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Journal publications

1. Bezděk, Aleš, Josef Sebera, João Teixeira da Encarnação, and Jaroslav Klokočník (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, Christian, João de Teixeira da Encarnação, Eelco Doornbos, Jose van den IJssel, Jiří Kraus, Radek Pereštý, Ludwig Grunwaldt, Guy Apelbaum, Jakob Flury, and Poul Erik Holmdahl Olsen (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, João, Daniel Arnold, Aleš Bezděk, Christoph Dahle, Eelco Doornbos, Jose van den IJssel, Adrian Jäggi, Torsten Mayer-Gürr, Josef Sebera, Pieter Visser, and Norbert Zehentner (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. Van Den Ijssel, Jose, João Encarnação, Eelco Doornbos, and Pieter Visser (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., P. Ditmar, R. Klees, J. Teixeira da Encarnação, X. Liu, Q. Zhao, and J. Guo (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, Nils, Patrick Alken, Ciaran D. Beggan, Arnaud Chulliat, Eelco Doornbos, João Encarnação, Rune Floberghagen, Eigil A Friis-Christensen, Brian Hamilton, Gauthier Hulot, Jose van den IJssel, Alexei V Alexey Kuvshinov, Vincent Lesur, Hermann Luhr, Susan Macmillan, Stefan Maus, Poul Erik Holmdahl Olsen, Jaeheung Park, Gernot Plank, Christoph Püthe, Patricia Ritter, Martin Rother, Terence J. Sabaka, Claudia Stolle, Erwan Thebault, Alan W. P. Thomson, Lars Tøffner-Clausen, Jakub Velimsky, Pieter N. A M Visser, Hermann Luehr, Max Noja, Christoph Puethe, Jan Rauberg, Reyko Schachtschneider, Olivier Sirol, Lars Toeffner-Clausen, Pierre Vigneron, Christoph Puthe, Jakub Velímský, Rune Floberghagen, Patrick Alken, Ciaran D. Beggan, Arnaud Chulliat, Eelco Doornbos, João Teixeira da Encarnação, Brian Hamilton, Gauthier Hulot, Jose van den IJssel, Alexei V Alexey Kuvshinov, Vincent Lesur, Hermann Lühr, Susan Macmillan, Stefan Maus, Max Noja, Poul Erik Holmdahl Olsen, Jaeheung Park, Gernot Plank, Christoph Püthe, Jan Rauberg, Patricia Ritter, Martin Rother, Terence J. Sabaka, Reyko Schachtschneider, Olivier Sirol, Claudia Stolle, Erwan Thébault, Alan W. P. Thomson, Lars Tøffner-Clausen, Jakub Velímský, Pierre Vigneron, and Pieter N. A M Visser (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, Pieter, Eelco Doornbos, Jose Van Den IJssel, J.T. Da Encarnação, and João Teixeira da Encarnação (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, Pavel, João Encarnação, and Hassan Hashemi Farahani (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, Brian C. B.C., Joao Encarnacao, Pavel Ditmar, Roland Klees, J. Encarnaçao, Pavel Ditmar, and Roland Klees (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.

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Conference proceedings (peer-reviewed)

1. Gunter, B.C. C, João Encarnação, P. Ditmar, R. Klees, P.W.L. W L Van Barneveld, and P. Visser (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, Brian C, Pavel Ditmar, and João Encarnação (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, Brian C, João Encarnação, Pavel Ditmar, and Roland Klees (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, João, Pavel Ditmar, and Xianglin Liu (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, João, R. Klees, E. Zapreeva, P. Ditmar, and J. Kusche (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.

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Invited Presentations

1. Teixeira Encarnação, João (2017). "Satellite Gravimetry". In: *Summer Sch. Data Assim. its Appl. Oceanogr. Hydrol. Risk Saf. Reserv. Eng.* URL: http://data-assimilation.com.

2. Teixeira Encarnação, João, Daniel Arnold, Aleš Bezdek, Christoph Dahle, Eelco Doornbos, Jose Van Den Ijssel, Adrian Jäggi, Torsten Mayer-gürr, Josef Sebera, Pieter Visser, and Norbert Zehentner (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. Encarnacao, Joao, Himanshu Save, Christian Siemes, Eelco Doornbos, and Byron Tapley (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.

