C-c=), you will probably see an error message like this in the mini buffer at the bottom:

```

#+BEGIN_EXAMPLE
No org-babel-execute function for sh!
#+END_EXAMPLE

#+BEGIN_SRC sh
echo hello
#+END_SRC

#+results:
: hello

```

We need to setup emacs to have org-mode fully installed. Open the file [~/.emacs](#)

```

#+BEGIN_SRC emacs-lisp
; Must have org-mode loaded before we can configure org-babel
(require 'org-install)

```

--:**- 9-bash-scripting.org 9% L46 (Org) -----

Code block evaluation complete.

```
#+END_EXAMPLE

#+BEGIN_SRC sh
echo hello
#+END_SRC

#+results:
: hello

We need to setup emacs to have org-mode fully installed.  Open the
file ~/.emacs

#+BEGIN_SRC LINK: file:~/.emacs
; Must have org-mode loaded before we can configure org-babel
(require 'org-install)

--:**- 9-bash-scripting.org 13% L53 (Org) -----

#+results:
: hello

We need to setup emacs to have org-mode fully installed.  Open the
file ~/.emacs

#+BEGIN_SRC emacs-lisp
; Must have org-mode loaded before we can configure org-babel
(require 'org-install)

; Some initial langauges we want org-babel to support
(org-babel-do-load-languages
 'org-babel-load-languages
 '(
  (sh . t)
))

--:**- 9-bash-scripting.org 13% L56 (Org) -----
```

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Using C-x 2 to split the window and then click on the link to the ~/.emacs file. You probably do not have a .emacs file, so this will create one.

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File Edit Options Buffers Tools Emacs-Lisp YASnippet Help

#+END_EXAMPLE

#+BEGIN_SRC sh
echo hello
#+END_SRC

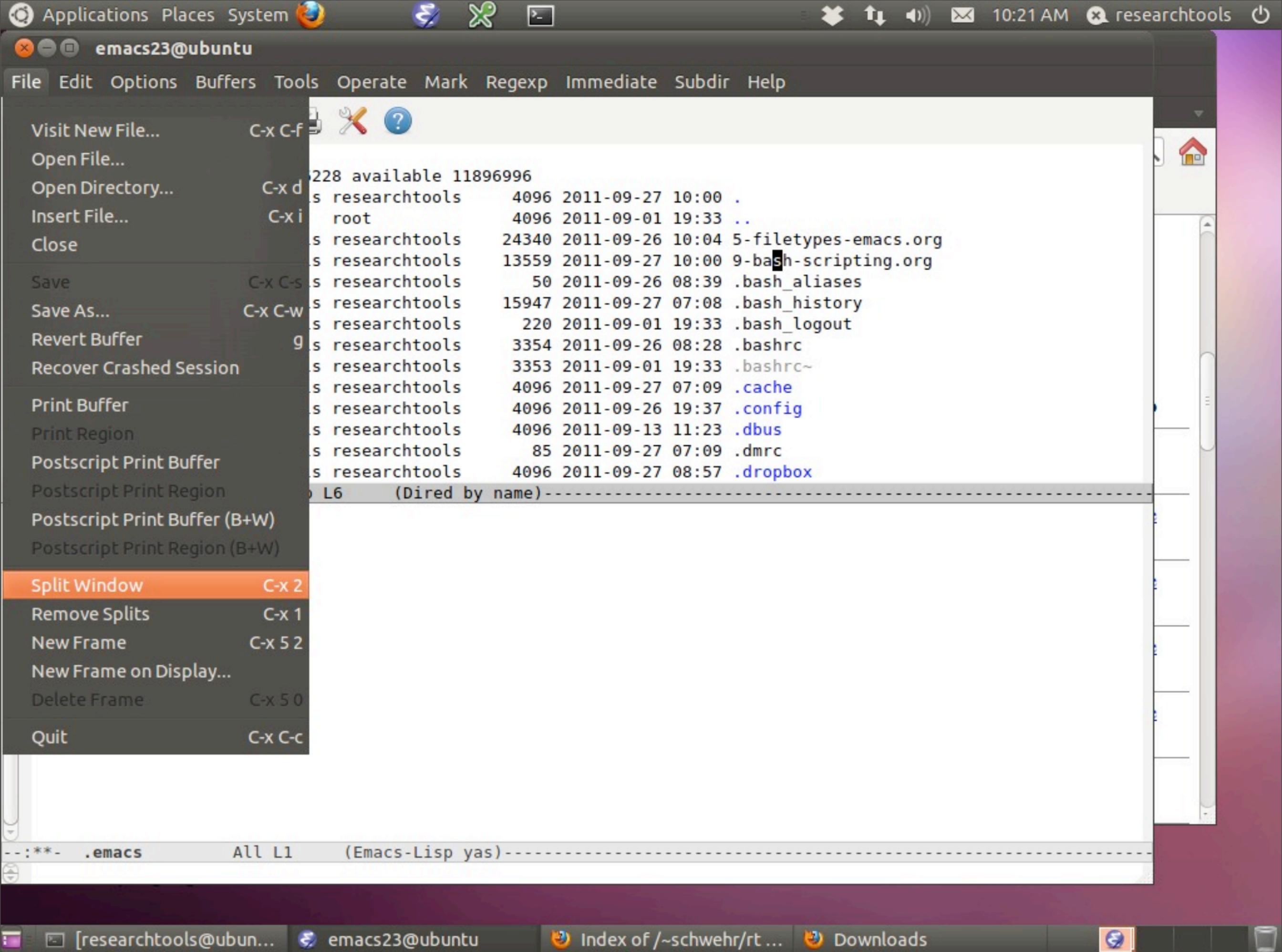
#+results:
: hello

We need to setup emacs to have org-mode fully installed. Open the file [~/.emacs](#)

#+BEGIN_SRC emacs-lisp
; Must have org-mode loaded before we can configure org-babel
(require 'org-install)

