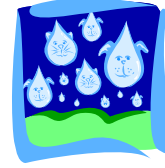




PRECIPITATION



Special CEN Precipitation Protocols

Purpose: Special CloudSat precipitation protocols have been created by mission scientists to obtain valuable rain and snow data. These are almost identical to the GLOBE protocols, but the times are different. The scientists want to know what is happening at the time that the satellite flies over (rather than over a 24-hour period). Therefore students are asked to make rain or snow observations just before and during flyover (instead of one observation at local solar noon as in GLOBE).

Procedure: Follow normal GLOBE precipitation protocol instructions **except** record amount of precipitation in rain gauge or on snowboard **one hour before CloudSat flyover**. Also record the number of days that the rain or snow accumulated and other comments/metadata such as “it was raining when we checked the rain gauge” or “we had a snow shower this morning”. Then record the amount of rain or snow **again at time of flyover**. Record your data.

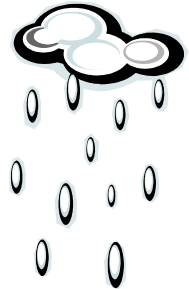
This is what the “Precipitation” section of your data sheet looks like:

Rainfall (one hour before CloudSat flyover)

Local Time (hour:min): _____ Universal Time (hour:min): _____

Number of days rain has accumulated: _____

Rainwater in rain gauge (mm)*: _____



Rainfall (at time of CloudSat flyover)

Rainwater in rain gauge (mm)*: _____

Snowfall (one hour before CloudSat flyover)

Local Time (hour:min): _____ Universal Time (hour:min): _____

Number of days snow has accumulated on the snowboard: _____

Depth of snow on the snowboard* (mm):

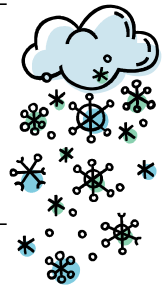
Sample 1: _____ Sample 2: _____ Sample 3: _____

Snow Pack: Total snow accumulation on the ground (mm):

Sample 1: _____ Sample 2: _____ Sample 3: _____

Rain equivalent of: 1. Snow on the snow board (mm): _____

2. Total snowpack on the ground (mm): _____



Snowfall (at time of CloudSat flyover)

Depth of **new** snow on the snowboard* (mm):

Sample 1: _____ Sample 2: _____ Sample 3: _____

Rain equivalent of **new** snow on the snow board (mm): _____

* Remember: Record 0 when there has been no rainfall or snowfall.

Record M for missing if there was rain or snow and you were not able to take an accurate reading.

Record T for trace amount of rainfall or snowfall (when too small to measure).