

Re: cubes at different redshifts?

4 messages

Marta Silva <martasilva85@gmail.com>
To: Abraham Richard Neben <abrahamn@mit.edu>

Fri, Feb 12, 2016 at 5:21 AM

Hi Abraham.

I will not make the codes public so soon simply because I really don't have the time to do make the codes look nice. I have a phd student who likes coding too much and I will try to convince him to do it but it will take a while.

I have boxes for Tb[K] and for ILya[erg s-1 cm^-2 sr-1 Hz-1] from z=6.7 to z=7.3 with a dz of 0.1 the boxes have 800^3 cells and L=542h/Mpc.

If you want I can give you the boxes by ssh but I cannot run more sims so soon.

Its 14 Gbs of data

If you want me to send you the boxes just get me an ssh address I can use.

Cheers,

Marta

On Fri, Feb 12, 2016 at 12:18 AM, Abraham Richard Neben <abrahamn@mit.edu> wrote: Hi Marta.

The code that makes the 21cm and Ly-alpha cubes, are you planning on making it public anytime soon? I hate to keep bugging you with requests. We'd like to get higher res cubes at a range of different redshifts, maybe 5 to 15. You don't need to convert them to angles, just xyz in comoving Mpc is fine.

Thanks.

Abraham

Marta Silva <martasilva85@gmail.com>

To: Abraham Richard Neben <abrahamn@mit.edu>

Fri, Feb 12, 2016 at 11:26 AM

These cubes do not have foregrounds. Stellar continuum emission is a smooth foreground so I just assume It was fitted out of the maps. I made these maps just to analyse the physics of the signals.

Lya from the EoR is observed in the optical so there is no IR here.

The cubes can be interpolated to do a broad band image which is basically what happens when I do the cubes. Is that what you want?

On Fri, Feb 12, 2016 at 4:42 PM, Abraham Richard Neben <abrahamn@mit.edu> wrote:

Hmm, 14Gb is a bit much. I'm more thinking that I'm like to see a simulated broad band IR image and an broad band 21cm image. If we summed your cubes over a range of redshifts could we make a realistic broad band IR image? Or does your code neglect stellar continuum emission?

Marta Silva <martasilva85@gmail.com> To: Abraham Richard Neben <abrahamn@mit.edu>

Mon, Apr 18, 2016 at 1:49 PM

Hi Abraham,

Sorry for the late reply.

I am running the simulation to get you some cubes at higher redshifts.

I will only make the code public if Mario Santos my ex supervisor updates the Simfast21 code. I will see him in a couple of months and we than we will discuss the subject. He did many updates on the code and it does not make sense for me to just make my art of the code public. So it will not happen soon.

I will also give the ionization history with the rest of the cubes.

Cheers,

Marta

On Mon, Apr 18, 2016 at 6:39 PM, Abraham Richard Neben <abrahamn@mit.edu> wrote: Hi Marta.

Will you be able to make the code public anytime soon? Or if not really public, I'd just like to be able to run my own simulations. If not, can you make some cubes for me at different redshifts (7.5, 8, 8.5, 9). Also, what is the ionization history (vs z) in your simulation?

Abraham

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> On Apr 7, 2016, at 6:33 PM, Abraham Richard Neben <abrahamn@mit.edu> wrote:
>
> Hi Marta,
> Can you simulate cubes at a few slightly higher redshifts (z~7.5, 8, 8.5) with the same params as before
(dtheta=0.1deg, df=100kHz, 5deg FOV, and \Delta z=0.5 bandwidth)? What is the ionization fraction at these
redshifts. The cubes you made for me before were centered at redshift 7.
> Hope you're doing well.
>
> Best.
>
> Abraham
>
>
>
>
>> On Feb 12, 2016, at 2:03 PM, Abraham Richard Neben <abrahamn@mit.edu> wrote:
>> Okay, let me think about it and get back to you. It would be useful to be able to run the code myself.
>> Abraham
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[Quoted text hidden]

I	o: Abraham Richard Neben <abrahamn@mit.edu></abrahamn@mit.edu>
	Hi Abraham,
	I am sending you cones for the redshifts you asked. Given the limited size of the simulation I had, the cubes only have 4.8 deg and a resolution of 0.1deg and 100KHz.
	I am also sending you the ionisation history and the evolution of the Intensities in units of [erg s-1 Hz-1 sr-1 cm-2]. Some values are a little different from what I had in the paper since this is a new much larger simulation and therefore has a much worse resolution than the one in the paper.
	I am sorry but I cannot run more simulations now. I hope this ones are useful for something.
	Cheers,
	Marta
	On Fri, Apr 29, 2016 at 5:45 PM, Abraham Richard Neben <abrahamn@mit.edu> wrote: Okay. For these cubes can you send them at higher resolution? What file size would they be with 10' resolution? Also, can you send the ionization history? Thanks,</abrahamn@mit.edu>
	Abraham [Quoted text hidden]
	13 attachments
	Cone_Nz_88_Nx_48_Tb_erg_z8.0_d4.8_dg0.1.dat
	Cone_Nz_112_Nx_48_Ilya_erg_z7.0_d4.8_dg0.1.dat
	cone_Nz_112_Nx_48_Tb_erg_z7.0_d4.8_dg0.1.dat
	cone_Nz_99_Nx_48_Ilya_erg_z7.5_d4.8_dg0.1.dat
	Cone_Nz_99_Nx_48_Tb_erg_z7.5_d4.8_dg0.1.dat
	Cone_Nz_72_Nx_48_Tb_erg_z9.0_d4.8_dg0.1.dat
	cone_Nz_79_Nx_48_Ilya_erg_z8.5_d4.8_dg0.1.dat
	cone_Nz_79_Nx_48_Tb_erg_z8.5_d4.8_dg0.1.dat
	cone_Nz_88_Nx_48_Ilya_erg_z8.0_d4.8_dg0.1.dat 792K
	Cone_Nz_72_Nx_48_Ilya_erg_z9.0_d4.8_dg0.1.dat
	Lya_z.out

ITb_z.out
1K

xHII_z.out
1K