2. Teixeira Encarnação, João, Daniel Arnold, Aleš Bezdek, Christoph Dahle, Eelco Doornbos, Jose Van Den Ijssel, Adrian Jäggi, Torsten Mayer-gürr, Josef Sebera, C.K. Shum, Pieter Visser, and Norbert Zehentner (2017). "Gravity field models derived from Swarm GPS data". In: *EGU Gen. Assem.* Vienna, Austria. URL: https://tinyurl.com/gswarmEGU2017.

3. Teixeira Encarnação, João, Daniel Arnold, Aleš Bezdek, Christoph Dahle, Adrian Jäggi, Torsten Mayer-gürr, Josef Sebera, Pieter Visser, and Norbert Zehentner (2016). "Gravity field models derived from Swarm GPS data". In: *EGU Gen. Assem.* Vienna, Austria. DOI: 10.13140/RG.2.1.3909.4642.

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5. Teixeira Encarnação, João, José van den IJssel, Eelco Doornbos, and Pieter N.A.M. Visser (2015). "Frequency domain combination of POD-driven and measured accelerations". In: *5th Swarm Data Qual. Work.* Paris, France.

6. Teixeira Encarnação, J. G., J. van den IJssel, E. Doornbos, and P. Visser (2014a). "POD-assisted calibration of Swarms Accelerometer Data". In: *4th Swarm Data Qual. Work.* December. Postdam, Germany.

7. Teixeira Encarnação, João, Eelco Doornbos, José van den IJssel, and Pieter N.A.M. Visser (2014b). "Combination of Swarm's Uncalibrated Accelerometer Data with POD-Based Accelerometry". In: *3rd Swarm Sci. Meet.* Copenhagen, Denmark, p. 2.

8. Teixeira Encarnação, João, José van den IJssel, Eelco Doornbos, and Pieter N.A.M. Visser (2014c). "Preliminary analysis of accelerometer data". In: *2nd Swarm Data Qual. Work.* Rome, Italy.

9. Encarnação, João, Pavel Ditmar, and Xianglin Liu (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.

10. Teixeira Encarnação, João, P. G. Ditmar, and Roland Klees (2008). "Spectral analysis of positioning modelling errors in gravimetric data". In: *IAG Symp. Gravity, Geoid, Earth Obs.* Chania, Greece.

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

12. Teixeira Encarnação, João, P. G. Ditmar, and Roland Klees (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, João (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. Teixeira Encarnação, João, Daniel Arnold, Aleš Bezdek, Christoph Dahle, Adrian Jäggi, Torsten Mayer-gürr, Josef Sebera, C.K. Shum, Pieter Visser, and Norbert Zehentner (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.

2. Doornbos, Eelco, João de Teixeira da Encarnação, Jose van den IJss, Christian Siemes, Ludwig Grunwaldt, Radek Peresty, Jiri Kraus, Jakob Flury, Guy Apelbaum, and Poul Erik Holmdahl Olsen (2016). "Thermospheric neutral densities derived from Swarm accelerometer and GPS data". In: *ESA Living Planet Symp. 2016.*

3. Jäggi, Adrian, Ulrich Meyer, Yoomin Jean, Andrea Susnik, Rolf Dach, Matthias Weigelt, Tonie van Dam, Zhao Li, Qiang Chen, Frank Flechtner, Christian Gruber, Leo Poropat, Andreas Güntner, Ben Gouweleeuw, Torsten Mayer-Gürr, Andreas Kvas, Beate Klinger, Sandro Martinis, Hendrik Zwenzner, Sean Bruinsma, Jean-Michel Lemoine, Richard Biancale, Jakob Flury, Tamara Bandikova, Stephane Bourgogne, Holger Steffen, João de Teixeira da Encarnação, and Martin Horwath (2016). "European Gravity Service for Improved Emergency Management - Status and Project Highlights". In: *Int. Assoc. Geod. Symp.* Springer, p. 1.

4. Siemes, Christian, Ludwig Grunwaldt, Radek Peresty, Jiri Kraus, Eelco Doornbos, João de Teixeira da Encarnação, Jose van den IJssel, Jakob Flury, Guy Apelbaum, and Poul Erik Holmdahl Olsen (2016). "Improvements of the Swarm Accelerometer Data Processing". In: *ESA Living Planet Symp. 2016*.

