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### Journal publications

- Bezděk, A., Sebera, J., Teixeira da Encarnação, J., Klokočník, J., (2016). "Time-variable gravity fields derived from GPS tracking of Swarm". In: Geophys. J. Int. 205.3, pp. 1665–1669. DOI: 10.1093/ gji/ggw094.
- Siemes, C., de Teixeira da Encarnação, J., Doornbos, E., IJssel, J., Kraus, J., Pereštý, R., Grunwaldt, L., Apelbaum, G., Flury, J., Holmdahl Olsen, P. E., (2016). "Swarm accelerometer data processing from raw accelerations to thermospheric neutral densities". In: *Earth*, *Planets Sp.* 68.1, p. 92. DOI: 10.1186/s40623-016-0474-5.
- 3. Teixeira Da Encarnação, J., Arnold, D., Bezděk, A., Dahle, C., Doornbos, E., Van Den Ijssel, J., Jäggi, A., Mayer-Gürr, T., Sebera, J., Visser, P., Zehentner, N., (2016). "Gravity field models derived from Swarm GPS data". In: *Earth, Planets Sp.* 68.1, p. 127. DOI: 10.1186/s40623-016-0499-9.
- 4. IJssel, J., **Encarnação**, **J.**, Doornbos, E., Visser, P., (2015). "Precise science orbits for the Swarm satellite constellation". In: Adv. Sp. Res. 56.6, pp. 1042–1055. DOI: 10.1016/j.asr.2015.06.002.
- 5. Hashemi Farahani, H., Ditmar, P., Klees, R., **Teixeira da Encarnação, J.**, Liu, X., Zhao, Q., Guo, J., (2013). "Validation of static gravity field models using GRACE K-band ranging and GOCE gradiometry data". In: *Geophys. J. Int.* 194.2, pp. 751–771. DOI: 10.1093/gji/ggt149.
- Olsen, N. (2013). "The Swarm Satellite Constellation Application and Research Facility (SCARF) and Swarm data products". In: Earth, Planets Sp. 65.11, pp. 1189–1200. DOI: 10.5047/eps.2013.07. 001.
- 7. Visser, P., Doornbos, E., IJssel, J., **Teixeira da Encarnação, J.**, (2013). "Thermospheric density and wind retrieval from Swarm observations". In: *Earth*, *Planets Sp.* 65.11, pp. 1319–1331. DOI: 10.5047/eps.2013.08.003.
- 8. Ditmar, P., **Encarnação**, **J.**, Hashemi Farahani, H., (2012). "Understanding data noise in gravity field recovery on the basis of inter-satellite ranging measurements acquired by the satellite gravimetry mission GRACE". In: *J. Geod.* 86.6, pp. 441–465. DOI: 10.1007/s00190-011-0531-6.
- 9. Gunter, B. C. B., **Encarnacao**, **J.**, Ditmar, P., Klees, R., Encarnaçao, J., Ditmar, P., Klees, R., (2011). "Using Satellite Constellations for Improved Determination of Earth's Time-Variable Gravity". In: *J. Spacecr. Rockets* 48.2, pp. 368–377. DOI: 10.2514/1.50926.
- 10. Resendes, D. P., Mota, S., Mendonça, J. T., Sanders, B., **Encarnação**, **J.**, Del Amo, J. G., (2007). "Laser Propulsion for Ground Launch". en. In: *J. Propuls. Power* 23.1, pp. 73–80. DOI: 10.2514/1.24527.

## Conference proceedings (peer-reviewed)

- 1. Gunter, B. C., **Encarnação**, **J.**, Ditmar, P., Klees, R., Van Barneveld, P. W. L., Visser, P., (2012). "Deriving global time-variable gravity from precise orbits of the Iridium NEXT constellation". In: *Adv. Astronaut. Sci.* Vol. 142, pp. 2087–2096. URL: <a href="http://www.univelt.com/book=3354">http://www.univelt.com/book=3354</a>.
- 2. Gunter, B. C., Ditmar, P., **Encarnação**, **J.**, (2010). "The determination of time variable gravity from a constellation of non-dedicated satellites". In: *Adv. Astronaut. Sci.* Pittsburgh, pp. 1999–2007. URL: http://www.univelt.com/book=1349.
- 3. Gunter, B. C., **Encarnação**, **J.**, Ditmar, P., Klees, R., (2009). "The use of satellite constellations and formations for future gravity field missions". In: *Adv. Astronaut. Sci.* Savannah, pp. 1357–1368. URL: http://www.univelt.com/book=1451.

