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Journal publications

1. Bezděk, A., Sebera, J., **Encarnação, J. T.**, 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.

2. 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., 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., **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.

6. Olsen, N., Alken, P., Beggan, C. D., Chulliat, A., Doornbos, E., **Encarnação, J.**, Floberghagen, R., Friis-Christensen, E. A., Hamilton, B., Hulot, G., IJssel, J., Kuvshinov, A. V. A., 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.A. M., Luehr, H., Noja, M., Puethe, C., Rauberg, J., Schachtschneider, R., Sirol, O., Toeffner-Clausen, L., Vigneron, P., Puthe, C., Velímský, J., (2013). "The Swarm Satellite Constellation Application and Research Facility (SCARF) and Swarm data products". In: *Earth, Planets Sp.* 65.11, p. 100. 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., **Encarnacao, 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: http://www.univelt.com/book=3354.

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. Rijswijk: ESA Communication Production Office, pp. 1–9. URL: https://pure.tudelft.nl/portal/en/publications/analysis-of-satellite-formations-in-the-context-of-gravity-field-retrieval(1489930e-7dbd-4a4b-9bf2-f15b8380ad12).html.

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.

6. 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.**, Amo, J. G., Prins, T. N. O., (2005). "Laser Propulsion for Ground to Orbit Launch". In: *29th Int. Electr. Propuls. Conf.* IEPC-2005-310, pp. 1–8. 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.* Sibiu, Romania. URL: http://data-assimilation.com.

2. **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 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., (2017a). "Gravity field models derived from Swarm GPS data". In: *EGU Gen. Assem.* Vienna, Austria. URL: https://www.researchgate.net/publication/319914485_Gravity_field_models_derived_from_Swarm_GPS_data.

2. **Teixeira Encarnação, J.**, Arnold, D., Bezdek, A., Dahle, C., Jäggi, A., Mayer-gürr, T., Sebera, J., Shum, C., Visser, P., Zehentner, N., (2017b). "Swarm as an Observing Platform for Large Surface Mass Transport Processes". In: *4th Swarm Sci. Meet.* Banff, Canada. URL: http://tinyurl.com/Swarm-Banff.

3. **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.

4. **Encarnacao, J.**, Ditmar, P., Klees, R., (2015). "Impact of Orbit Position Errors on Future Satellite Gravity Models". In: *Am. Geophys. Union, Fall Meet. 2015.* G31B-1114. URL: http://adsabs.harvard.edu/abs/2015AGUFM.G31B1114E.

5. **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.

6. **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.

7. **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.

8. **Teixeira Encarnação, J.**, IJssel, J., Doornbos, E., Visser, P. N., (2014c). “Preliminary analysis of accelerometer data”. In: *2nd Swarm Data Qual. Work.* Rome, Italy.

9. **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. Rijswijk: ESA Communication Production Office, pp. 1–9. URL: https://pure.tudelft.nl/portal/en/publications/analysis-of-satellite-formations-in-the-context-of-gravity-field-retrieval(1489930e-7dbd-4a4b-9bf2-f15b8380ad12).html.

10. **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.

11. **Teixeira Encarnação, J. G.**, Ditmar, P. G., Klees, R., (2007a). “Temporal aliasing in GRACE monthly solutions”. In: *Intergeo*. Leipzig, Germany.

12. **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.

13. **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. Doornbos, E., **de Teixeira da Encarnação**, t., 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 Symposium 2016*.

2. Jäggi, A., Meyer, U., Jean, Y., Susnik, A., Dach, R., Weigelt, M., Dam, T., Li, Z., Chen, Q., Flechtner, F., (2016). “European Gravity Service for Improved Emergency Management–Status and Project Highlights”. In: *International Association of Geodesy Symposia*. Springer, p. 1.

3. Siemes, C., Grunwaldt, L., Peresty, R., Kraus, J., Doornbos, E., **de Teixeira da Encarnação**, t., IJssel, J., Flury, J., Apelbaum, G., Olsen, P. E. H., (2016). “Improvements of the Swarm Accelerometer Data Processing”. In: *ESA Living Planet Symposium 2016*.

