

Making data CDs on the nmr1 workstation

1. Copy data directory (even the .fid entries are directories) to **/data1/temp** on nmr1.

2. This can be done using the remote mounting utility once you are already in **/data1/temp**, for example with the commands

```
cp -r /net/instrumentname/directorytree/directory .  
(note the period is necessary at the end of the last command!)
```

3. Make file image in **/data1/temp** with **mkisofs** utility, for example

```
mkisofs -l -r -o outputname.iso directorytobeimaged
```

** See options for the **mkisofs** command below.

4. When the image has been made, press the open button on the Plextor CD writer on the top of the computer to open the CD drawer.

5. Insert a writeable CD and close the drawer.

Caution: Do not write data on a disk with some data on it already! If there is data on the disk, a file manager window will appear on the monitor after you have inserted the disk.

6. To start the CD writing process, type

```
cdrw -i outputname.iso
```

in the directory **/data1/temp**

8. At the completion of the CD writing process, the door should open by itself.

9. Remove disk, and push the door to close it.

10. Delete directory and .iso file from **/data1/temp**

NOTE: Do not try to do other things on the workstation while writing the CD, allow it to finish writing.

11. To check the disk, insert it in the CD reader built into the workstation.

Once it is ready, a file manager window will appear on the monitor. To eject a CD, click on "eject" from the File pull-down menu of the File Manager window.

** Options for the **mkisofs** command:

-d Omit trailing period from (plain) files that do not have a period (such as the file "fid" in "*.fid/fid")

- D** Do not use deep directory relocation
 - f** Follow symbolic links when generating the filesystem.
 - l** Allow full 32 character filenames.
 - L** Allow filenames to begin with a period.
 - N** Omit version numbers from ISO9660 file names.
 - r** Use the Rock Ridge extensions. The UID/GID of all files will be set to 0/0, all files on the CD will be readable by the world, and execute permissions are expanded to the world as well. If you use "-R" instead of "-r", then permissions and ownership will be the same on the CD as on the harddisk.
 - V vol_name** Specifies the volume ID to be written into the master block this is how the disk image will be named by the Solaris volume manager.
 - o raw_file** File name of the (raw) CD disk image (needless to say that this file must NOT be in the directory tree(s) of which you create the CD image!).
- file(s)** Directories and file(s) that are to be written to the ISO-9660 file system.
- Example: **mkisofs -d -D -f -l -L -N -r -V vol_name -o raw_file file(s)**