- 4. **Encarnação, J.**, Ditmar, P., Liu, X., (2008). "Analysis of Satellite Formations in the Context of Gravity Field Retrieval". In: 3rd Int. Symp. Form. Flying, Mission. Technol. Ed. by K Fletcher. Vol. ESA SP-654. 654 SP. Rijswijk: ESA Communication Production Office, pp. 1–9. URL: https://tinyurl.com/3rdISFFMT.
- 5. **Encarnação**, J., Klees, R., Zapreeva, E., Ditmar, P., Kusche, J., (2008). "Influence of Hydrology-Related Temporal Aliasing on the Quality of Monthly Models Derived from GRACE Satellite Gravimetric Data". In: *Obs. our Chang. Earth* 133, pp. 323–328. DOI: 10.1007/978-3-540-85426-5\_38.
- Resendes, D. P., Mota, S., Mendonça, J. T., Sanders, B., Encarnação, J., Amo, J. G., Myrabo, L. N., (2006). "Laser Propulsion for ESA Missions: Ground to Orbit Launch Project Overview Part 1". en. In: AIP Conf. Proc. Vol. 830. 1. AIP, pp. 576–587. DOI: 10.1063/1.2203299.
- 7. Resendes, D. P., Mota, S., Mendonça, J. T., Sanders, B., Encarnação, J., Del Amo, J. G., (2005). "Laser Propulsion for Ground to Orbit Launch". In: 29th Int. Electr. Propuls. Conf. IEPC-2005-310. URL: http://erps.spacegrant.org/uploads/images/images/iepc\_articledownload\_1988-2007/2005index/310.pdf.

#### Invited Presentations

- 1. **Teixeira Encarnação**, **J.** (2017). "Satellite Gravimetry". In: Summer Sch. Data Assim. its Appl. Oceanogr. Hydrol. Risk Saf. Reserv. Eng. URL: http://data-assimilation.com.
- Teixeira Encarnação, J., Arnold, D., Bezdek, A., Dahle, C., Doornbos, E., Ijssel, J. V. D., Jäggi, A., Mayer-gürr, T., Sebera, J., Visser, P., Zehentner, N., (2015). "First monthly gravity field solutions derived from GPS orbits of Swarm". In: AGU Fall Meet. Abstr. San Francisco, CA, USA. URL: https://agu.confex.com/agu/fm15/webprogram/Paper71877.html.

#### Conference Attendance

- 1. **Teixeira da Encarnação**, **J.**, Save, H., Tapley, B. D., Rim, H. J., (2018). "Analysis of GRACE's accelerometer scale-factor calibration". In: *AGU Fall Meet*. Washington, D.C.
- Encarnacao, J., Save, H., Siemes, C., Doornbos, E., Tapley, B., (2017). "Temperature corrected-calibration of GRACE's accelerometer". In: AGU Fall Meet. Abstr. 5.512, p. 78759. DOI: 10.13140/RG.2.2.
   20396.97929. URL: https://agu.confex.com/agu/fm17/meetingapp.cgi/Paper/288232.
- 3. **Teixeira Encarnação, J.**, Arnold, D., Bezdek, A., Dahle, C., Doornbos, E., Ijssel, J. V. D., Jäggi, A., Mayer-gürr, T., Sebera, J., Shum, C., Visser, P., Zehentner, N., (2017). "Gravity field models derived from Swarm GPS data". In: *EGU Gen. Assem.* Vienna, Austria. URL: https://tinyurl.com/gswarmEGU2017.
- 4. **Teixeira Encarnação, J.**, Arnold, D., Bezdek, A., Dahle, C., Jäggi, A., Mayer-gürr, T., Sebera, J., Visser, P., Zehentner, N., (2016). "Gravity field models derived from Swarm GPS data". In: *EGU Gen. Assem.* Vienna, Austria. DOI: 10.13140/RG.2.1.3909.4642.
- 5. **Encarnacao**, J., Ditmar, P., Klees, R., (2015). *Impact of Orbit Position Errors on Future Satellite Gravity Models*. URL: http://adsabs.harvard.edu/abs/2015AGUFM.G31B1114E.
- 6. **Teixeira Encarnação**, **J.**, IJssel, J., Doornbos, E., Visser, P. N., (2015). "Frequency domain combination of POD-driven and measured accelerations". In: *5th Swarm Data Qual*. *Work*. Paris, France.
- 7. **Teixeira Encarnação, J. G.**, IJssel, J., Doornbos, E., Visser, P., (2014a). "POD-assisted calibration of Swarms Accelerometer Data". In: *4th Swarm Data Qual. Work*. December. Postdam, Germany.
- 8. **Teixeira Encarnação, J.**, Doornbos, E., IJssel, J., Visser, P. N., (2014b). "Combination of Swarm's Uncalibrated Accelerometer Data with POD-Based Accelerometry". In: *3rd Swarm Sci. Meet.* Copenhagen, Denmark, p. 2.
- 9. **Teixeira Encarnação**, J., IJssel, J., Doornbos, E., Visser, P. N., (2014c). "Preliminary analysis of accelerometer data". In: *2nd Swarm Data Qual. Work*. Rome, Italy.