5. Sneew, N, S Iran Pour, T Reubelt, I Daras, M Murböck, R Pail, T Gruber, P Visser, J Encarnacao, J van den IJssel, and Others (2016). "ESA SC4MGV Study - Assessment of Satellite Constellations for Monitoring the Variations in Earth Gravity Field". In: *Living Planet Symp. 2016*.

6. Astafyeva, E, I Zakharenkova, M Foerster, E Doornbos, J. Teixeira da Encarnacao, and C Siemes (2015). "Ionospheric and Thermospheric Response to the 2015 St. Patrick's Day Storm - a Global Multi-Instrumental Overview". In: *AGU Fall Meet. Abstr.*

7. Doornbos, E, C Siemes, J Teixeira da Encarnação, R Peresty, L Grunwaldt, J Kraus, P E Holmdahl Olsen, J van den IJssel, J Flury, and G Apelbaum (2015). "Processing of Swarm Accelerometer Data into Thermospheric Neutral Densities". In: *AGU Fall Meet. Abstr.*

8. Siemes, Christian, Joao Encarnacao, Eelco Doornbos, Radek Peresty, Ludwig Grunwaldt, Jiri Kraus, Poul Erik Holmdahl Olsen, Jose van den IJssel, Jakob Flury, and Guy Apelbaum (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.

9. Bruinsma, S, E Doornbos, C Siemes, R Peresty, J Kraus, A Bezdek, J van den IJssel, J Teixeira da Encarnação, and P N Visser (2014). "Results from the First Year of Swarm GPS Receiver and Accelerometer Data". In: *AGU Fall Meet. Abstr.*

10. Iran Pour, S, M Weigelt, M Murböck, S Tonetti, P Visser, I Daras, J Encarnacao, S Cesare, C Siemes, J van den IJssel, and 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.*

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

12. Olsen, Nils, Patrick Alken, Ciaran Beggan, Arnaud Chulliat, Eelco Doornbos, João Encarnação, Rune Floberghagen, Eigil A Friis-Christensen, Brian Hamilton, Gauthier Hulot, Jose Van Den IJssel, Alexei V Kuvshinov, Vincent Lesur, Hermann Luhr, Susan Macmillan, Stefan Maus, Poul Erik H Olsen, Jaeheung Park, Gernot Plank, Christoph Püthe, Patricia Ritter, Martin Rother, Terence J Sabaka, Claudia Stolle, Erwan Thebault, Alan W P Thomson, Lars Tøffner-Clausen, Jakub Velimsky, and Pieter N Visser (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.

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14. Gunter, B C, J Teixeira da Encarnação, P Ditmar, and R Klees (2012). "Potential contributions to space geodesy from the IridiumNEXT constellation". In: *AGU Fall Meet. Abstr.*

15. Gunter, B, J Teixeira da Encarnação, P Ditmar, and R Klees (2011). "An investigation into new advances in geodesy utilizing future satellite constellations". In: *AGU Fall Meet. Abstr.*

16. Ditmar, Pavel, Hassan Hashemi Farahani, and João Teixeira da Encarnação (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.

17. Gunter, B, J Teixeira da Encarnação, P Ditmar, and R Klees (2010). "Using existing satellite constellations to complement current and future dedicated gravity field missions". In: *AGU Fall Meet. Abstr.*

18. Hashemi Farahani, H, P Ditmar, J Teixeira da Encarnação, and X Liu (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

1. Sneeuw, Nico, Siavash Iran-Pour, Tilo Reubelt, Nico Sneeuw, Ilias Daras, Michael Murböck, Thomas Gruber, Roland Pail, Matthias Weigelt, Tonie van Dam, Pieter Visser, Joao Teixeira Encarnação, Jose van den IJssel, Stefania Tonetti, Stefania Cornara, and Stefano Cesare (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., S. Cesare, P. Visser, T. Van Dam, N. Sneeuw, T. Gruber, B. Altes, B. Christophe, F. Cossu, P. Ditmar, M. Murboeck, M. Parisch, M. Renard, T. Reubelt, G. Sechi, and J Teixeira Encarnação (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: https://tinyurl.com/ANGMMVEGF.