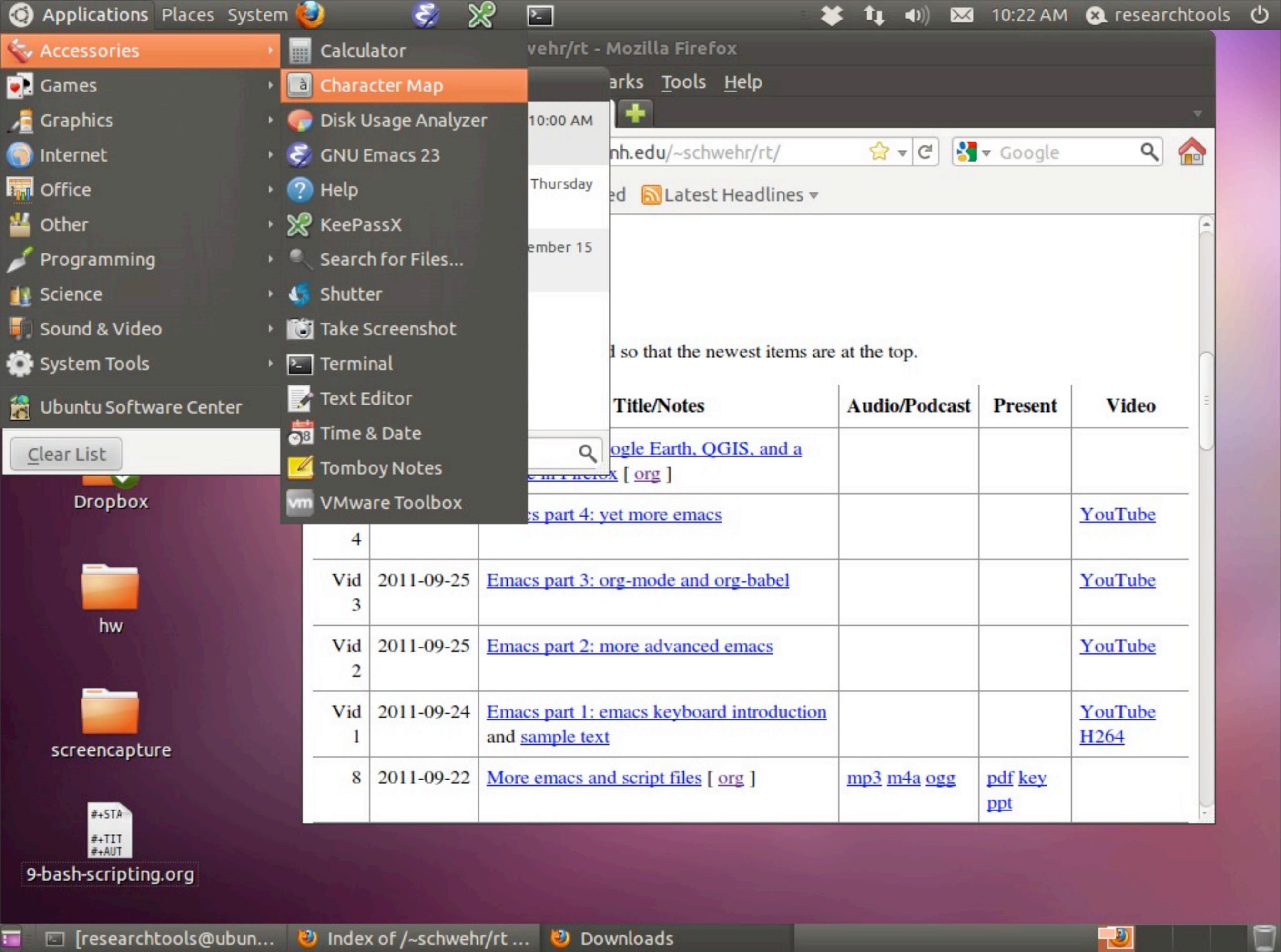
--:**- 9-bash-scripting.org 13% L53 (Org)-----

--:**- .emacs All L1 (Emacs-Lisp yas)-----



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If you forget how to split and unsplit windows with the keyboard, you can find the shortcuts for many things in the menus.



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After you save your .emacs file, you need to restart emacs to have it load the .emacs file on startup. This will activate languages for org-mode

```

emacs23@ubuntu
File Edit Options Buffers Tools Org Tbl Help

(ruby . t)
(ditaa . t)
(dot . t)
(octave . t)
(sqlite . t)
(perl . t)
))

; Add short cut keys for the org-agenda
(global-set-key "\C-cl" 'org-store-link)
(global-set-key "\C-cc" 'org-capture)
(global-set-key "\C-ca" 'org-agenda)
#+END_SRC

Now restart emacs.

** Testing org-babel                                     :testing:

Try executing this block with =C-c C-c= while the point (aka cursor)
is inside the SRC block.

#+BEGIN_SRC sh
echo $SHELL
#+END_SRC

You should see something like this appear:

#+BEGIN_SRC org
,#+results:
,: /bin/bash
#+END_SRC

```

at the top.

Audio/Podcast	Present	Video
		YouTube
		YouTube
		YouTube
		YouTube H264
mp3 m4a ogg	pdf key ppt	

Now, if you try to execute this hello code block with C-c C-c it should work.

```

emacs23@ubuntu
File Edit Options Buffers Tools Org Tbl Help

))

; Add short cut keys for the org-agenda
(global-set-key "\C-cl" 'org-store-link)
(global-set-key "\C-cc" 'org-capture)
(global-set-key "\C-ca" 'org-agenda)
#+END_SRC

Now restart emacs.

** Testing org-babel                                     :testing:

Try executing this block with =C-c C-c= while the point (aka cursor)
is inside the SRC block.

#+BEGIN_SRC sh
echo $SHELL
#+END_SRC

#+results:
: /bin/bash

You should see something like this appear:

#+BEGIN_SRC org
,#+results:
,: /bin/bash
#+END_SRC

* Creating a log file                                     :logging:

For the rest of the semester, you need to keep a log file for this
--:**- 9-bash-scripting.org 17% L86 (Org)-----

```

at the top.

Audio/Podcast	Present	Video
		YouTube
		YouTube
		YouTube
		YouTube H264
mp3 m4a ogg	pdf key ppt	

This is what you should get if it succeeds

```

emacs23@ubuntu
File Edit Options Buffers Tools Org Tbl Help

#+END_SRC

#+results:
: /bin/bash

You should see something like this appear:

#+BEGIN_SRC org
,#+results:
,: /bin/bash
#+END_SRC

* Creating a log file                                     :logging:

For the rest of the semester, you need to keep a log file for this
class with =C-c C-c= inside the src block.

#+BEGIN_SRC sh
mkdir ~/Dropbox/logs
#+END_SRC

Start a log file. Replace YOURUSERNAME below with your short username at CCOM.

#+BEGIN_SRC sh
log=~/Dropbox/logs/researchtools-YOURUSERNAME.org
echo "#+STARTUP: showall" > $log

echo "Log contains:"
cat $log
#+END_SRC

You can now open up that log file in another emacs window. Add

```

at the top.

Audio/Podcast	Present	Video
		YouTube
		YouTube
		YouTube
		YouTube H264
mp3 m4a ogg	pdf key ppt	

```

emacs23@ubuntu
File Edit Options Buffers Tools Org Tbl Help

* Creating a log file                                     :logging:

For the rest of the semester, you need to keep a log file for this
class with =C-c C-c= inside the src block.

#+BEGIN_SRC sh
mkdir ~/Dropbox/logs
#+END_SRC

#+results:

Start a log file. Replace YOURUSERNAME below with your short username at CCOM.

#+BEGIN_SRC sh
--:**- 9-bash-scripting.org 20% L101 (Org)-----
mkdir: cannot create directory `/home/researchtools/Dropbox/logs': File exists

-U:**- *Org-Babel Error Output* All L1 (Fundamental)-----
Code block produced no output.

```

at the top.

Audio/Podcast	Present	Video
		YouTube
		YouTube
		YouTube
		YouTube H264
mp3 m4a ogg	pdf key ppt	

If you run a code block and it has a problem, it will often show you an error message. I already have a logs directory in my ~/Dropbox folder.

```

emacs23@ubuntu
File Edit Options Buffers Tools Org Tbl Help

mkdir ~/Dropbox/logs
#+END_SRC

#+results:

Start a log file.  Replace YOURUSERNAME below with your short username at CCOM.

#+BEGIN_SRC sh
log=~/.Dropbox/logs/researchtools-schwehr.org
echo "#+STARTUP: showall" > $log

echo "Log contains:"
cat $log
#+END_SRC

You can now open up that log file in another emacs window.  Add
--:**- 9-bash-scripting.org 22% L110 (Org)-----
mkdir: cannot create directory `~/home/researchtools/Dropbox/logs': File exists

-U:**- *Org-Babel Error Output* All L1 (Fundamental)-----

```

at the top.

