



GLOBE

Relative Humidity

Data Sheets

Print the Relative Humidity Data Sheet:

- [Relative Humidity Data Sheet](#)

Or select an alternative option below:

- Relative Humidity: Multi-Day
 - [Multi-day data sheet using a sling psychrometer](#)
 - [Multi-day data sheet using a digital hygrometer](#)
- Relative Humidity with the field guide incorporated
 - [Data sheet and field guide using a sling psychrometer](#)
 - [Data sheet and field guide using a digital hygrometer](#)
- Relative Humidity: Simplified
 - [Simplified data sheet using a sling psychrometer](#)
 - [Simplified data sheet using a digital hygrometer](#)
- [Relative Humidity Reference Table](#)
 - Use this table to determine relative humidity from the dry and wet bulb readings.

GLOBE Relative Humidity Data Sheet

Name: _____ Site Name: _____

Date: _____ Time (local): _____

Relative Humidity Measurement

Select instrument used and record the appropriate data.

<input type="checkbox"/> Sling Psychrometer	OR	<input type="checkbox"/> Digital Hygrometer
Dry bulb temperature: _____ °C		Air temperature: _____ °C
Wet bulb temperature: _____ °C		Relative Humidity: _____ %
Relative Humidity: _____ % <i>*GLOBE data entry calculates this for you</i>		<div style="border: 1px solid black; border-radius: 10px; padding: 5px; text-align: center;">Record relative humidity to the nearest 1%</div>
<div style="border: 1px solid black; border-radius: 10px; padding: 5px; text-align: center;">Record the temperature to the nearest 0.5°C</div>		

If there is fog, rain or snow, the relative humidity is 100%; write "condensation occurring" in comments.

Comments :

GLOBE Relative Humidity Data Sheet: Multi-day Sling Psychrometer

Name: _____ Site Name: _____

Record the temperature to the nearest 0.5°C

Relative Humidity Measurements

Date	Time (local)	Dry bulb temperature (°C)	Wet bulb temperature (°C)	Relative Humidity (%) <small><i>(GLOBE Data Entry calculates this for you)</i></small>

Comments :

GLOBE Relative Humidity Data Sheet and Field Guide: Sling Psychrometer

Name: _____ Site Name: _____

Date: _____ Time (local): _____

Relative Humidity Measurement

1. Stand in the shade with your back to the sun and away from people and objects.
2. Keep the psychrometer as far away from your body as possible so your body heat does not alter the temperature readings.
 - This is especially important in cold weather! Do not touch or breathe on the sensor.
3. Open the sling psychrometer case by pulling out the slider, which contains two thermometers.
4. Wait three minutes to allow the thermometer to acclimate.
5. With your eyes level to the instrument, read the current dry bulb temperature to 0.5°C using the thermometer with no wick attached. Record below.

Dry bulb temperature: _____ °C

6. Check that there is distilled water in the reservoir and the wick is moist. If dry, add distilled water.
7. Sling the psychrometer for three minutes and then let the psychrometer stop whirling on its own.
8. Read and record the wet bulb temperature to 0.5°C (thermometer with wick attached).

Wet bulb temperature: _____ °C

9. Determine the relative humidity using the sliding scale found in the case or a psychrometric chart. When entering the data, this calculation is done for you.

Relative humidity: _____ %

If there is fog, rain or snow, the relative humidity is 100%; write "condensation occurring" in comments.

10. Write any comments on the back of this page.

GLOBE Relative Humidity Data Sheet and Field Guide: Digital Hygrometer

Name: _____ Site Name: _____

Date: _____

Relative Humidity Measurement

1. Place the digital hygrometer in a shaded area with airflow (i.e. an instrument shelter) for 30 minutes.

2. After 30 minutes record the time.

Time (local): _____

3. Read the current air temperature.

Air temperature: _____ °C

4. Read the relative humidity to the nearest 1%. *Note: if there is fog, rain or snow, the relative humidity is 100%; write "condensation occurring" in comments.*

Relative humidity: _____ %

5. Return the digital hygrometer to an indoor location and store in a dry place.

Comments :

GLOBE Relative Humidity Data Sheet: Simplified Sling Psychrometer

Name: _____

Site Name: _____

Date: _____ Time (local): _____

Relative Humidity Measurement

Dry bulb temperature: _____ . _____ °C

Record the
temperature to the
nearest 0.5°C

Wet bulb temperature: _____ . _____ °C

Dry bulb temperature minus
wet bulb temperature: _____ °C ← Round to the nearest degree

Use the Relative Humidity table to find the relative humidity!

Relative Humidity: _____ %

Record relative
humidity to the
nearest 1%



If there is fog, rain or snow, the relative humidity is 100%.
Write “condensation occurring” in the notes.

Notes:

GLOBE Relative Humidity Data Sheet: Simplified Digital Hygrometer

Name: _____

Site Name: _____

Date: _____ Time (local): _____

Relative Humidity Measurement

Air temperature: _____ . _____ °C

Record the
temperature to the
nearest 0.5°C

Relative Humidity: _____ %

Record relative
humidity to the
nearest 1%



If there is fog, rain or snow, the relative humidity is 100%.
Write “condensation occurring” in the notes.

Notes:

Relative Humidity Reference Table

1. Find the dry bulb temperature in the first column. Put one finger on it.
2. Find the difference between the dry and wet bulb temperatures. Put one finger on this number in the top row.
3. Bring your fingers together. The relative humidity is where the column and row intersects.

Dry bulb temp (°C)	Dry bulb temperature minus wet bulb temperature (°C)									
	1	2	3	4	5	6	7	8	9	10
10	88	77	66	55	44	34	24	15	6	--
11	89	78	67	56	46	36	27	18	9	--
12	89	78	68	58	48	39	29	21	12	--
13	89	79	69	59	50	41	32	23	15	7
14	90	79	70	60	51	42	34	26	18	10
15	90	80	71	61	53	44	36	27	20	13
16	90	81	71	63	54	46	38	30	23	15
17	90	81	72	64	55	47	40	32	25	18
18	91	82	73	65	57	49	41	34	27	20
19	91	82	74	65	58	50	43	36	29	22
20	91	83	74	66	59	51	44	37	31	24
21	91	83	75	67	60	53	46	39	32	26
22	92	83	76	68	61	54	47	40	34	28
23	92	84	76	69	62	55	48	42	36	30
24	92	84	77	69	62	56	49	43	37	31
25	92	84	77	70	63	57	50	44	39	33
26	92	85	78	71	64	58	51	46	40	34
27	92	85	78	71	65	58	52	47	41	36
28	93	85	78	72	65	59	53	48	42	37
29	93	86	79	72	66	60	54	49	43	38
30	93	86	79	73	67	61	55	50	44	39
31	93	86	80	73	67	61	56	51	45	40
32	93	86	80	74	68	62	57	51	46	41
33	93	87	80	74	68	63	57	52	47	42
34	93	87	81	75	69	63	58	53	48	43