From: Chopra, Sidhant sidhant.chopra@yale.edu

Subject: Re: SIR model
Date: 5 May 2023 at 5:00 am
To: alex.fornito@monash.edu

Hi Alex,

Please find a download link to a folder containing all the voxel-wise DBM contrast maps (3mm smoothing) for STAGES, HCP-EP, BGS, and COBRE. The contents of the folder are described in more detail below:

- For the three cross-sectional studies (COBRE, HCP-EP, and BGS), inside the study folder, you will find an "F" and "T" sub-folders. The "T" folder contains a "swe_vox_Tstat_c01.nii" file (this is what I used as the primary target for modeling and likely the main file that will be of use) which is a t-statistic map for differences between patients and controls, with a higher t-value representing greater atrophy in patients. There is also a corresponding "swe_vox_Tstat_lp_c01.nii" file which is the parametric -log10(p) map corresponding to the t-map. The "F" folder contains a similar F-stat and corresponding -log10(p) file for an F-test (rather than a directed T-test).
- For STAGES, there is a "bl" subfolder (baseline), which follows the same structure as the above cross-sectional studies. There is also a "bl_3m" and "bl_12m" folder which contain the longitudinal contrasts for baseline to 3 months and baseline to 12 months. Within each of these two longitudinal folders there is a T and F folder for illness effect (pipt_v_hc) and medication effect ("mipt_v_pipt&hc"). 'pipt' means placebo group and 'mipt' means medication group. Accordingly, the pipt_v_hc folder contains T and F files that index the "illness effect" or, change in volume in placebo patients compared to healthy controls, with a higher t-value meaning greater atrophy in patients. The mipt_v_pipt&hc folder contains the T and F files which index the medication effect, or change in volume in the medicated patients compared to both the placebo patient group and the healthy control group, with a higher t-value meaning greater atrophy in medicated patients.
- All cross-sectional contrasts include age, sex, and handedness as covariates.
- Longitudinal contrasts include cross-sectional and longitudinal age variables, sex, handedness, and medication exposure in cumulative olanzapine equivalents as covariates.
- The STAGES "bl" and the HCP-EP folders also contain a "scz_only" folder, which has the T and F files for a contrast comparing patients to controls, while only including patients diagnosed with schizophrenia or schizophreniform disorder.
- Each study folder also contains a "swe_vox_mask.nii" file which is simply the binary MNI explicit voxel mask used for the comparisons. All contrast maps are already masked by this so you probably won't need this but can be useful for analyses or FDR correction etc.

Let me know if you needed any further clarifications or any other files. Happy to meet with the student to explain in more detail.

Download: https://www.dropbox.com/sh/t3ornq97g0fdkw0/AABIQkEXMY7agVK mp3djSOara?dl=0

Regards, Sid

Sidhant Chopra, PhD Psychologist/Postdoc - Holmes Lab Yale University

From: Alex Fornito <alex.fornito@outlook.com>

Sent: 26 April 2023 20:30

To: Chopra, Sidhant < sidhant.chopra@yale.edu>

Subject: SIR model

Hi Sid.

I have a new student who is starting soon and she is interesting in extending the SIR models.

Would you mind sending the SCZ GM maps you modelled so she can have a play?

Also happy for you to sit in on supervision meetings if you want to be involved?

Alex Fornito

Professor I ARC Laureate Fellow Turner Institute for Brain and Mental Health & Monash Biomedical Imaging Monash University

770 Blackburn Rd, Clayton, 3168, Vic, Australia

+61 3 9902 9796 F: +61 3 9902 9817 E:

alex.fornito@monash.edu

T: @AFornito

https://www.monash.edu/turner-institute/alex-fornito-lab

Book: http://bit.ly/1mz215S