# Case1 FromGUID is NULL but User entered is NOT NULL (migration issue)

**Hint**: run the check if length(FromPointGUID) = 0 before you start since that will affect many of the WHERE.

You might as well need a tool/online help to calculate distance and bearing.

## Case 1 Point 1 of the polygon is to a single point

Here it is important that the first point should be fixed i.e. NOT Distance and bearing. The first point may be the Benchmark or the first point of the polygon. It is not possible to use Point Type in WHERE for determine if the Point is a single point or polygon point since e.g. Start point may be both and users may choose whatever.

1 Run *DistBear Missing FromPoint Point1*

how many that is Point #1

I found 13074 at Sri Lanka

These are point of a Polygon but are relative so that means that they have BM as previous point.

They need FromPointGUID and update of userinputformat

Note coordformat is depending on coordrefsys so if data checks was done before upgrade it should be correct

1B **Export** out Run *DistBear Missing FromPoint Point1* and **import** as *dist\_bear1*

Run *DistBear Check Remaining Case1 Point1*

This query gives you guidance which of the following queries to run and also important when to stop ☺ Here I chose to update the temporary table and when all values set update geopoint table.

*Update FromGUID BM Haz*

*Update FromGUID BM HazInfo*

*Update FromGUID BM HazRed*

*Update FromGUID BM HazRedInfo*

*Update FromGUID RP Haz*

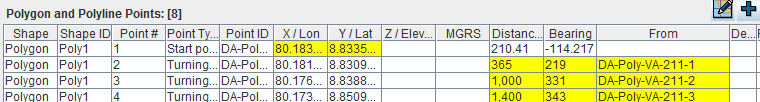
*Update FromGUID RP HazInfo*

*Update FromGUID RP HazRed*

*Update FromGUID RP HazRedInfo*

When I had done this for Sri Lanka I only had 16 points left and they had odd Point types.

##### Why odd records left?



Two records DA-VA-201 and DA-VA-211 did not have any single point for the first point of the polygon to have FromGUID from due to Action Replace had been used when the polygon was added 🡺 Point 1 should have Distance and Bearing deleted.

1C Fix values in geopoint Run **Update Set DistBear NULL**

1D Delete the rows from dist\_bear1

1E Run **Update DistBear Case1 Point1**

## Case 1 Points in the polygon

2 Run *DistBear Missing FromPoint Point2*

how many are NOT Point #1

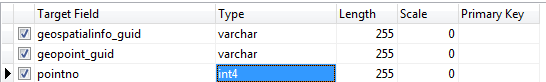
233024

3 Export out DistBear Missing FromPoint Export2

Note that more rows than in *DistBear Missing FromPoint Point2 will be exported*

It is probably possible to do a subquery or other advanced SQL but so far I have been too tired to figure it out so I have done export/import to temp table instead solution

4 Import back in as dist\_bear

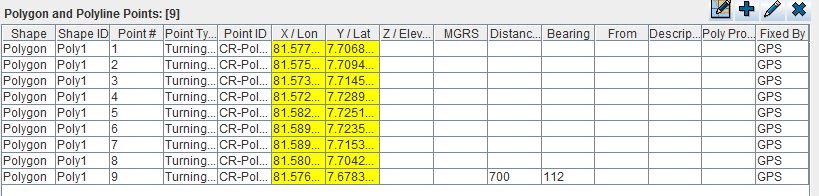


Change data type of pointno to int4

5 Run **Update DistBear Case1**

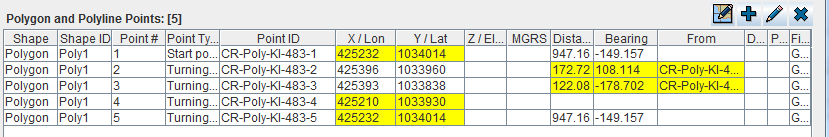
Note that there might be some rows that are not updated due to dist, bear, user\_entered are NULL and formGUID is NOT NULL

##### Why odd records left?



In Sri Lanka 47 records did not get updated by Update DistBear Case1 and these needs to be looked into one by one they did not. See example above where only one point the polygon are wrongly relative.

**I have permission from NMAA to delete distance/bearing values if only half polygon has distance/bearing.**



Here is another example where point 5 did not get FromPointGUID and that is because Point 4 is wrong.

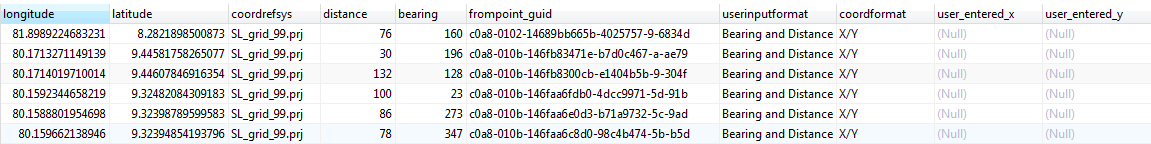
Check them one by one by using *DistBear Missing FromPoint Point2* and look inside IMSMA.

