



Submitting Non-DMSM data to the National Insect & Disease Detection Survey (IDS) Database



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Overview & Criteria

The <u>Digital Mobile Sketch Mapping System</u> (DMSM) is the platform standard for collecting and submitting data for inclusion in the National Insect & Disease Survey (IDS) database. Some users may have data collected outside of the DMSM system, but would still like to include it in the national database. The template feature classes included in this package can be used to prepare data for submittal.

The criteria for inclusion in the national IDS database are:

- 1. The data records geographic information about tree damage (points or polygons)
- 2. The data includes observational details about agent, host, damage type and intensity. Core required attributes are detailed in an accompanying spreadsheet.
- 3. Remote sensing data can be used to map tree damage, but must be ground verified.
- 4. Survey boundary data, like a buffered flight path, ground transect or imagery extent, should accompany all submissions to determine areas of no damage versus areas not surveyed.

Database Templates and Information

The zip file includes the following items:

- 1. IDS_DataSubmissionTemplate.doc. This document.
- 2. **IDS2_TemplateFeatureClasses_v1.gdb.** This file geodatabase is compatible with ArcGIS version 10 and beyond and contains the following template datasets:
 - a. DAMAGE_AREAS_FLAT polygon feature class for damage features
 - b. DAMAGE_POINTS_FLAT point feature class for damage features
 - c. SURVEYED_AREAS_FLAT polygon feature class for the survey area boundaries.

Important: All features use a DAMAGE_AREA_ID (or DAMAGE_POINT_ID) to identify geometry and an OBSERVATION_ID to identify individual observations (collection of descriptive attributes) for that geometry.

These data are stored in a "flattened" (aka "denormalized") format. Features that have multiple observations must have identical geometry for each record with the same DAMAGE_AREA_ID and different OBSERVATION_ID.



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DAMAGE_AREAS_FLAT										
OBJECTID* CREATED_DATE			GION_ID* OBSERVATION_COUNT		OBSERVATION_ID	HOST_CODE * HOST_GROUP_CODE *		DAMAGE_TYPE_CODE *	PERCENT_AFFECTED_CODE *	
	9/21/2018 11:01:31 PM 11/6/2018 7:41:42 PM	2018	5 MULTIPLE 5 MULTIPLE	{87fbff00-3eb2-4452-8219-857c055b27b6} {87fbff00-3eb2-4452-8219-857c055b27b6}	{c13e3170-e5e0-424d-a849-5b74cde1a0f5} {7840002e-1688-4227-8a18-f98b6cad8a81}	122 <nul> 20 <nul></nul></nul>	11002 11050	2		3 269.95 3 269.95
4079706 97172018 5.51.04 PM	11/0/2010 7.41.42 PM	2010	SIMOLTIPLE	[{0/101100-3802-4452-6219-657005502706}	{/0400028-1000-422/-0810-19000C800801}	20 <100	11050	2		3 209.95
OBSERVATION	COUNT		DAMAGE		-	OBSERVATIO			1.4	

OBSERVATION_COUNT	DAMAGE_AREA_ID	UDSERVATION_ID		
MULTIPLE	{87fbff00-3eb2-4452-8219-857c055b27b6}	{c13e3170-e5e0-424d-a849-5b74cde1a0f5}		
MULTIPLE	{87fbff00-3eb2-4452-8219-857c055b27b6}	{7840002e-1688-4227-8a18-f98b6cad8a81}		

Figure 1 – Example of appropriate IDs for a feature with multiple attributes in a "flattened" format.

- 3. **IDS2_TemplateFeatureClasses_v1.xlsx.** A spreadsheet with tabs for each feature class that describes the table schema, required fields, domains and notes.
- 4. **Calc_GUID.cal.** A python code snippet for use in the ArcMap field calculator tool that formats and calculates a globally unique identifier (GUID).

OBSERVATION_ID {7840002e-1688-4227-8a18-f98b6cad8a81}	Field Calculator	×
{/040002e-1000-4227-0810-19000080817	Parser O VB Script	
	Fields: Type: Functions:	
	OBJECTID .conjugate() CREATED_DATE .denominator() OBSERVATION_COUNT String DAMAGE_AREA_ID .sinteger_ratio() OBSERVATION_ID .denominator() HOST_CODE .denominator() DCA_CODE .denominator() DAMAGE_TYPE_CODE .denominator() Show Codeblock * Pre-Logic Script Code: *	× =
	def CalcGUID(): import uuid return '(' + str(uuid.uuid4()).lower() + ')'	^
	< >	~
	OBSERVATION_ID =	
	CalcGUIDO	Ĵ
	About calculating fields Clear Load Save.	
	Data loaded. OK Canc	el

Figure 2 – The python snippet for calculating a GUID shown in the field calculator



Submitting Data

Once all data had been formatted and loaded into the feature classes in the file geodatabase, contact the Forest Health Assessment and Applied Sciences Team (FHAAST) for instructions on best way to submit the final data.

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