Audio/Podcast	Present	Video
		YouTube
		YouTube
		YouTube
		YouTube H264
mp3 m4a ogg	pdf key ppt	

This is an advanced bit of bash script that will setup a log file for us. Try not to worry about how the code in this section works. It will start a log file for you (or erase a log file that already exists).

```

emacs23@ubuntu
File Edit Options Buffers Tools Org Tbl Help

mkdir ~/Dropbox/logs
#+END_SRC

#+results:

Start a log file.  Replace YOURUSERNAME below with your short username at CCOM.

#+BEGIN_SRC sh
log=~/Dropbox/logs/researchtools-schwehr.org
echo "#+STARTUP: showall" > $log

echo "Log contains:"
cat $log
#+END_SRC

#+results:
--:**- 9-bash-scripting.org 22% L110 (Org)-----
Code block evaluation complete.

```

at the top.

Audio/Podcast	Present	Video
		YouTube
		YouTube
		YouTube
		YouTube H264
mp3 m4a ogg	pdf key ppt	

If it is successful, it should say "Code block evaluation complete" in the minibuffer

```

emacs23@ubuntu
File Edit Options Buffers Tools Minibuf Help

mkdir ~/Dropbox/logs
#+END_SRC

#+results:

Start a log file. Replace YOURUSERNAME below with your short username at CCOM.

#+BEGIN_SRC sh
log=~/Dropbox/logs/researchtools-schwehr.org
echo "#+STARTUP: showall" > $log

echo "Log contains:"
cat $log
#+END_SRC

#+results:

--:**- 9-bash-scripting.org 22% L110 (Org)-----
#+END_SRC

#+results:

Start a log file. Replace YOURUSERNAME below with your short username at CCOM.

#+BEGIN_SRC sh
log=~/Dropbox/logs/researchtools-schwehr.org
echo "#+STARTUP: showall" > $log

echo "Log contains:"
cat $log
#+END_SRC

#+results:
| Log | contains: |
--:**- 9-bash-scripting.org 22% L110 (Org)-----
Find file: ~/Dropbox/logs/researchtools-schwehr.org

```

at the top.

Audio/Podcast	Present	Video
		YouTube
		YouTube
		YouTube
		YouTube H264
mp3 m4a ogg	pdf key	ppt

Go open the log

```

emacs23@ubuntu
File Edit Options Buffers Tools Org Tbl Help
#+STARTUP: showall

```

```

----- researchtools-schwehr.org All L2 (Org) -----
#+END_SRC
#+results:
Start a log file. Replace YOURUSERNAME below with your short username at CCOM.
#+BEGIN_SRC sh
log=~/.Dropbox/logs/researchtools-schwehr.org
echo "#+STARTUP: showall" > $log
echo "Log contains:"
cat $log
#+END_SRC
#+results:
| Log | contains: |

```

```

----- 9-bash-scripting.org 22% L111 (Org) -----

```

at the top.

Audio/Podcast	Present	Video
		YouTube
		YouTube
		YouTube
		YouTube H264
mp3 m4a ogg	pdf key ppt	

```

emacs23@ubuntu
File Edit Options Buffers Tools Org Tbl Help
#+STARTUP: showall

```

```

---:--- researchtools-schwehr.org All L1 (Org) ---
echo "#+STARTUP: showall" > $log

echo "Log contains:"
cat $log
#+END_SRC

#+results:
| Log          | contains: |
| #+STARTUP:  | showall   |

You can now open up that log file in another emacs window. Add
AUTHOR and EMAIL lines just line in homework 2.

#+BEGIN_SRC org
#+TITLE:      Research Tools log file for FIX: your name

```

```

---:**- 9-bash-scripting.org 23% L116 (Org) ---

```

at the top.

Audio/Podcast	Present	Video
		YouTube
		YouTube
		YouTube
		YouTube H264
mp3 m4a ogg	pdf key	ppt

```

emacs23@ubuntu
File Edit Options Buffers Tools Org Tbl Help

#+STARTUP: showall

#+TITLE:      Research Tools log file for FIX: your name
#+AUTHOR:     FIX: your name
#+EMAIL:      FIX: your email

--:**- researchtools-schwehr.org All L6 (Org) -----
| #+STARTUP: | showall |

You can now open up that log file in another emacs window. Add
AUTHOR and EMAIL lines just line in homework 2.

#+BEGIN_SRC org
#+TITLE:      Research Tools log file for FIX: your name
#+AUTHOR:     FIX: your name
#+EMAIL:      FIX: your email
#+END_SRC

And you can make entries that look something like this:

#+BEGIN_SRC org
* Log entry for a day <2011-09-27 Tue> :day:

```

at the top.

Audio/Podcast	Present	Video
		YouTube
		YouTube
		YouTube
		YouTube H264
mp3 m4a ogg	pdf key ppt	

```

emacs23@ubuntu
File Edit Options Buffers Tools Org Tbl Help

#+STARTUP: showall

#+TITLE:      Research Tools log file for FIX: your name
#+AUTHOR:
#+EMAIL:
[]

----- researchtools-schwehr.org All L6 (Org) -----
#+AUTHOR:    FIX: your name
#+EMAIL:     FIX: your email
#+END_SRC

And you can make entries that look something like this:

#+BEGIN_SRC org
* Log entry for a day <2011-09-27 Tue>           :day:
#+END_SRC

I start them by typing line this:

#+BEGIN_SRC org
* Log entry for a day
#+END_SRC

----- 9-bash-scripting.org 26% L134 (Org) -----
Auto-saving...done

```

at the top.

Audio/Podcast	Present	Video
		YouTube
		YouTube
		YouTube
		YouTube H264
mp3 m4a ogg	pdf key ppt	

emacs23@ubuntu

File Edit Options Buffers Tools Minibuf Help

#+STARTUP: showall

#+TITLE: **Research Tools log file for FIX: your name**

#+AUTHOR:

#+EMAIL:

* Research Tools Lecture 09

--:**- researchtools-schwehr.org All L7 (Org) -----

August 2011							September 2011							October 2011						
Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6					1	2	3							1
7	8	9	10	11	12	13	4	5	6	7	8	9	10	2	3	4	5	6	7	8
14	15	16	17	18	19	20	11	12	13	14	15	16	17	9	10	11	12	13	14	15
21	22	23	24	25	26	27	18	19	20	21	22	23	24	16	17	18	19	20	21	22
28	29	30	31	25	26	27	28	29	30	23	24	25	26	27	28	29				
										30	31									

< Calendar ? info / o other / . today Tue, Sep 27, 2011 >

Date+time [2011-09-27]: => <2011-09-27 Tue>

Google

at the top.

Audio/Podcast	Present	Video
		YouTube
mp3 m4a ogg	pdf key	
	ppt	

```

emacs23@ubuntu
File Edit Options Buffers Tools Minibuf Help

#+STARTUP: showall

#+TITLE:      Research Tools log file for FIX: your name
#+AUTHOR:
#+EMAIL:

* Research Tools Lecture 09 <2011-09-27 Tue>

--:**- researchtools-schwehr.org All L7 (Org) -----
#+END_SRC

And you can make entries that look something like this:

#+BEGIN_SRC org
* Log entry for a day <2011-09-27 Tue>           :day:
#+END_SRC

I start them by typing line this:

#+BEGIN_SRC org
* Log entry for a day
#+END_SRC

Then I use =C-c .= to add the date. I follow it up with at least the
=day= tag by doing =C-c C-c= on the header line and typing "day". I

--:**- 9-bash-scripting.org 26% L140 (Org) -----
Tags:
    
```

at the top.