- Encarnação, J., Ditmar, P., Liu, X., (2008). "Analysis of Satellite Formations in the Context of Gravity Field Retrieval". In: 3rd Int. Symp. Form. Flying, Mission. Technol. Ed. by K Fletcher. Vol. ESA SP-654. 654 SP. Rijswijk: ESA Communication Production Office, pp. 1–9. URL: https://tinyurl.com/ 3rdISFFMT.
- 11. **Teixeira Encarnação, J.**, Ditmar, P. G., Klees, R., (2008). "Spectral analysis of positioning modelling errors in gravimetric data". In: *IAG Symp. Gravity, Geoid, Earth Obs.* Chania, Greece.
- 12. **Teixeira Encarnação, J. G.**, Ditmar, P. G., Klees, R., (2007a). "Temporal aliasing in GRACE monthly solutions". In: *Intergeo*. Leipzig, Germany.
- 13. **Teixeira Encarnação**, **J.**, Ditmar, P. G., Klees, R., (2007b). "Influence of hydrology-related temporal aliasing on the quality of monthly models derived from GRACE satellite gravimetric data". In: VMSG Symp. Utrecht, The Netherlands.
- 14. **Encarnação, J.** (2002). "Single Stage To Orbit Minimum Requirements Through Numerical Simulation". In: 34th COSPAR Sci. Assem. Second World Sp. Congr. Houston, TX, USA: IAF. URL: http://adsabs.harvard.edu/abs/2002iaf..confE.984T.

#### Conference Contributions

- 1. **de Teixeira da Encarnação**, J., Save, H., Tapley, B., Rim, H. J., (2018a). "GRACE's accelerometer scale-factor calibration". In: *GRACE/ GRACE-FO Sci. Team Meet*. Potsdam, Germany: Copernicus Office. URL: http://presentations.copernicus.org/GSTM-2018-66\_presentation.pdf.
- 2. **de Teixeira da Encarnação, J.**, Arnold, D, Bezdek, A, Doornbos, E, Ellmer, M, Guo, J, IJssel, J, Iorfida, E, Jäggi, A, Klokočnik, J, Mao, X, Mayer-Gürr, T, Meyer, U, Sebera, J, Shum, C. K., Visser, P, Zehentner, N, Zhang, Y., Zhang, C, (2018b). "Observing Earth's mass transport processes with the Swarm satellites". In: *Gravity, Geoid Height Syst. 2 Symp*. Copenhagen, Denmark.
- 3. Encarnacao, J., Visser, P., Doornbos, E., IJssel, J., Mao, X., Iorfida, E., Arnold, D., Jäggi, A., Meyer, U., Bezdek, A., Sebera, J., Klokocnik, J., Ellmer, M., Mayer-Gürr, T., Zehentner, N., Guo, J., Luk, P., Shum, C. K., Zhang, Y. Y., (2018). "Signal contents of combined monthly gravity field models derived from Swarm GPS data Multi-approach gravity field models from Swarm GPS data". In: EGU Gen. Assem. April, EGU2018-10. DOI: 10.13140/RG.2.2.224263.39845. URL: https://www.researchgate.net/publication/324545998\_Signal\_contents\_of\_combined\_monthly\_gravity\_field\_models\_derived\_from\_Swarm\_GPS\_data.
- 4. Jäggi, A, Meyer, U., Schreiter, L., Sterken, V., Dahle, C., Arnold, D., **Encarnacao, J.**, Visser, P., IJssel, J., Mao, X., Iorfida, E., Bezdek, A., Sebera, J., Mayer-GÜrr, T., Zehentner, N., Shum, C. K., Lück, C., Rietbroek, R., Kusche, J., (2018). "Assessment of individual and combined gravity field solutions from Swarm GPS data and mitigation of systematic errors". In: *EGU Gen. Assem.* Vienna, Austria, EGU2018–89.
- Visser, P., Encarnação, J. T., Doornbos, E., IJssel, J., Mao, X., Iorfida, E., Arnold, D., Jäggi, A., Meyer, U., Bezděk, A., Sebera, J., Klokočnik, J., Ellmer, M., Mayer-Gürr, T., Zehentner, N., Guo, J., Zhang, Y., Shum, C. K., (2018). "Multi-approach Gravity Field Models from Swarm GPS data". In: 42nd COSPAR Sci. Assem. Pasadena, CA, USA, No. 20613.
- 6. Zehentner, N., Mayer-Gürr, T., Ellmer, M., **Encarnacao, J. T.**, Visser, P., Doornbos, E., IJssel, J. V., Mao, X., Iorfida, E., Arnold, D., Jäggi, A., Meyer, U., Bezdek, A., Sebera, J., Klokocnik, J., Guo, J., Shum, C., (2018). "Investigations of GNSS-derived baselines for gravity field recovery". In: *EGU Gen. Assem.* Vienna, Austria, EGU2018–11920. DOI: 10.13140/RG.2.2.18307.81440. URL: ftp://ftp.tugraz.at/outgoing/ITSG/poster/zehentner\_etal\_EGU2018.pdf.
- 7. Zhang, C., Guo, J.-Y., Bezděk, A., Shum, C. K., Cai, Z., Zhang, Y., **de Teixeira da Encarnação, J.**, Visser, P., (2018). "Swarm Temporal Gravity Field Estimates Using Acceleration Approach". In: *9th Int. Work. TibXS (Multi-observations Interpret. Tibet. Xinjiang Sib.* Zhangye, Gansu Province, China.