4. Astafyeva, E, Zakharenkova, I, Foerster, M, Doornbos, E, **de Teixeira da Encarnação**, t., Siemes, C, (2015). “Ionospheric and Thermospheric Response to the 2015 St. Patrick’s Day Storm: a Global Multi-Instrumental Overview”. In: *AGU Fall Meeting Abstracts*.

5. Doornbos, E, Siemes, C, **de Teixeira da Encarnação**, t., Perestý, R, Grunwaldt, L, Kraus, J, Holmdahl Olsen, P., IJssel, J, Flury, J, Apelbaum, G, (2015). “Processing of Swarm Accelerometer Data into Thermospheric Neutral Densities”. In: *AGU Fall Meeting Abstracts*.

6. Siemes, C., **Encarnacao, J.**, Doornbos, E., Perestý, R., Grunwaldt, L., Kraus, J., Olsen, P. E. H., 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.

7. Bruinsma, S, Doornbos, E, Siemes, C, Perestý, R, Kraus, J, Bezdek, A, IJssel, J, **de Teixeira da Encarnação**, t., Visser, P., (2014). “Results from the First Year of Swarm GPS Receiver and Accelerometer Data.” In: *AGU Fall Meeting Abstracts*.

8. Doornbos, E, Bruinsma, S, Fritsche, B, Visser, P, Van Den IJssel, J, **de Teixeira da Encarnação**, t., Kern, M, (2013). “Air density and wind retrieval using GOCE data”. In: *ESA Living Planet Symposium*. Vol. 722, p. 7.

9. 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://earth.esa.int/documents/1578837/1580047/61_SCARF_N_Olsen_L2_Processing_Facility.pdf/3679e4e9-44f0-42ee-bc01-4b55ac3113e7;jsessionid=AE42F6E267ADCBF4E4C78047F9AD801C.jvm1.

10. Doornbos, E, Bruinsma, S, Koppenwallner, G, Fritsche, B, IJssel, J, Visser, P, **de Teixeira da Encarnação**, t., Kern, M, (2012). "Thermospheric density and wind from GOCE thruster activation and accelerometer data". In: *EGU General Assembly Conference Abstracts*. Vol. 14, p. 5634.

11. Gunter, B., **de Teixeira da Encarnação**, t., Ditmar, P, Klees, R, (2012). "Potential contributions to space geodesy from the IridiumNEXT constellation". In: *AGU Fall Meeting Abstracts*.

12. Gunter, B, **de Teixeira da Encarnação**, t., Ditmar, P, Klees, R, (2011). "An investigation into new advances in geodesy utilizing future satellite constellations". In: *AGU Fall Meeting Abstracts*.

13. Ditmar, P., Hashemi Farahani, H., **de Teixeira da Encarnação**, t., (2010). "Mitigation of along-track artifacts in unconstrained mass transport models based on GRACE satellite data". In: *EGU General Assembly Conference Abstracts*. Vol. 12, p. 10393.

14. Gunter, B, **de Teixeira da Encarnação**, t., Ditmar, P, Klees, R, (2010). "Using existing satellite constellations to complement current and future dedicated gravity field missions". In: *AGU Fall Meeting Abstracts*.

15. Hashemi Farahani, H, Ditmar, P, **de Teixeira da Encarnação**, t., Liu, X, (2010). "Contribution of an accurate determination of GRACE satellite orbits to precise mass transport modeling". In: *EGU General Assembly Conference Abstracts*. Vol. 12, p. 10867.

Miscellaneous Contributions

1. 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: http://gsp.esa.int/gsp-study-view/-/wcl/gaUaMHco1QJ9/10192/assessment-of-satellite-constellations-for-monitoring-the-variations-in-earth-gravity-field-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: http://www.iapg.bgu.tum.de/mediadb/5746123/5746124/04_ao7317_rd4-nggm_finalreport_issue2.pdf.