



Expert in Geostatistical Characterization

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LIST OF PUBLICATIONS

Last update: June 23

PhD thesis

Masoudi, P. (2017). *Application of a hybrid uncertainty-clustering approach in pre-processing well-logs*. PhD (dual) thesis, Géosciences-Rennes and School of Mining of the University of Tehran. <http://www.theses.fr/2017REN1S023>

Deliverables and guidance:

D9.60 Guidance to reduce sampling uncertainty (2019) European Joint Programme for the Integration of Radiation Protection Research H2020 – 662287. Deliverable D9.60 (https://concert-h2020.eu/sites/concert_h2020/files/uploads/Deliverables/D9/Territories/_Lists_Deliverables_Attachments_148_D9.60-Guidance-to-reduce-sampling-uncertainties_approved30072019.pdf)

D9.62 Guidance on uncertainty analysis for radioecological models (2019) European Joint Programme for the Integration of Radiation Protection Research H2020 – 662287. Deliverable D9.62. (https://territories.eu/assets/files/publications/D9.62_guidance-on-uncertainty-analysis-for-radioecological-models.pdf)

Report after TERRITORIES Workshop #3, planned in Madrid in June 2018 (2018) European Joint Programme for the Integration of Radiation Protection Research H2020 – 662287. Deliverable D9.74. (https://territories.eu/assets/files/publications/D9_74_After-each-training_2nd-year_TERRITORIES_WS2018_2018-11-05_approved07112018.pdf)

Publications in scientific journals:

Yasumiishi, M., **Masoudi, P.**, Nishimura, T., Ochi, K., Ye, X., Aldstadt, J., Komissarov, M. (2023) Assessment of ambient dose equivalent rate distribution patterns in a forested-rugged terrain using field-measured and modeled dose equivalent rates. *Radiation Measurements*. <https://doi.org/10.1016/j.radmeas.2023.106978>



- Masoudi, P.** (2023) Determining sampling spacing according to volume of investigation in geophysical surveys, application of air dose rate mapping. *Geophysical Journal International*: 234(3). <https://doi.org/10.1093/gji/ggad238>
- Masoudi, P.** (2022) Fuzzy membership function for weighting pairs in variographical analysis. *Spatial Statistics*: 52. <https://doi.org/10.1016/j.spasta.2022.100717>
- Masoudi, P.,** Le Coz, M., Gonze, M.A., Cazala, C. (2020) Estimation of Fukushima radiocesium deposits by airborne surveys: sensitivity to the flight-line spacing. *Journal of Environmental Radioactivity*: Volume 222. <https://doi.org/10.1016/j.jenvrad.2020.106318>
- Masoudi, P.,** Le Coz, M., Cazala, C., Saito, K. (2019) Spatial properties of soil analyses and airborne measurements for reconnaissance of soil contamination by ¹³⁷Cs after Fukushima nuclear accident in 2011. *Journal of Environmental Radioactivity*: Volume 202, Pages 74-84. <https://doi.org/10.1016/j.jenvrad.2018.11.014>
- Moradi, M., Tokhmechi, B., **Masoudi, P.** (2019) Inversion of well logs into rock types, lithofacies and environmental facies, using pattern recognition, a case-study of carbonate Sarvak Formation. *Carbonates and Evaporites*: Volume 34, No. 2, Pages 335–347. <https://doi.org/10.1007/s13146-017-0388-8>
- Moradi, M., Tokhmechi, B., Kordi, M., **Masoudi, P.** (2019) Gamma-clustering sequence stratigraphy, case study of the carbonate Sarvak Formation, Southwest Iran. *SN Applied Sciences*, 1: 1369. <https://doi.org/10.1007/s42452-019-1407-2>
- Masoudi, P.,** Aifa, T., Memarian, H., Tokhmechi, B. (2018) Uncertainty assessment of porosity and permeability by clustering algorithm and fuzzy arithmetic. *Journal of Petroleum Science and Engineering*: Volume 161, Pages 275-290. <https://doi.org/10.1016/j.petrol.2017.11.018>
- Masoudi, P.,** Aifa, T., Memarian, H., Tokhmechi, B. (2017) Uncertainty assessment of volumes of investigation to enhance the vertical resolution of well-logs. *Journal of Petroleum Science and Engineering*: Volume 154, Pages 252-276. <https://doi.org/10.1016/j.petrol.2017.04.026>
- Masoudi, P.,** Memarian, H., Aifa, T., Tokhmechi, B. (2017) Geometric modelling of volume of investigation of well-logs for thin-bed characterization. *Journal of Geophysics and Engineering*: Volume 14, No. 2, Pages 426-444. <https://doi.org/10.1088/1742-2140/aa59d4>
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- Masoudi, P.,** Arbab, B., Mohammadrezaei, H. (2014) Net pay determination by Dempster rule of combination, case study on Iranian offshore oil fields. *Journal of Petroleum Science and Engineering*: Volume 123, Pages 78-83. <https://doi.org/10.1016/j.petrol.2014.07.014>
- Masoudi, P.,** Arbab, B., Mohammadrezaei, H. (2014) Net pay determination by artificial neural network, case study on Iranian offshore oil fields. *Journal of Petroleum Science and Engineering*: Volume 123, Pages 72-77. <https://doi.org/10.1016/j.petrol.2014.07.007>
- Masoudi, P.,** Tokhmechi, B., Ansari Jafari, M., Zamanzadeh S.M., Sherkati, S. (2012) Application of Bayesian technique in determining net pay zones. *Journal of Petroleum Science and Engineering*: Volume 94, Pages 47-54. <https://doi.org/10.1016/j.petrol.2012.06.028>