Audio/Podcast	Present	Video
		YouTube
		YouTube
		YouTube
		YouTube H264
mp3 m4a ogg	pdf key	ppt

```

emacs23@ubuntu
File Edit Options Buffers Tools Minibuf Help

#+STARTUP: showall

#+TITLE:      Research Tools log file for FIX: your name
#+AUTHOR:
#+EMAIL:

* Research Tools Lecture 09 <2011-09-27 Tue>

--:**- researchtools-schwehr.org All L7 (Org) -----
#+END_SRC

And you can make entries that look something like this:

#+BEGIN_SRC org
* Log entry for a day <2011-09-27 Tue>           :day:
#+END_SRC

I start them by typing line this:

#+BEGIN_SRC org
* Log entry for a day
#+END_SRC

Then I use =C-c .= to add the date. I follow it up with at least the
=day= tag by doing =C-c C-c= on the header line and typing "day". I

--:**- 9-bash-scripting.org 26% L140 (Org) -----
Tags: day
    
```

at the top.

Audio/Podcast	Present	Video
		YouTube
		YouTube
		YouTube
		YouTube H264
mp3 m4a ogg	pdf key	ppt

```

emacs23@ubuntu
File Edit Options Buffers Tools Org Tbl Help

#+STARTUP: showall

#+TITLE:      Research Tools log file for FIX: your name
#+AUTHOR:
#+EMAIL:

* Research Tools Lecture 09 <2011-09-27 Tue>           :day:

- [X] asdfal;skjf

** An entry                                           :dog:
** another entry

--:**- researchtools-schwehr.org All L14 (Org)-----
#+END_SRC

And you can make entries that look something like this:

#+BEGIN_SRC org
* Log entry for a day <2011-09-27 Tue>                :day:
#+END_SRC

I start them by typing line this:

#+BEGIN_SRC org
* Log entry for a day
#+END_SRC

Then I use =C-c .= to add the date. I follow it up with at least the
=day= tag by doing =C-c C-c= on the header line and typing "day". I

--:**- 9-bash-scripting.org 26% L140 (Org)-----

```

at the top.

Audio/Podcast	Present	Video
		YouTube
		YouTube
		YouTube
		YouTube H264
mp3 m4a ogg	pdf key	ppt

```

emacs23@ubuntu
File Edit Options Buffers Toc
#+END_SRC
And you can make entries th
#+BEGIN_SRC org
* Log entry for a day <2011
#+END_SRC
I start them by typing line
#+BEGIN_SRC org
* Log entry for a day
#+END_SRC
Then I use =C-c .= to add t
=day= tag by doing =C-c C-c
also use "travel" as a tag
You can now make entries fo
level heading:
#+BEGIN_SRC org
** Research Tools Class 09
# FIX: Start writing about
#+END_SRC
* Creating a Google Earth K
Now we are going to create
a bit and not try to unders
least show you how easy it

```

Research Tools log file for FIX: your name - Mozilla Firefox

http://vislab-ccom.unh.edu/~schwehr/rt/9-bash-scr

Most Visited Getting Started Latest Headlines

TODO Earth Science Tea!

If you have the time, head over to James hall for the Earth Science Tea!

TODO HOMEWORK

DEADLINE: 2011-09-29 Thu by 5PM EDT

Note: These check boxes are just to help you.

- Watch youtube videos: [1](#) [2](#) [3](#) [4](#)
 - Put any questions that you have into your org-mode log file
- Make sure you have log entries for both 2011-09-27 Tue and 2011-09-29 Thu for the Research Tools course
- Turn in your log file on the researchtools server as this file ~/hw/03/log-\$USER-\$(date +%Y%m%d).org
- Email <mailto:kurt@ccom.unh.edu> the md5 sum of the log file. Do not make this an attachment.

Author: FIX: your name

Date: <2011-09-27 Tue>

HTML generated by org-mode 7.4 in emacs 23

--:**- 9-bash-scripting.org 26% L146 (Org) -----
 Auto-saving...done

```

emacs23@ubuntu
File Edit Options Buffers Tools Org Tbl Help

You can now make entries for that day with two "*" entries for a 2nd
level heading:

#+BEGIN_SRC org
** Research Tools Class 09                               :researchtools:class:

# FIX: Start writing about the class here.
#+END_SRC

* Creating a Google Earth KML                            :googleearth:kml:

Now we are going to create our first KML file. We are going to cheat
a bit and not try to understand the file format, but this will at
least show you how easy it can be.

First, make sure we have a working directory for this class:
█
#+BEGIN_SRC sh
mkdir -p ~/class/09
ls -ld ~/class/09
#+END_SRC

Now, get the header and footer text for the KML line format:

#+BEGIN_SRC sh
cd ~/class/09

curl -O http://vislab-ccom.unh.edu/~schwehr/Classes/2011/esci895-researchtools/g
curl -O http://vislab-ccom.unh.edu/~schwehr/Classes/2011/esci895-researchtools/g
#+END_SRC

These two pieces give you the front and back of the KML and all we
--:**- 9-bash-scripting.org 29% L162 (Org)-----

```

```

Firefox
Google
Tea!

e log file
and 2011-09-29 Thu for the Research

e ~/hw/03/log-$USER-$(date

g file. Do not make this an attachment.

```

```

emacs23@ubuntu
File Edit Options Buffers Tools Minibuf Help

Now we are going to create our first KML file. We are going to cheat
a bit and not try to understand the file format, but this will at
least show you how easy it can be.

First, make sure we have a working directory for this class:

#+BEGIN_SRC sh
mkdir -p ~/class/09
ls -ld ~/class/09
#+END_SRC

Now, get the header and footer text for the KML line format:

#+BEGIN_SRC sh
cd ~/class/09

curl -O http://vislab-ccom.unh.edu/~schwehr/Classes/2011/esci895-researchtools/g
curl -O http://vislab-ccom.unh.edu/~schwehr/Classes/2011/esci895-researchtools/g
#+END_SRC

These two pieces give you the front and back of the KML and all we
need to do is provide the coordinates for the

Get the coordinates file from the Boston Construction file used during
the homework:

#+BEGIN_SRC sh
cd ~/class/09

curl -O http://vislab-ccom.unh.edu/~schwehr/Classes/2011/esci895-researchtools/e
bunzip2 2007-boston-construction.csv.bz2
#+END_SRC

```

Firefox

Google

Tea!

e log file

and 2011-09-29 Thu for the Research

e ~/hw/03/log-\$USER-\$(date

g file. Do not make this an attachment.

9-bash-scripting.org 32% L164 (Org)

Evaluate this sh code block on your system? (yes or no) yes

```

emacs23@ubuntu
File Edit Options Buffers Tools Org Tbl Help

Now we are going to create our first KML file. We are going to cheat
a bit and not try to understand the file format, but this will at
least show you how easy it can be.

First, make sure we have a working directory for this class:

#+BEGIN_SRC sh
mkdir -p ~/class/09
ls -ld ~/class/09
#+END_SRC

#+results:
: drwxr-xr-x 2 researchtools researchtools 4096 2011-09-27 10:53 /home/researcht

Now, get the header and footer text for the KML line format:

#+BEGIN_SRC sh
cd ~/class/09

curl -O http://vislab-ccom.unh.edu/~schwehr/Classes/2011/esci895-researchtools/g
curl -O http://vislab-ccom.unh.edu/~schwehr/Classes/2011/esci895-researchtools/g
#+END_SRC

These two pieces give you the front and back of the KML and all we
need to do is provide the coordinates for the

Get the coordinates file from the Boston Construction file used during
the homework:

#+BEGIN_SRC sh
cd ~/class/09

curl -O http://vislab-ccom.unh.edu/~schwehr/Classes/2011/esci895-researchtools/e

```

Firefox

Google

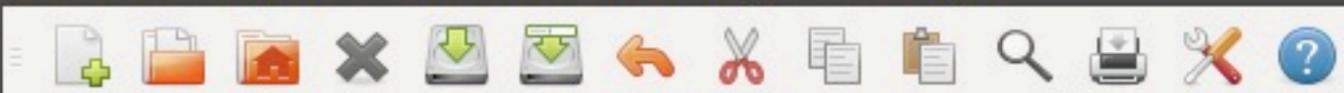
Tea!

e log file

and 2011-09-29 Thu for the Research

e ~/hw/03/log-\$USER-\$(date

g file. Do not make this an attachment.



