

# Metadata Rivas et al. Rehydration

**Table 1.** Describes rehydration results for collected dust samples and collection location.

<b>Title of dataset</b>	Organisms rehydrated from dust samples.
<b>URL of dataset</b>	datarepo.bioinformatics.utep.edu/getdata?acc=ACIEJDV41U1ZN5I
<b>Abstract</b>	This spreadsheet provides results from the dust rehydrations in addition to codes used for environmental sequencing. Location of sample, results from rehydrations, and whether particle size analysis was performed on each sample are also stated.
<b>Keywords</b>	Sample name, Location, Organisms rehydrated
<b>Dataset lead author</b>	Jose A. Rivas Jr.
<b>Position of data author</b>	Graduate Student
<b>Address of data author</b>	500 W University Ave, El Paso, TX 79902
<b>Email address of data author</b>	jarivas@utep.edu
<b>Primary contact person for dataset</b>	Dr. Elizabeth Walsh
<b>Position of primary contact person</b>	Professor
<b>Address of primary contact person</b>	Department of Biological Sciences 500 W University Ave, El Paso, TX 79902
<b>Email address of primary contact person</b>	ewalsh@utep.edu
<b>Organization associated with the data</b>	Biological Sciences-University of Texas at El Paso
<b>Usage Rights</b>	publicly available and free to use
<b>Geographic region</b>	Southwestern United States including the States of Texas and New Mexico.
<b>Geographic coverage</b>	Hueco Tanks State Park and Historic Site; 31.926927 N, -106.041183 W; 1384 m University of Texas El Paso; 31.76873 N, -106.504067 W; elevation 1170 m White Sands Missile Range; 32.437503 N, -106.168744 W; 1249 m: 32.542026 N, -106.194941 W; 1222 m Yellow Lake playa 33.823477 N, -102.459967 W; 1040 m Jornada, LTER 32.608625, -106.730238; 1327 m
<b>Temporal coverage - Begin date</b>	3/28/2002
<b>Temporal coverage - End date</b>	3/24/16
<b>--General study design</b>	The overall purpose of this study is to understand how resting stages of organisms are transported in dust storms across long distances. The study involved collecting dust samples from the University of Texas at El Paso and from various regional locations. Laboratory experiments included; rehydration of dust samples, particle size analysis, environmental sequencing of samples, and the use of a wind tunnel.

<b>Methods description</b>	Dust samples were collected from three types of passive samplers which included Big Spring Number Eight (BSNE), Marble Pan Dust Collectors (MDCO), and Modified Wilson and Cooke (MWAC) samplers. Samples were rehydrated with specific media and checked for propagule hatching. Subsamples were also taken and used for environmental sequencing and particle size analysis.
<b>Laboratory, field, or other analytical methods</b>	Falling sediment was passively collected from 2011–2016 using standard marble dust collectors (MDCOs) and Big Spring Number Eight (BSNE). Samples were collected from UTEP, Jornada Long Term Experimental Range, Hueco Tanks State Park and Historic Site, White Sands Missile Range, and Yellow Lake Playa. Samples were analyzed using laser diffraction to quantify particle size on the Malvern 2000 Particle Size analyzer. Samples were also rehydrated in 250 mL of modified MBL medium, incubated at 25°C and 12°C in 12:12 Light:Dark photocycle and checked under a dissecting scope for emerging invertebrates every other day until no new taxa were found for three successive observations. After one month, samples were checked a final time. Organisms were identified using appropriate taxonomic keys, photographed, and preserved as vouchers.
<b>Quality control</b>	Collection pans and marbles were cleaned and washed before each dust collection event. Petri dishes were sterilized prior to use. Cleaned plastic bottles were used to prepare samples for particle size analysis. In addition we set out or samples under non-windy days as a control.
<b>Additional information</b>	

**Table 2.** Location describes where the dust samples were collected and includes GPS coordinates. Data also indicate abbreviations used for labeling environmental sequencing results, whether particle size analysis performed on the dust samples, and states the types of organisms rehydrated.

<b>Column name</b>	<b>Definition</b>	<b>Units</b>
NAME	Name of the sample	N/A
LOCATION	HTSPHS= Hueco Tanks State Park and Historic Site; 31.926927 N, -106.041183 W; 1384 m University of Texas El Paso; 31.76873 N, -106.504067 W; elevation 1170 m White Sands Missile Range; 32.437503 N, -106.168744 W; 1249 m: 32.542026 N, -106.194941 W; 1222 m Yellow Lake playa 33.823477 N, -102.459967 W; 1040 m Jornada, LTER 32.608625, -106.730238; 1327 m	GPS coordinates in decimal degrees. Elevation in meters.
SAMPLE #	This describes the sample identifier used for environmental sequencing	N/A
MALVERN	YES or NO answer stating if particle size was determined for the specific sample.	Results are in µg
ORGANISMS FOUND	Description of organisms rehydrated from dust samples.	N/A