- Data collection is authorized in "The Guide to the GCOS Surface and Upper-Air Networks: GSN and GUAN"
- http://www.wmo.ch/web/gcos/Publications/gcos-73.pdf
- Section 3.2 Daily data are minimum requirements; and
- 3.7 The country should send the data to The World Data Centre-Asheville.

- Greg assumed collection duties January 2004
- Contacted people using the National Focal Points list or via contacts supplied by others
 - Email and Fax preferred methods

- Composed a note in English, French, Spanish and Russian, sometimes the letter is sent in 2 or 3 languages
- The note is personalized for each country
- States what is being sought and why
 - Daily Max, Min, Precip. for the P.O.R. from beginning to present
- Lists each station name and number sought
- Gives an example of the preferred data format

Greetings Noelya Aliyakbarova,

Your name has been supplied as the GCOS contact person for Kazakhstan.

Years ago, the World Meteorological Organization sent out a request to its Member Countries and territories to provide data to the Global Climate Observing System (GCOS) Archive Center from GCOS Surface Network stations. Unfortunately, the data format was complicated and prevented many countries from fulfilling their obligations. For Kazakhstan, you have **28952 Kustanai...** with no data received so far. I am writing to remind you of this request and to do whatever I can to make transferring the data easy for you.

The data requested were primarily daily observations of rain amount, maximum temperature, and minimum temperature from the beginning of observations to now. Long-term daily data from the approximately 1000 station GCOS Surface Network around the world are considered crucial to understanding how the global climate is changing, particularly how climate extremes (such as very heavy rain amounts) are changing. Providing GCOS Surface Network data for Kazakhstan will allow analysis of the changes in extremes that Kazakhstan is experiencing to be included in the next Intergovernmental Panel on Climate Change (IPCC) Assessment Report.

To ensure the data are read properly, some countries put their data into files with separate columns for station number, year, month, day, precipitation, maximum temperature, and minimum temperature. With one day per line, the file can be easily emailed to me (<u>Gregory.R.Hammer@noaa.gov</u>). Please see the sample below from Estonia.

```
ST_CD;YYYY;MM;DD;PREC_SUM;TEMP_MAX;TEMP_MIN 26242;2004;09;01; 15.3; 17.1; 13.8 26242;2004;09;02; 0.5; 16.1; -01.1 26242;2004;09;03; 0.0; 20.7; 12.9
```

However, other options are available so please let me know what problems you encounter and how I can assist you.

I look forward to hearing from you.

Respectfully,

Greg Hammer for the World Meteorological Organization Commission for Basic Systems GCOS Lead Center at the World Data Center for Meteorology, Asheville

Results

- Data from >30 countries
 - Data range from 1860s to July 2006
 - 2 countries email data to Greg each month
- Data received in a variety of formats-presents problems during ingest
- 1 country has said "No" and 1 country has said show me the unfulfilled request (then didn't send anything)
- Can provide a two-way channel for the receipt of MCDW, GUAN metadata, etc.
- Have been given a WMO email account