- 8. **Teixeira Encarnação, J.**, Arnold, D., Bezdek, A., Dahle, C., Jäggi, A., Mayer-gürr, T., Sebera, J., Shum, C., Visser, P., Zehentner, N., (2017). "Swarm as an Observing Platform for Large Surface Mass Transport Processes". In: 4th Swarm Sci. Meet. Banff, Canada. URL: http://tinyurl.com/Swarm-Banff.
- 9. Doornbos, E., **de Teixeira da Encarnação, J.**, IJss, J., Siemes, C., Grunwaldt, L., Peresty, R., Kraus, J., Flury, J., Apelbaum, G., Olsen, P. E. H., (2016). "Thermospheric neutral densities derived from Swarm accelerometer and GPS data". In: *ESA Living Planet Symp.* 2016.
- Jäggi, A., Meyer, U., Jean, Y., Susnik, A., Dach, R., Weigelt, M., Dam, T., Li, Z., Chen, Q., Flechtner, F., Gruber, C., Poropat, L., Güntner, A., Gouweleeuw, B., Mayer-Gürr, T., Kvas, A., Klinger, B., Martinis, S., Zwenzner, H., Bruinsma, S., Lemoine, J.-M., Biancale, R., Flury, J., Bandikova, T., Bourgogne, S., Steffen, H., de Teixeira da Encarnação, J., Horwath, M., (2016). "European Gravity Service for Improved Emergency Management Status and Project Highlights". In: Int. Assoc. Geod. Symp. Springer, p. 1.
- 11. Siemes, C., Grunwaldt, L., Peresty, R., Kraus, J., Doornbos, E., **de Teixeira da Encarnação, J.**, IJssel, J., Flury, J., Apelbaum, G., Olsen, P. E. H., (2016). "Improvements of the Swarm Accelerometer Data Processing". In: *ESA Living Planet Symp.* 2016.
- 12. Sneew, N, Iran Pour, S, Reubelt, T, Daras, I, Murböck, M, Pail, R, Gruber, T, Visser, P, **Encarnacao**, J, IJssel, J, Others, (2016). "ESA SC4MGV Study Assessment of Satellite Constellations for Monitoring the Variations in Earth Gravity Field". In: *Living Planet Symp*. 2016.
- 13. Astafyeva, E, Zakharenkova, I, Foerster, M, Doornbos, E, **Teixeira da Encarnacao, J.**, Siemes, C, (2015). "Ionospheric and Thermospheric Response to the 2015 St. Patrick's Day Storm a Global Multi-Instrumental Overview". In: *AGU Fall Meet. Abstr.*
- Doornbos, E., Siemes, C., Teixeira da Encarnação, J, Perestý, R., Grunwaldt, L., Kraus, J., Holmdahl Olsen, P. E., IJssel, J, Flury, J., Apelbaum, G., (2015). "Processing of Swarm Accelerometer Data into Thermospheric Neutral Densities". In: AGU Fall Meet. Abstr. Abstract SA31D-2371. San Francisco, CA, USA. URL: http://abstractsearch.agu.org/meetings/2015/FM/SA31D-2371.html.
- 15. Bruinsma, S, Doornbos, E, Siemes, C, Perestý, R, Kraus, J, Bezdek, A, IJssel, J, **Teixeira da Encarnação**, **J**, Visser, P. N., (2014). "Results from the First Year of Swarm GPS Receiver and Accelerometer Data". In: *AGU Fall Meet*. *Abstr*.
- 16. Iran Pour, S, Weigelt, M, Murböck, M, Tonetti, S, Visser, P, Daras, I, **Encarnacao**, **J**, Cesare, S, Siemes, C, IJssel, J, Others, (2014). "Search strategies for optimal double pair scenarios for future gravity satellite missions experience from the ESA SC4MGV project". In: *5th Int. GOCE User Work*.
- 17. Doornbos, E, Bruinsma, S, Fritsche, B, Visser, P, Van Den IJssel, J, **de Teixeira da Encarnação, J.**, Kern, M, (2013). "Air density and wind retrieval using GOCE data". In: *ESA Living Planet Symp.* Vol. 722, p. 7.
- Olsen, N., Alken, P., Beggan, C., Chulliat, A., Doornbos, E., Encarnação, J., Floberghagen, R., Friis-Christensen, E. A., Hamilton, B., Hulot, G., IJssel, J. V. D., Kuvshinov, A. V., Lesur, V., Luhr, H., Macmillan, S., Maus, S., Olsen, P. E. H., Park, J., Plank, G., Püthe, C., Ritter, P., Rother, M., Sabaka, T. J., Stolle, C., Thebault, E., Thomson, A. W. P., Tøffner-Clausen, L., Velimsky, J., Visser, P. N., (2013). "SCARF the swarm satellite constellation application and research facility". In: ESA Living Planet Symp. Edinburgh, United Kingdom: European Space Agency, p. 100. URL: https://tinyurl.com/SCARFLPS2013.
- Doornbos, E, Bruinsma, S, Koppenwallner, G, Fritsche, B, IJssel, J, Visser, P, Teixeira da Encarnação, J, Kern, M, (2012). "Thermospheric density and wind from GOCE thruster activation and accelerometer data". In: EGU Gen. Assem. Conf. Abstr. Vol. 14, p. 5634.
- 20. Gunter, B. C., **Teixeira da Encarnação**, **J**, Ditmar, P, Klees, R, (2012). "Potential contributions to space geodesy from the IridiumNEXT constellation". In: *AGU Fall Meet. Abstr*.

