3 Oct, 2011

Robert Trzeciak

Program Manager

Northrop Grumman ICS

2829 Guardian Lane

Virginia Beach, VA 23452

757-631-2334 work

**Progress Report – 1 Sep 2011 – 30 Sep 2011**

Contract Number: HSHQDC-06-D-00022

Order Number: HSCG23-07-J-TED150

Task Order – Performance Work Statement (PWS) 1.12

Attachments: (1) SAROPS subcontractor financial reports

1. **SAROPS Systems Component Services Tasks**
   1. **Activities completed:**
      1. **Suppressed rounding if plannerTimeInSeconds is 0 (response to 1.4.1.1 list).**
      2. **Reporting “origTotalOvl” now.**
      3. **Fixed bug in the “half-hearted wiggle” routine that tries to clear overlap after rounding.**
      4. **Looked into Etopo1. I think we can use it as is right now; simply use Etop1Plus.jar.**
      5. **Fixed an issue with the multi-running. If a run cannot get a processor from the pool of processors, I wait 3 seconds, and give that run 3 more seconds to run. The waiting is done more smoothly now and the “extra time” has been implemented. Furthermore, I now insist that at most nProcessors/nProcessorsPerEngine engines are run, and I enforce the idea that nProcessorsPerEngine is at least 2. This cuts down on the number of engines that can be run simultaneously, but increases the speed that the ones that are running, are run. It is still true that the server can queue up an unlimited number of cases.**
      6. **Went over with Jack the specs for the new POS page. Designed a new planner\_results.xml for Judy.**
      7. **Went over with Rob the install for the new Server. Apparently, the Sim.jar that I sent up was corrupted by the transfer and it took some time to track down that problem.**
      8. **Reviewed web Mercator and wrote up the motion models that are used pre-distress and post-distress in SAROPS.**
      9. **Reviewed some problems with overlap. In my code, I explicitly allow (unless overlap\_exceptions trump this consideration) overlap when a pattern is given with no exclusion area. That caused some confusion. I ran that down, and Judy will now specify an overlap “exception” for every pair of SRUs. In addition, I removed the exception at the beginning of this paragraph.**
      10. **Ran down another reported problem; what do I use for exclusion areas when overlap is forbidden and no exclusion area is explicitly given. What I do is just now being looked at and understood by the rest of the team. What I do is apparently correct. My computations are just a default for when no exclusion area is given. An exclusion area will be given more often now.**
      11. **Ran an apparent anchoring problem in the Great Lakes. Doesn’t seem to be a problem on my end. Made a video from my GUI and sent it on. Probably more work on that.**
      12. **Found a small problem in reverse drift runs and fixed it.**
      13. **Ran down an anchoring problem in the Great Lakes. To take advantage of Etopo1Plus.jar, one needs a fairly modern Sim.jar. The first 1.4 Sim.jar won’t work. I ran down that issue with Rob Wilson.**
      14. **Rebuilt the GSHHS files. This is kind of a maintenance task that I do periodically to make sure that the rebuilding process still works. There was a small glitch which I ironed out immediately. After that, the program ran from Saturday afternoon to Monday morning without a hitch.**
      15. **Built 1.4.1.1, but had a problem with that. I’m not sure what happened, but I cleaned up the installer some and tried again. It seemed to work the 2nd time.**
      16. **Had a problem with the new POS table. The combination of sampling, using all intervals, landed/adrift particles, selected only, and using all lateral range curves or just the ones for selected particles, caused some grief. Now all reports are done using all lateral range curves, no sampling is done except during the optimization, and all intervals are used just for the final reports.**
      17. **Looked through a planner case that appeared to be not working. But the problem was that the user gave a poor initial solution that planner could not recover from. I checked through the code and think I have a better way of trying to recover; the “major moves” can be improved.**
   2. **Travel completed:**
      1. **None**
   3. **Upcoming activities scheduled:**
      1. **IPR: ?.**
   4. **Travel planned:**
      1. **IPR: ?**
   5. **Concerns or recommendations:**

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| --- | --- | --- | --- | --- |
| **Name** | **Activity Worked** | **Hours Worked** | **Hourly Cost** | **Total Cost** |
| Kratzke | Coding/Doc/Travel | 97.5 | 230 | 22425 |
| Stone | Doc | 0 | 223 | 0 |
| Vergamini | Meeting/Consulting | 0 | 223 | 0 |
| L White (Tech Writer) |  | 0 |  | 0 |
|  |  |  |  |  |
| **Totals** |  | 92 |  | 22425 |
|  |  |  |  |  |