Now we are going to create our first KML file. We are going to cheat a bit and not try to understand the file format, but this will at least show you how easy it can be.

First, make sure we have a working directory for this class:

```
#+BEGIN_SRC sh
mkdir -p ~/class/09
ls -ld ~/class/09
#+END_SRC
```

```
#+results:
: drwxr-xr-x 2 researchtools researchtools 4096 2011-09-27 10:53 /home/researchtools/class/09
```

Now, get the header and footer text for the KML line format:

```
#+BEGIN_SRC sh
cd ~/class/09
```

```
curl -O http://vislab-ccom.unh.edu/~schwehr/Classes/2011/esci895-researchtools/google-earth-line-start.kml
curl -O http://vislab-ccom.unh.edu/~schwehr/Classes/2011/esci895-researchtools/google-earth-line-end.kml
#+END_SRC
```

These two pieces give you the front and back of the KML and all we need to do is provide the coordinates for the

Get the coordinates file from the Boston Construction file used during the homework:

```
#+BEGIN_SRC sh
cd ~/class/09
```

```
curl -O http://vislab-ccom.unh.edu/~schwehr/Classes/2011/esci895-researchtools/examples/2007-boston-construction.kml
```

```

emacs23@ubuntu
File Edit Options Buffers Tools Operate Mark Regexp Immediate Subdir Help

/home/researchtools/class/09:
total used in directory 8 available 11814540
drwxr-xr-x 2 researchtools researchtools 4096 2011-09-27 10:53 .
drwxr-xr-x 3 researchtools researchtools 4096 2011-09-27 10:53 ..

-U:%%- 09 All L5 (Dired by name)-----

#+results:
: drwxr-xr-x 2 researchtools researchtools 4096 2011-09-27 10:53 /home/researchtools/class/09

Now, get the header and footer text for the KML line format:

#+BEGIN_SRC sh
cd ~/class/09
curl -O http://vislab-ccom.unh.edu/~schwehr/Classes/2011/esci895-researchtools/google-earth-line-start.kml
curl -O http://vislab-ccom.unh.edu/~schwehr/Classes/2011/esci895-researchtools/google-earth-line-end.kml
#+END_SRC

These two pieces give you the front and back of the KML and all we
need to do is provide the coordinates for the

--:**- 9-bash-scripting.org 34% L175 (Org)-----
Auto-saving...done

```

```

emacs23@ubuntu
File Edit Options Buffers Tools Org Tbl Help

/home/researchtools/class/09:
total used in directory 8 available 11814540
drwxr-xr-x 2 researchtools researchtools 4096 2011-09-27 10:53 .
drwxr-xr-x 3 researchtools researchtools 4096 2011-09-27 10:53 ..

```

-U:%%- 09 All L5 (Dired by name)

```

#+results:
: drwxr-xr-x 2 researchtools researchtools 4096 2011-09-27 10:53 /home/researchtools/class/09

Now, get the header and footer text for the KML line format:

#+BEGIN_SRC sh
cd ~/class/09

curl -O http://vislab-ccom.unh.edu/~schwehr/Classes/2011/esci895-researchtools/google-earth-line-start.kml
curl -O http://vislab-ccom.unh.edu/~schwehr/Classes/2011/esci895-researchtools/google-earth-line-end.kml
#+END_SRC

These two pieces give you the front and back of the KML and all we
need to do is provide the coordinates for the

```

--:**- 9-bash-scripting.org 34% L178 (Org)

```

emacs23@ubuntu
File Edit Options Buffers Tools Operate Mark Regexp Immediate Subdir Help

/home/researchtools/class/09:
total used in directory 16 available 11809668
drwxr-xr-x 2 researchtools researchtools 4096 2011-09-27 10:59 .
drwxr-xr-x 3 researchtools researchtools 4096 2011-09-27 10:53 ..
-rw-r--r-- 1 researchtools researchtools 109 2011-09-27 10:59 google-earth-line-end.kml
-rw-r--r-- 1 researchtools researchtools 311 2011-09-27 10:59 google-earth-line-start.kml

```

```

-U:%%- 09 All L4 (Dired by name)-----
#+END_SRC

#+results:
: drwxr-xr-x 2 researchtools researchtools 4096 2011-09-27 10:53 /home/researchtools/class/09

Now, get the header and footer text for the KML line format:

#+BEGIN_SRC sh
cd ~/class/09

curl -O http://vislab-ccom.unh.edu/~schwehr/Classes/2011/esci895-researchtools/google-earth-line-start.kml
curl -O http://vislab-ccom.unh.edu/~schwehr/Classes/2011/esci895-researchtools/google-earth-line-end.kml
#+END_SRC

#+results:

```

```

--:**- 9-bash-scripting.org 33% L174 (Org)-----

```

```

emacs23@ubuntu
File Edit Options Buffers Tools Complete In/Out Signals Help

researchtools@ubuntu:~/class/09$ pwd
/home/researchtools/class/09
researchtools@ubuntu:~/class/09$ ls -l
total 8
-rw-r--r-- 1 researchtools researchtools 109 2011-09-27 10:59 google-earth-line-end.kml
-rw-r--r-- 1 researchtools researchtools 311 2011-09-27 10:59 google-earth-line-start.kml
researchtools@ubuntu:~/class/09$ rm *.kml
rm: remove regular file `google-earth-line-end.kml'? y
rm: remove regular file `google-earth-line-start.kml'? y
researchtools@ubuntu:~/class/09$ curl -O http://vislab-ccom.unh.edu/~schwehr/Classes/2011/esci895-researchtools/google-earth-line-start.kml
% Total % Received % Xferd Average Speed Time Time Time Current
Dload Upload Total Spent Left Speed
100 311 100 311 0 0 17852 0 --:--:-- --:--:-- --:--:-- 151k
researchtools@ubuntu:~/class/09$

```

-U:**- *shell* All L14 (Shell:run)-----

```

#+END_SRC

#+results:
: drwxr-xr-x 2 researchtools researchtools 4096 2011-09-27 10:53 /home/researchtools/class/09

Now, get the header and footer text for the KML line format:

#+BEGIN_SRC sh
cd ~/class/09

curl -O http://vislab-ccom.unh.edu/~schwehr/Classes/2011/esci895-researchtools/google-earth-line-start.kml
curl -O http://vislab-ccom.unh.edu/~schwehr/Classes/2011/esci895-researchtools/google-earth-line-end.kml
#+END_SRC

#+results:

