In this section we will briefly review the meteorological data servers that can be accessed to obtain data already in a format compatible with HYSPLIT. We are just showing you three potential locations that you can go to.

We are accessing these data right now through the web browser, but as we mentioned earlier in earlier sections, it's probably better to use an FTP client. Some of these are also available through the GUI.

For instance, the ARL forecast server, forecast data server. If we open up the directory for today, you can see that there are possibly eight directories here, by year, month, and day. And they keep rotating, so as new ones are added, the older ones are dropped off and only eight days of data remain. If I look at today for instance, you see the different files that are available already. Currently files are available through the 15 UTC forecast initialization time. You have to look at the ARL website to determine what these different file names represent, but basically the cycle, the forecast cycle time, is the middle number here 00Z UTC, and then there are abbreviations for the Global Forecast System, the HRRR, the Rapid Update Cycle, the North American Model.

If we go to the NCEP server for forecast data, it's a similar structure. The directories are more complicated and the forecast of data available are really only for today. There is no archive. There are different analyses here but the main point is if I open up today, you'll see a very similar structure, the same data sets are available here as on the

ARL server.

And the last thing is the ARL server for archived data. As you can see it goes to /pub/archives and there are many subdirectories. We talked about some of these previously, for instance the North American Regional Reanalysis was one, the GDAS for global data. There's the North American Regional Reanalysis. The GDAS for global data has different resolutions, at 1° resolution, at half a degree resolution, and at a quarter degree resolution.

But also I wanted to point out that there is an archive available here as well that is not in the GUI yet. It is the WRF model. WRF/ARW at 27 km resolution and this archive goes back to 1980, through 2016 at this point. This is an hourly archive. And if I select a particular year, you can see there are files, essentially listed by day and this covers the continental United States.

So this this just reinforces the points I was making earlier, that it is much better to download these data rather than trying to ..., data that have already been provided in the HYSPLIT compatible format, rather than trying to do your own conversions. If you want to read more on some of these and how the READY system works, there is a reference here, there's a reference to the READY system which we discussed in the previous section, but also an article discussing the READY system. And that concludes the discussion about the meteorological data servers.