ISIS - Bug #4869

cnetcombinept doesn't properly combine control points that contain the same control measures in each point (i.e., duplicates)

2017-05-16 04:02 PM - Kris Becker

Status:	Closed		
Priority:	Normal		
Assignee:	Tyler Wilson		
Category:	Applications		
Target version:	3.5.1 (2017-08-08 Aug)		
Impact:	No expected impact to ISIS. The change which was implemented was in a helper class to this application which is not used outside of this app.	**Test Reviewer:**	
Software Version:			

Description

The degenerate case where two or more (truly) duplicate control points exist within the input control networks is not properly handled.

Duplicate points occur when two or more control points contain the exact same control measures, each from the same image within the specified pixel tolerance (IMAGETOL). In other words, all duplicate points contain no unique measures.

The proper handling is to simply disable all duplicate control points with no regard for the measures (they are all within IMAGETOL average distance by definition) retaining the point from the first occurring network containing the same measures (i.e., the order in which control nets are provide by the user does matter).

Related issues:

Related to ISIS - Bug #4772: cnetcombinept doesn't properly set a prior lat/l...	**Closed**
Related to ISIS - Bug #4870: cnetcombinept should set merged control measure ...	**Closed**

History

#1 - 2017-05-16 04:45 PM - Kris Becker

- Related to Bug #4772: cnetcombinept doesn't properly set a prior lat/lon to the adjusted values added

#2 - 2017-05-16 04:46 PM - Kris Becker

- Related to Bug #4870: cnetcombinept should set merged control measure types to Candidate so that pointreg can be run efficiently added

#3 - 2017-05-22 05:32 PM - Tammy Becker

- Status changed from New to Acknowledged

#4 - 2017-05-31 04:52 PM - Tammy Becker

- Target version changed from 3.5.1 (Sprint 1) to 3.5.1 (2017-08-08 Aug)

#5 - 2017-06-05 01:53 PM - Stuart Sides

- Target version changed from 3.5.1 (2017-08-08 Aug) to 3.5.1 (Sprint 1)

#6 - 2017-06-06 11:59 AM - Lynn Weller

Test data for this specific case can be found under /work/users/lweller/Isis3Tests/CnetCombinePt/.
Command line:

cnetcombinept cnetbase=Extract_thmir_dups.net onet=testout_Extract_thmir_dups.net

There are some known duplicate points that aren't being handled properly:
I00945002RDR_bndry_29_ERID
I58882002RDR_bndry_5_ERID

and
I00945002RDR_bndry_28_ERID
I58882002RDR_CTR_ERID
I58882002RDR_grid_10_ERID

In each case, only one of the points should be kept in the output network, the remaining should be ignored then deleted (based on default settings). All listed points are currently in the output network.

#7 - 2017-06-07 01:01 PM - Tyler Wilson

- Assignee set to Tyler Wilson

#8 - 2017-06-07 03:45 PM - Tyler Wilson

- Status changed from Acknowledged to In Progress

#9 - 2017-06-09 05:31 PM - Tyler Wilson

- Impact updated

#10 - 2017-06-16 10:21 AM - Tyler Wilson

- Status changed from In Progress to Resolved

#11 - 2017-06-19 01:25 PM - Tyler Wilson

To make things easier for testing, I have combined all three of the cnetcombinept tickets into one ticket which can be tested by pointing your ISIS version here:

/work/projects/isis/latest/m04870_4772_4869/isis/

The other two tickets are:
https://isis.astrogeology.usgs.gov/fixit/issues/4772
https://isis.astrogeology.usgs.gov/fixit/issues/4870

#12 - 2017-06-22 12:10 PM - Lynn Weller

I've tested this on the small data set I pointed to and it appears to be working as expected now.
I also tested on a much larger network where I originally came across the issue to be sure functionality didn't change in some other way and I *think* it looks good. I say *think* because there is no log file to help track what happened to any particular point or measure so it's a bit of a chore to follow the paths of points that may have been merged. However, for the two points I tracked, I believe everything is working fine. Kris needs to give the final blessing though and I think Tammy wanted to have a look as well.

#13 - 2017-06-28 09:40 AM - Kris Becker

One additional change that needs to be made is to determine if the reference measures on both points are the same. In this case, you will not set the point to Candidate but leave the type unchanged.

This should be test for prior to the loop that merges individual measures and a flag set to make the update if reference measures are different.

This is an unlikely case, but will save time if it does occur.

#14 - 2017-06-28 09:40 AM - Kris Becker

One additional change that needs to be made is to determine if the reference measures on both points are the same. In this case, you will not set the point to Candidate but leave the type unchanged.

This should be test for prior to the loop that merges individual measures and a flag set to make the update if reference measures are different.

This is an unlikely case, but will save time if it does occur.

#15 - 2017-06-29 03:10 PM - Kris Becker

- Status changed from Resolved to Closed

Great

#16 - 2017-08-14 10:04 AM - Stuart Sides

- Target version changed from 3.5.1 (Sprint 1) to 3.5.1 (2017-08-08 Aug)