```

--:**- 9-bash-scripting.org 33% L176 (Org)-----

```

emacs23@ubuntu
File Edit Options Buffers Tools XML YASnippet Help
<?xml version="1.0" encoding="UTF-8"?>
<kml xmlns="http://www.opengis.net/kml/2.2" xmlns:gx="http://www.google.com/kml/ext/2.2" xmlns:kml="http://www
www.opengis.net/kml/2.2" xmlns:atom="http://www.w3.org/2005/Atom">
<Document>
  <Placemark>
    <LineString>
      <coordinates>

```

```

-U:--- google-earth-line-start.kml All L1 (nXML Invalid yag)-----
#+END_SRC
#+results:
: drwxr-xr-x 2 researchtools researchtools 4096 2011-09-27 10:53 /home/researchtools/class/09

Now, get the header and footer text for the KML line format:

#+BEGIN_SRC sh
cd ~/class/09

curl -O http://vislab-ccom.unh.edu/~schwehr/Classes/2011/esci895-researchtools/google-earth-line-start.kml
curl -O http://vislab-ccom.unh.edu/~schwehr/Classes/2011/esci895-researchtools/google-earth-line-end.kml
#+END_SRC

#+results:

```

```

--:**- 9-bash-scripting.org 33% L177 (Org)-----
Using vacuous schema

```



```

/home/researchtools/class/09:
total used in directory 16 available 11794388
drwxr-xr-x 2 researchtools researchtools 4096 2011-09-27 11:09 .
drwxr-xr-x 3 researchtools researchtools 4096 2011-09-27 10:53 ..
-rw-r--r-- 1 researchtools researchtools 109 2011-09-27 11:09 google-earth-line-end.kml
-rw-r--r-- 1 researchtools researchtools 311 2011-09-27 11:09 google-earth-line-start.kml

```

```

These two pieces give you the front and back of the KML and all we
need to do is provide the coordinates for the

Get the coordinates file from the Boston Construction file used during
the homework:

#+BEGIN_SRC sh
cd ~/class/09

curl -O http://vislab-ccom.unh.edu/~schwehr/Classes/2011/esci895-researchtools/examples/2007-boston-construction.csv.bz2
bunzip2 2007-boston-construction.csv.bz2
#+END_SRC

Take a look at the file:

```



the homework:

```
#+BEGIN_SRC sh
cd ~/class/09
```

```
curl -O http://vislab-ccom.unh.edu/~schwehr/Classes/2011/esci895-researchtools/examples/2007-boston-construction.csv.bz2
```

```
bunzip2 2007-boston-construction.csv.bz2
#+END_SRC
```

#+results:

Take a look at the file:

```
#+BEGIN_SRC sh
cd ~/class/09
```

```
head 2007-boston-construction.csv
#+END_SRC
```

We see that it has longitude, latitude, and a [Unix UTC timestamp](#). We will ignore the timestamp for now.

```
#+BEGIN_EXAMPLE
-70.5014566667,42.1006833333,1179617934
-70.5016466667,42.101755,1179617991
-70.501845,42.1028766667,1179618051
-70.5020833333,42.1039,1179618111
-70.5022083333,42.1049116667,1179618176
-70.5022883333,42.1059316667,1179618233
-70.502515,42.1069266667,1179618296
-70.5027566667,42.10796,1179618356
-70.5028616667,42.1090066667,1179618416
```

Evaluate this sh code block on your system? (yes or no) yes



the homework:

```
#+BEGIN_SRC sh
cd ~/class/09
```

```
curl -O http://vislab-ccom.unh.edu/~schwehr/Classes/2011/esci895-researchtools/examples/2007-boston-construction.csv.bz2
```

```
bunzip2 2007-boston-construction.csv.bz2
#+END_SRC
```

#+results:

Take a look at the file:

```
#+BEGIN_SRC sh
cd ~/class/09
```

```
head 2007-boston-construction.csv
#+END_SRC
```

#+results:

-70.5014566667	42.1006833333	1179617934.0
-70.5016466667	42.101755	1179617991.0
-70.501845	42.1028766667	1179618051.0
-70.5020833333	42.1039	1179618111.0
-70.5022083333	42.1049116667	1179618176.0
-70.5022883333	42.1059316667	1179618233.0
-70.502515	42.1069266667	1179618296.0
-70.5027566667	42.10796	1179618356.0
-70.5028616667	42.1090066667	1179618416.0
-70.5029816667	42.1102133333	1179618486.0

We see that it has longitude, latitude, and a [Unix UTC timestamp](#). We



```

#+BEGIN_EXAMPLE
-70.5014566667,42.1006833333,1179617934
-70.5016466667,42.101755,1179617991
-70.501845,42.1028766667,1179618051
-70.5020833333,42.1039,1179618111
-70.5022083333,42.1049116667,1179618176
-70.5022883333,42.1059316667,1179618233
-70.502515,42.1069266667,1179618296
-70.5027566667,42.10796,1179618356
-70.5028616667,42.1090066667,1179618416
-70.5029816667,42.1102133333,1179618486
#+END_EXAMPLE

```

We can reuse the cut command to get just the X and Y coordinates:

```

#+BEGIN_SRC sh
cd ~/class/09

cut -d, -f1,2 2007-boston-construction.csv | head
#+END_SRC

```

Which should look like this:

```

#+BEGIN_EXAMPLE
-70.5014566667,42.1006833333
-70.5016466667,42.101755
-70.501845,42.1028766667
-70.5020833333,42.1039
-70.5022083333,42.1049116667
-70.5022883333,42.1059316667
-70.502515,42.1069266667
-70.5027566667,42.10796

```



```

#+BEGIN_EXAMPLE
-70.5014566667,42.1006833333,1179617934
-70.5016466667,42.101755,1179617991
-70.501845,42.1028766667,1179618051
-70.5020833333,42.1039,1179618111
-70.5022083333,42.1049116667,1179618176
-70.5022883333,42.1059316667,1179618233
-70.502515,42.1069266667,1179618296
-70.5027566667,42.10796,1179618356
-70.5028616667,42.1090066667,1179618416
-70.5029816667,42.1102133333,1179618486
#+END_EXAMPLE

```

We can reuse the cut command to get just the X and Y coordinates:

```

#+BEGIN_SRC sh
cd ~/class/09

cut -d, -f1,2 2007-boston-construction.csv | head
#+END_SRC

```

```

#+results:
| -70.5014566667 | 42.1006833333 |
| -70.5016466667 | 42.101755 |
| -70.501845 | 42.1028766667 |
| -70.5020833333 | 42.1039 |
| -70.5022083333 | 42.1049116667 |
| -70.5022883333 | 42.1059316667 |
| -70.502515 | 42.1069266667 |
| -70.5027566667 | 42.10796 |
| -70.5028616667 | 42.1090066667 |
| -70.5029816667 | 42.1102133333 |

```



Which should look like this:

```
#+BEGIN_EXAMPLE
-70.5014566667,42.1006833333
-70.5016466667,42.101755
-70.501845,42.1028766667
-70.5020833333,42.1039
-70.5022083333,42.1049116667
-70.5022883333,42.1059316667
-70.502515,42.1069266667
-70.5027566667,42.10796
-70.5028616667,42.1090066667
-70.5029816667,42.1102133333
#+END_EXAMPLE
```

We are lucky! KML expects coordinates to come as x,y,z or x,y. If you want to read more, you can look at the KML Reference section on [coordinates](#), [Placemark](#) and [LineString](#). We will talk more about KML in future lectures quite a bit.

```
#+BEGIN_SRC xml
<Placemark>
  <LineString>
    <coordinates>
      -125.810021667,48.4840316667
      -125.810295,48.483705
    </coordinates>
  </LineString>
</Placemark>
#+END_SRC
```

Let's create the x,y pairs in a file:



```
cut -d, -f1,2 2007-boston-construction.csv > 2007-boston-construction.xy
#+END_SRC
```

#+results:

We can now put the header, points and tail together to create a KML file. Google Earth has trouble with lines with too many points in them, so we will use head to only output some of the points.

