BASIC (SCIENTIST LEVEL) USE OF COMPANDES VERSION 1.0

AIM:
First 30 minutes: To run a 1km resolution baseline for Colombia.
Next 30 minutes: To run a climate change alternative

If already confident with the system just get on and run the analysis you want to and we can help.
1. Open Firefox (system works best in this browser)
2. Go to http://training.policysupport.org/links/compandes
3. Normally you would access using http://www.policysupport.org/compandes
4. Type your assigned username and password for use today.
5. Choose scientist.
6. Hit the Login button
1. **STEP 1:** At A enter Colombia name of your site then click Go>
2. Move the map until the blue box (1km resolution) or pink box (1ha resolution) covers most of your site (Colombia). We will repeat this later for your own site.
3. At B enter a name for the run, leave Tiled 1km as is and click Define Area
1. The map will re-center on your tile (if it does not click the green refresh button at A)
2. Your run name will change, B. Click it to see a window with details of the run, C. Close that window.
STEP 2: Prepare data (building missing map tiles)

1. Click Step 2: Prepare Data A. If the window that appears requests Build missing map tiles (B) then click that button to do so.
2. When the tiles have built click prepare data again (C)
STEP 2: Prepare data (copy to workspace)

• Now click the copy data to workspace button (A).
• The system will take a few minutes to gather and copy the necessary data to your workspace on the servers. When the data is ready you can see the inputs by clicking the + (B)
STEP 2: Prepare data (view workspace)

- The model requires more than 140 maps to run.
- Those that we produce or have license to redistribute can be downloaded in GIS formats (A) and visualised (B) from here
**USAGE CASE:** Simply visualising and comparing data for a place, including in Google Maps/Earth, even without running the model. No local GIS system or skills required.

see http://goo.gl/8jkBY
STEP3: Start simulation.

Click STEP 3: Start simulation. Click Start. Click yes you are sure.

Some time for questions and answers now

Takes about 6 minutes to run sophisticated hydrological baseline. If tile never been run before by anyone else can take 24 hours (because of preprocessing) but once started window or computer can be switched off. Will complete without user interaction. If long simulation then system sends email to you when done.
STEP 5: Results: maps.

1. We are skipping STEP 4 as we want to look at the baseline results before running an alternative

2. Key results are presented. If you want to see more outputs click the + (A)

3. To view them click the Show link for water balance (B)
GEOBROWSE 1: View the data.
Click (A) to View in Google Maps. To read the value at a point drag the map until the cross hair is over the point and click Query (D).
You can also pop out for comparison with other maps (B).
Click on the image (C).
GEOBROWSE 2: View by area (e.g. administrative regions) instead of by pixel.

1. Close the Google map and go back to the map window (press Alt then tab key to flick between windows).

2. Click View by (A). The dropdown list will fill. Choose the units you want to view water balance by. We used regional administrative boundaries to produce the map (B).
GEOBROWSE 5: Define areas of interest (not now)
STEP 6: Results: stats.
Access to time series results for download (Excel), and online visualisation.

1. Close the results: maps windows and click STEP 6 Results: stats (A) from the main page to see window (B).
2. Click (C) to display the water balance time-series (D) and (E) to download as Excel.
STEP 7: Results: narrative. A written summary of the simulation results. 
Click STEP 7: Results narrative from the main menu 
Click show in any of the text to fill-in the results
BACK TO STEP 4: Negotiation tools. Apply a scenario for land use or climate change. Click STEP 4: Negotiation tools in the main menu (A) to see window (B). Choose climate change and click submit to see window (C).
We will apply the A2a climate scenario.
**CLIMATE CHANGE: choose the scenario that you wish to apply.**

Choose an existing [IPCC](https://www.ipcc.ch) downscaled GCM scenario:

Apply downscaled results from IPCC GCM scenarios using a range of scenarios, downscaling tools, models and time periods or a representation the mean of all models available for a given IPCC scenario.

**Compare scenarios and GCMs**

Please make a selection in all fields.

Choose the following: Assessment » Scenario » Downscaler » GCM » Year »

<table>
<thead>
<tr>
<th>yr4</th>
<th>A2a</th>
<th>CIAT</th>
<th>Max Planck Institute for Meteorology, Germany, ECHAM5 / MPI-OM</th>
<th>2050s</th>
</tr>
</thead>
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**Submit**

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**USAGE CASE: ECHAM GCM climate scenario**

Let's apply the AR4 A2a climate scenario and the Max Planck ECHAM5 GCM. Change the figures as above and click Submit.
The scenario. B=baseline

Temperature

< Jan

> Jul

Precip

< Jan

> Jul
Deforestation: Run the scenario
Close the view scenario window and go back to the window underneath (A) and click Run scenario (B)
The scenario will take a few minutes to run as before
We have some more time for questions
Climate change: RESULTS MAPS:

Once the run has completed go back and click Results maps from the main window (A). Results have new ‘compare’ icon for comparison with baseline (B). Click on the change in water balance compare icon.
Climate change: Spatial impacts

Overall water balance increases in some basins and decreases in others

WB decreases are associated with the greatest ET increase (Amazon)

WB per-capita
By admin region shows increases throughout the Andes and Llanos, decreases in Amazon

See http://goo.gl/aMymW

see http://goo.gl/EAFDS
Click results: stats (A) to see window (B) and click Water balance compare button (C) to see the chart (D). Click the + next to Difference [scenario-baseline] The climate change led to an increase in water balance for the first months (rainfall), followed by a decrease (rainfall and higher ET). Decreases are higher during the day (ET).
Climate change: Narrative

Click results: narrative (A) to see window (B) which describes the results of the baseline and impacts of the scenario.
Accessing CompAndes outside of this course:
• Use links from www.policysupport.org/companandes
• There is much more functionality than we have shown today
• Set up your own permanent account (we can help you do that now)
• Keep in touch so we can help you interpret outputs that you use
• Let us know what is missing/needed in the system
• Feed-back to us where data can be improved
Create account: (define username and password, wait for email, click link in email, check in spam folder if email not received within a few minutes) or login as guest (but then no continuity from session to session). Sign in as scientist.