
Regarding Computational Datasets used in your paper "The multi-depot open location routing problem with a heterogeneous fixed fleet"

Samuel Moisés Nucamendi Guillén <snucamendi@up.edu.mx>

Sat, Mar 23, 2024 at 10:56 AM

To: Santanu Banerjee <santanu@kgpian.iitkgp.ac.in>

Cc: alejandra.gomez@cucei.udg.mx, eolivaresb@up.edu.mx, jmmoreno@ull.es, soumen.atta@gmail.com, "Prof. Goutam Sen" <gsen@iem.iitkgp.ac.in>

Dear Satanu,

First of all, I apologize for my late reply. I have checked the information you shared and revised the information published in the paper, and as you mentioned, we have mistakenly interchanged sets of O and P in the document. In addition, the information regarding the number of vehicles per origin and the contracting costs is also incorrect. I sincerely apologize for this.

Please find attached the Excel file containing the input data that we considered for the experiments and the description of the optimal solution obtained. In addition, I have attached all the files regarding tables 5, 7, and 9. I have to mention that they are in that format since we used AMPL software to solve them.

If you have any questions, please do not hesitate to contact me.

Regards,



Dr.

Samuel Moisés Nucamendi Guillén

Jefe de Academia

.....

UNIVERSIDAD
Panamericana

Academia de Operaciones,

Facultad de Ingeniería

Campus Guadalajara

snucamendi@up.edu.mx

T. +52 (33) 1368 2200

Ext. 4221

up.edu.mx

TWITTER | FACEBOOK | INSTAGRAM | LINKEDIN





El mar, 19 mar 2024 a las 6:33, Santanu Banerjee (<santanu@kgpian.iitkgp.ac.in>) escribió:
Respected Sirs (/Madam),

I am testing my new formulation on the dataset used in your paper "The multi-depot open location routing problem with a heterogeneous fixed fleet". However when performing the optimization on the case study instance, I was able to obtain a different optimal solution of 98.9378 which is reported in the paper as 92.5384.

While trying to cross-check your case study result from the Figure 6 of your paper, I was not able to identify the routes of the vehicles, the reason being that the points plotted do not directly correspond to the locations mentioned in your dataset. I share the images generated from the dataset. (I suggest you to look at Figure A attached).

You will observe that the route image described in the Figure 6 of your paper seems to have been mistakenly computed on interchanged sets of O and P. This gave me the idea that I should be able to replicate your result just by changing my sets of O and P as well. However, this resulted in a different optimal solution value of 91.0406. Interestingly, the two routes found from this altered data completely matched the routes described in your Figure 6 (please see my attached excel file mentioning the optimal routes found in each case). In case there is a mistake on my part, please kindly point to it.

I request you to kindly share the exact routes of the case study instance, as this will help me **obtain the node sequence of each route** in your solution. Once the exact sequence of vertices visited by each vehicle is available, I will be able to benchmark my formulation on this instance (I found a similar problem for the last instance I15 as well but since the route information is not available for any of those other instances, I prefer to clarify the case study route information first).

For further clarity, I am computing the Euclidean Distance between the points without rounding off the distances or the latitude/longitude values when populating the distance matrix, with the cost per unit distance being assumed 1.

Additionally, I also request you to kindly share the datasets of the other instances (in Tables 7 and 9) used in your paper enabling comparative analysis.

Thanking you in anticipation and eagerly awaiting your swift response.

Yours Sincerely,
Santanu Banerjee,
Senior Research Fellow and Master of Science student,
Department of Industrial and Systems Engineering,
Indian Institute of Technology Kharagpur, India.
Mobile & WhatsApp: (+91) 90510 77183.

P.S. All values mentioned in this email are rounded to 4 decimals.





























AVISO DE PRIVACIDAD: Las instituciones pertenecientes al Sistema UP-IPADE utilizarán cualquier dato personal expuesto en el presente correo electrónico, única y exclusivamente para cuestiones académicas, administrativas, de comunicación, o bien para las finalidades expresadas en cada asunto en concreto, esto en cumplimiento con la Ley Federal de Protección de Datos Personales en Posesión de los Particulares. Para mayor información acerca del tratamiento y de los derechos que puede hacer valer, usted puede acceder al aviso de privacidad integral a través de nuestras páginas de Internet: www.up.edu.mx / prepaup.up.edu.mx / www.ipade.mx / www.ipadealumni.com.mx






















La información contenida en este correo es privada y confidencial, dirigida exclusivamente a su destinatario. Si usted no es el destinatario del mismo debe destruirlo y notificar al remitente absteniéndose de obtener copias, ni difundirlo por ningún sistema, ya que está prohibido y goza de la protección legal de las comunicaciones.

48 attachments



Data requested Satanu.xlsx
38K

-  **I5.dat**
4K
-  **I6.dat**
4K
-  **I3.dat**
4K
-  **I4.dat**
4K
-  **I2.dat**
5K
-  **I9.dat**
3K
-  **I10.dat**
4K
-  **I7.dat**
4K
-  **I8.dat**
4K
-  **I11.dat**
5K
-  **I15.dat**
4K
-  **I14.dat**
5K
-  **I13.dat**
4K
-  **I12.dat**
4K
-  **CaX10.dat**
6K
-  **GaMG74.dat**
12K
-  **Kou15.dat**
3K
-  **Wang-Wu.dat**
9K
-  **GaJ76-9.dat**
67K
-  **GaJ76-10.dat**
119K
-  **GaJ76-11.dat**
68K
-  **GaJ76-12.dat**
68K
-  **GaJ76-8.dat**
31K
-  **P_07.dat**
118K
-  **P_08.dat**
719K
-  **P_10.dat**
725K

-  **P_09.dat**
722K
-  **P_11.dat**
728K
-  **P_12.dat**
67K
-  **Pr_01.dat**
30K
-  **P_15.dat**
277K
-  **P_18.dat**
631K
-  **Pr_03.dat**
250K
-  **Pr_02.dat**
113K
-  **Pr_04.dat**
440K
-  **Pr_07.dat**
67K
-  **Pr_06.dat**
982K
-  **Pr_05.dat**
684K
-  **Pr_08.dat**
254K
-  **Pr_09.dat**
559K
-  **P_02.dat**
32K
-  **P_01.dat**
32K
-  **P_03.dat**
68K
-  **Pr_10.dat**
989K
-  **P_05.dat**
115K
-  **P_04.dat**
115K
-  **P_06.dat**
116K