The ">" redirects output to a file just as we have done in the past. However, if we use it a 2nd time to the same file, it will overwrite the first file and destroy anything that we did before.

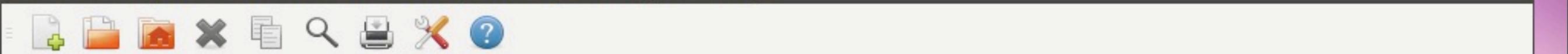
The ">>" string does redirection, but ***appends*** the data to any existing file.

```
#+BEGIN_SRC sh
cd ~/class/09
```

```
cat google-earth-line-start.kml > 2007-boston-construction.kml
head -1000 2007-boston-construction.xy >> 2007-boston-construction.kml
cat google-earth-line-end.kml >> 2007-boston-construction.kml
#+END_SRC
```

We can now open the file in Google Earth. It appears that Google Earth on a Ubuntu 11.04 virtual machine on the Mac is very crash prone. You can put the kml file into your dropbox folder and then download it through <http://dropbox.com>.

```
#+BEGIN_SRC sh
# This does NOT work
google-earth ~/class/09/2007-boston-construction.kml
```



```

researchtools@ubuntu:~/class/09$ pwd
/home/researchtools/class/09
researchtools@ubuntu:~/class/09$ ls -l
total 8
-rw-r--r-- 1 researchtools researchtools 109 2011-09-27 10:59 google-earth-line-end.kml
-rw-r--r-- 1 researchtools researchtools 311 2011-09-27 10:59 google-earth-line-start.kml
researchtools@ubuntu:~/class/09$ rm *.kml
rm: remove regular file `google-earth-line-end.kml'? y
rm: remove regular file `google-earth-line-start.kml'? y
researchtools@ubuntu:~/class/09$ curl -O http://vislab-ccom.unh.edu/~schwehr/Classes/2011/esci895-researchtools/google-earth-line-start.kml
% Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
           Dload  Upload   Total     Spent    Left  Speed
100  311  100  311    0     0  17852      0  --:--:-- --:--:-- --:--:--  151k
researchtools@ubuntu:~/class/09$ cd ~/class/09
researchtools@ubuntu:~/class/09$ google-earth

```

-U: ** - *shell* All L15 (Shell:run) -----

```

the first file and destroy anything that we did before.

The ">>" string does redirection, but *appends* the data to any
existing file.

#+BEGIN_SRC sh
cd ~/class/09

cat google-earth-line-start.kml > 2007-boston-construction.kml
head -1000 2007-boston-construction.xy >> 2007-boston-construction.kml
cat google-earth-line-end.kml >> 2007-boston-construction.kml
#+END_SRC

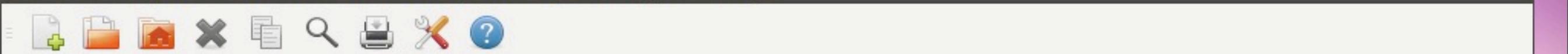
#+results:

We can now open the file in Google Earth. It appears that Google

```

--: ** - 9-bash-scripting.org 59% L310 (Org) -----

Auto-saving...done



```

/home/researchtoo
researchtools@ubun
total 8
-rw-r--r-- 1 rese
-rw-r--r-- 1 rese
researchtools@ubun
rm: remove regulat
rm: remove regulat
researchtools@ubun
earth-line-start.km
% Total % Re
100 311 100
researchtools@ubun
researchtools@ubun
-U:**- *shell*
the first file and
The ">>" string de
existing file.
#+BEGIN_SRC sh
cd ~/class/09
cat google-ear
head -1000 2007-bosto
cat google-ear line-end.km >> 2007-boston-construction.km
#+END_SRC
#+results:
We can now open the file in Google Earth. It appears that Google
--:**- 9-bash-scripting.org 59% L310 (Org)

```

Start-Up Tip

Tip: View 3D buildings and Trees

Google Earth: Recommends 'DirectX' mode.

Please complete the login window first if it's shown in front.

You are starting Google Earth in 'OpenGL Software Emulation' mode, which will work but runs more slowly. We recommend you try 'DirectX' mode for the best Google Earth experience.

Would you like to switch to 'DirectX' mode?

```

researchtools/google-ear

```

```
researchtools@ubuntu:~$ rm -rf .googleearth/
researchtools@ubuntu:~$ cd class/09
researchtools@ubuntu:~/class/09$
```

```
cd 113034.png
113044.png
cat 113055.png
hea 113105.png
cat
```

#+END_SRC

#+results:

We can now open the file in Google Earth. It appears that Google

Open

Look in: /home/researchtools/class

Computer	09
researchtools	

File name:

Files of type: Google Earth (*.kml *.kmz *.eta *.ini)

Open Cancel



© 2011 MapLink/Tele Atlas
 © 2011 Europa Technologies
 © 2011 Google
 US Dept of State Geographer