Update the below query if you are going to delete Distance, Bearing, FromPointGUID and set userinputformat to 'X and Y'.

**Note! Pay attention to which character you must have before the % so not too many records are deleted.**

5A Run **Update Set DistBearFromGUID NULL**

# Case 2 User entered coord NULL (upgrade issue)



##### These records need to only to get values in user\_entered\_x and user\_entered\_y

1 Run *DistBear Check user\_entered1*

This query finds records with user\_entered NULL and frompoint\_guid is NOT NULL

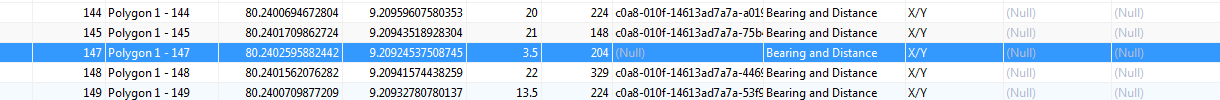
I found 26860 records at Sri Lanka

1B Double check that userinputformat is Bearing and Distance and coordformat is X/Y

with DistBear Check user\_entered1B

2 Update these with ***Update DistBear Case2***

# Case 3 few points are missing fromGUID and user\_entered



##### These records need to only to get values in user\_entered\_x and user\_entered\_y + frompoint\_guid

1 Run *DistBear Check user\_entered2*

This query finds records with user\_entered NULL and frompoint\_guid is NULL

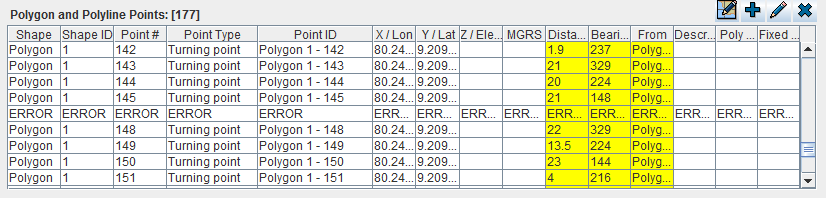
In Sri Lanka I found 5 records belonging to 2 items. The PrSc above shows that it is only point 147 that is missing frompoint\_guid in that polygon.

2 Add tables hazreducinfoversion\_has\_geospatialinfo and hazreducinfoversion to *DistBear Check user\_entered2*

Update WHERE clause in *DistBear Check user\_entered2 HazRed* and verify that it only one point that does not have **frompoint\_guid**

3 Add tables hazardinfoversion\_has\_geospatialinfo and hazardinfoversion to *DistBear Check user\_entered2*

Update WHERE clause in *DistBear Check user\_entered2 Haz* and verify that it only one point that does not have **frompoint\_guid**



**Reason 1:** The reason why this point gives errors is that point 146 is missing.

**Reason2**

The other 3 records belonged to a Land with a small polygon where the link to the single-point had been destroyed by Action Replace but there were more than one single-point to choose from. Here I found it more difficult to figure out which one I should link to so I deleted Distance, Bearing, FromPointGUID and set user\_entered\_coord with **Update Set DistBearFromGUID NULL UserCoord**.

# Case 4 Other odd cases

## Zero in distance

Zero in Distance could create calculation issues.

I have found both in Western Sahara and Sri Lanka where Benchmarks had distance = 0 and bearing = 0 which I set to NULL.

1 Run *DistBear Check dist 0*

2 Run ***Update Set DistBear NULL2***

## Length of FromPointGUID is 0

The above records in Sri Lanka also had this problem. They had user **Import** and actually most likely orphans.

1 Run *DistBear Check length FromPointGUID*

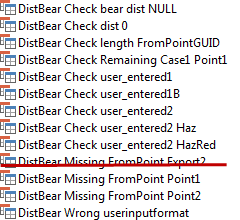
2 Run **Update Set FromGUID NULL**

## One of Distance / Bearing is null

Need to triple-check that all actually has values in distance and bearing. In the infamous record in WS one turning point did not have any value for Distance.

Run *DistBear Check bear dist NULL*

# Final step



Run all check queries again in order to triple-check that any corrections have been missed.

In Sri Lanka I found 12 polygon Start points that had Distance and Bearing with *DistBear Missing FromPoint Point1*

They had lost their link to the single-point due to updates of items.

Run ***Update Set DistBear NULL3*** if you found similar records***.***

## wiki

I have started updating the existing page http://mwiki.gichd.org/IM/Check\_coordinates\_distance\_and\_bearing

but to put all queries there would be quite long and or many pages.

I suggest to have the Case descriptions on the wiki and then share the queries.

