Sending 1-sec daily SG data to DMC-IRIS in near real-time

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There are 2 packages that should be compiled on a Linux OS using the Makefile:

- **ggp2mseed**: DMC-IRIS packages written in C to convert PRETERNA files into MINISEED files
  ggp2mseed*: executable program
  Makefile: to compile again the ggp2mseed package (just type "make" in the terminal)

- **miniseed2dmc**: DMC-IRIS packages written in C to transfer MINISEED files to DMC-IRIS center
  Makefile: to compile again the miniseed2dmc package (just type "make" in the terminal)
  miniseed2dmc*: executable program

I also joined 2 shell scripts **dat2mseed** and **send2iris** that can be used. The script **dat2mseed** calls **ggp2mseed**. BE CAREFUL, **ggp2mseed** must be applied on PRETERNA files (1s daily files) with gravity and pressure; the missing values must be written 99999.999

Please contact Mea Edmunds (edmunds@iris.washington.edu) for sending SG data to DMC-IRIS: You will have to give her the IP address from which data will be sent. The data to send should be in MINISEED format in a specific directory (e.g. MSEED) and can be sent using the **miniseed2dmc** script. The output "statefile" should not be deleted.
You will need also to provide the response files and coordinates of the station to generate the dataless SEED file.

If you do not know the transfer function of the (gravimeter + digital acquisition system), you can send the nominal GGP1 (or GGP2) and barometer response files as prepared for Strasbourg. They are the files RESP.SG.ST.GGP1.txt (or RESP.SG.ST.GGP2.txt) and RESP.SG.ST.LDO.txt.

In the RESP file for gravity output, there will be 1 line to modify:

```
B058F04     Sensitivity:                          -1.26260E+06
```
= 1/scale factor in m/s²/V

(e.g. for ST, scale factor = -792 nm/s²/V)

For atmospheric pressure output: RESP.SG.ST.LDO.txt is for a barometer with output directly in hPa, if your barometer output is in Volt, the lines here below must be modified so that the **sensitivity is equal to 1/scale factor where scale factor is in hPa/V**.

```
B058F04     Sensitivity:                          +1.00000E+00
```