- 21. Gunter, B, **Teixeira da Encarnação**, **J**, Ditmar, P, Klees, R, (2011). "An investigation into new advances in geodesy utilizing future satellite constellations". In: *AGU Fall Meet*. *Abstr*.
- 22. Ditmar, P., Hashemi Farahani, H., **Teixeira da Encarnação**, **J.**, (2010). "Mitigation of along-track artifacts in unconstrained mass transport models based on GRACE satellite data". In: *EGU Gen. Assem. Conf. Abstr.* Vol. 12, p. 10393.
- 23. Gunter, B, **Teixeira da Encarnação**, **J**, Ditmar, P, Klees, R, (2010). "Using existing satellite constellations to complement current and future dedicated gravity field missions". In: *AGU Fall Meet. Abstr.*
- 24. Hashemi Farahani, H, Ditmar, P, **Teixeira da Encarnação**, J, Liu, X, (2010). "Contribution of an accurate determination of GRACE satellite orbits to precise mass transport modeling". In: *EGU Gen. Assem. Conf. Abstr.* Vol. 12, p. 10867.

#### Miscellaneous Contributions

- Sneeuw, N., Iran-Pour, S., Reubelt, T., Sneeuw, N., Daras, I., Murböck, M., Gruber, T., Pail, R., Weigelt, M., Dam, T., Visser, P., Teixeira Encarnação, J., IJssel, J., Tonetti, S., Cornara, S., Cesare, S., (2015).
   Assessment of Satellite Constellations for Monitoring the Variations in Earth Gravity Field "SC4MGV".
   Tech. rep. European Space Agency. URL: https://tinyurl.com/SC4MGV.
- 2. Anselmi, A., Cesare, S., Visser, P., Van Dam, T., Sneeuw, N., Gruber, T., Altes, B., Christophe, B., Cossu, F., Ditmar, P., Murboeck, M., Parisch, M., Renard, M., Reubelt, T., Sechi, G., **Teixeira Encarnação**, **J**, (2010). Assessment of a next Generation Gravity Mission for Monitoring the Variations of Earth's Gravity Field. Tech. rep. Thales Alenia Space report SD-RP-AI-0668: ESA Contract No. 22643/09/NL/AF. URL: <a href="https://tinyurl.com/ANGMMVEGF">https://tinyurl.com/ANGMMVEGF</a>.