38°57'33.79" N 95°15'55.74" W elev 1015 ft

Eye alt 6835.90 mi

Google

Google Earth

File Edit View Tools Add Help

Search

Fly To Find Businesses Directions

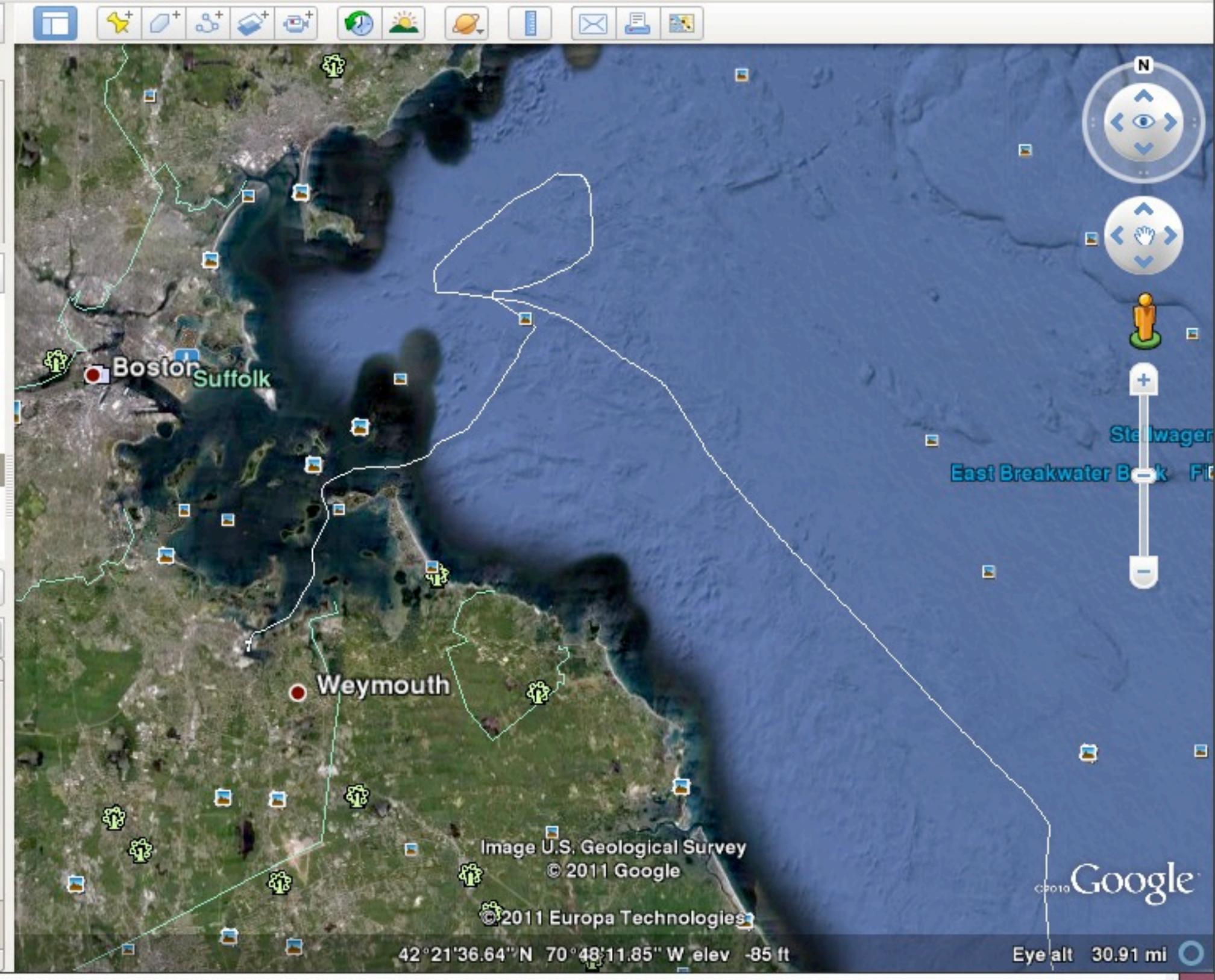
Fly to e.g., 94043

Places

- My Places
- Sightseeing Tour
 - Make sure 3D Buildings layer is checked
- Temporary Places
- 2007-boston-construction.kml

Layers

- Earth Gallery >>
- Primary Database
 - Borders and Labels
 - Places
 - Photos
 - Roads
 - 3D Buildings
 - Ocean
 - Weather
 - Gallery
 - Global Awareness



emacs23@ubuntu

File Edit Options **Buffers** Tools Complete In/Out Signals Help

100 311 100
 researchtools@ub
 researchtools@ub
 Google Earth has
 We apologize for
 This is a bug i
 circumstances.
 to this text fi
 /home/resear
 Please include t
 researchtools@ubuntu:~/class/09

09 % - ...chtools/class/09/
 9-bash-scripting.org * - /home/researchtools/
 ~ % - /home/researchtools/
 researchtools-schwehr.org * - ...ols/Dropbox/logs/
 Calendar %
 GNU Emacs %
 scratch
 Messages *

Next Buffer C-x <C-right>
 Previous Buffer C-x <C-left>
 Select Named Buffer... C-x b
 List All Buffers C-x C-b

U: ** - *shell* Bot L21 (Shell:run)-----

the first file and destroy anything that we did before.

The ">>" string does redirection, but ***appends*** the data to any existing file.

```

#+BEGIN_SRC sh
cd ~/class/09

cat google-earth-line-start.kml > 2007-boston-construction.kml
head -1000 2007-boston-construction.xy >> 2007-boston-construction.kml
cat google-earth-line-end.kml >> 2007-boston-construction.kml
#+END_SRC

#+results:

We can now open the file in Google Earth. It appears that Google

```

: ** - 9-bash-scripting.org 59% L310 (Org)-----



```

/home/researchtools/class/09:
total used in directory 7372 available 11763260
drwxr-xr-x 2 researchtools researchtools 4096 2011-09-27 11:27 .
drwxr-xr-x 3 researchtools researchtools 4096 2011-09-27 10:53 ..
-rw-r--r-- 1 researchtools researchtools 4404821 2011-09-27 11:11 2007-boston-construction.csv
-rw-r--r-- 1 researchtools researchtools 26259 2011-09-27 11:27 2007-boston-construction.kml
-rw-r--r-- 1 researchtools researchtools 3093687 2011-09-27 11:21 2007-boston-construction.xy
-rw-r--r-- 1 researchtools researchtools 109 2011-09-27 11:09 google-earth-line-end.kml
-rw-r--r-- 1 researchtools researchtools 311 2011-09-27 11:09 google-earth-line-start.kml

```

the first file and destroy anything that we did before.

The ">>" string does redirection, but ***appends*** the data to any existing file.

□

```

#+BEGIN_SRC sh
cd ~/class/09

```

```

cat google-earth-line-start.kml > 2007-boston-construction.kml
head -1000 2007-boston-construction.xy >> 2007-boston-construction.kml
cat google-earth-line-end.kml >> 2007-boston-construction.kml

```

#+END_SRC

#+results:

We can now open the file in Google Earth. It appears that Google

Find file: ~/example.t

emacs23@ubuntu

File Edit Options Buffers Tools Minibuf Help

the first file and destroy anything that we did before.

The ">>" string does redirection, but ***appends*** the data to any existing file.

```

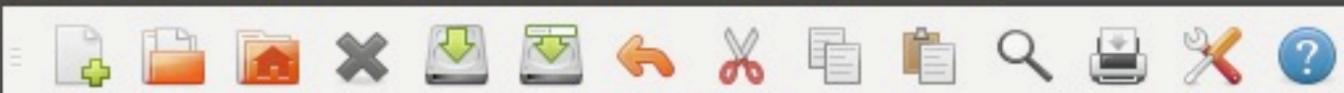
#+BEGIN_SRC sh
cd ~/class/09

cat      google-earth-line-start.kml > 2007-boston-construction.kml
head -1000 2007-boston-construction.xy >> 2007-boston-construction.kml
cat      google-earth-line-end.kml  >> 2007-boston-construction.kml
#+END_SRC

#+results:

We can now open the file in Google Earth. It appears that Google
--:**- 9-bash-scripting.org 59% L306 (Org)-----
asd;flkj asdf;lkj asdf;lkj asdf asdf;laksjdf asdf;lj;laksjdf [qweieurpoi;laskdjf ;kjasdf as;dflkj asd
-U:**- example.txt All L1 (Text yas)-----
M-x auto-fill-mode

```



```

/home/researchtools/class/09:
total used in directory 7372 available 11763260
drwxr-xr-x 2 researchtools researchtools 4096 2011-09-27 11:27 .
drwxr-xr-x 3 researchtools researchtools 4096 2011-09-27 10:53 ..
-rw-r--r-- 1 researchtools researchtools 4404821 2011-09-27 11:11 2007-boston-construction.csv
-rw-r--r-- 1 researchtools researchtools 26259 2011-09-27 11:27 2007-boston-construction.kml
-rw-r--r-- 1 researchtools researchtools 3093687 2011-09-27 11:21 2007-boston-construction.xy
-rw-r--r-- 1 researchtools researchtools 109 2011-09-27 11:09 google-earth-line-end.kml
-rw-r--r-- 1 researchtools researchtools 311 2011-09-27 11:09 google-earth-line-start.kml

```

-U:%%- 09 All L6 (Dired by name)-----

```

asd;flkj asdf;lkj asdf;lkj asdf asdf;laksjdf asdf;lj;laksjdf
[qweieurpoi;laskdjf ;kjasdf as;dflkj asd asdf asdf asdf 1234

M-x auto-fill
M-q "refill"

```

-U:**- example.txt All L5 (Text yas Fill)-----

Auto-saving...done