- Masoudi, P.**, Tokhmechi, B., Ansari Jafari, M., Moshiri, B. (2012) Application of fuzzy classifier fusion in determining productive zones in oil wells. *Journal of Energy Exploration and Exploitation*: Volume 30, No. 3, Pages 403-416. <https://doi.org/10.1260/0144-5987.30.3.403>
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- Masoudi, P.**, Zahedi, A.R., Moradzadeh, A., Alirezaei F., Zamanzadeh, S.M. (2011) Estimation of in place gas volume in multilayered reservoirs using deterministic and probabilistic approaches. *Journal of Energy Exploration and Exploitation*: Volume 29, No. 5, Pages 543-557. <https://doi.org/10.1260/0144-5987.29.5.543>
- Masoudi, P.**, Tokhmechi, B., Zahedi A.R., Ansari Jafari, M. (2011) Developing a new method for identification of net zones using log data and diffusivity equation. *Journal of Mining & Environment*: Volume 2, No. 1, Pages 53-60. <https://doi.org/10.22044/JME.2012.19>

International conferences:

- Masoudi, P.**, Petronille, M., Binet, H., Geoffroy, E. (2023) Spatial statistical analysis and geostatistical mapping of offshore magnetometric acquisition data. *EAGE Near Surface Geosciences Conference & Exhibition*.
- Masoudi, P.**, Binet, H., Simon, C., Pelletier, B., Lambert, F., Assy, Y. (2023) Improving seismic velocity mapping using Standard Penetration Test data in a cokriging interpolation. *EAGE Near Surface Geosciences Conference & Exhibition*.
- Desnoyers, Y., **Masoudi, P.**, Joly, P., Deneuvillers, E. (2022) Metallographic characterization by variographic analysis and geostatistical simulation of local segregation microstructures in a heavy thickness forged part in SA508 Gr3 Cl2 type steel. *International Symposium Contribution of Materials Investigations and Operating Experience to LWRs' Safety, Performance and Reliability (FONTEVRAUD 10)*, Avignon, France.
- Yasumiishi, M., Nishimura, T., **Masoudi, P.**, Aldstadt, J. (2021) Assessing the Influence of Topography and Environmental Factors on Gamma-Ray Air Dose Rates Under Canopies. *EGU General Assembly, Virtual*. https://presentations.copernicus.org/EGU21/EGU21-8129_presentation.pdf
- Chautru, J.-M., Binet, H., **Masoudi, P.**, Geoffroy, F., Papouin, M., Rodriguez, S., Renard, D. (2021) Time-Depth Conversion with Uncertain and/or Incomplete Data. *82nd EAGE Annual Conference & Exhibition*. <https://doi.org/10.3997/2214-4609.202011680>
- Chautru, J.-M., Binet, H., **Masoudi, P.**, Geoffroy, F., Renard, D. (2021) Modeling Complex Tectonic Structures in any Kind of Grid without Space Deformation. *82nd EAGE Annual Conference & Exhibition*. <https://doi.org/10.3997/2214-4609.202011541>
- Chautru, J.-M., Binet, H., **Masoudi, P.**, Rodriguez, S., and Papouin, M. (2021) Uncertainty Quantification Enhancement by Combining Data of Varying Accuracy and Precision. *82nd EAGE Annual Conference & Exhibition*. <https://doi.org/10.3997/2214-4609.202012109>
- Le Coz, M., **Masoudi, P.**, Gonze, M.A., Cazala, C. (2019) Cartographie du dépôt de césium-137 par spectrométrie gamma aéroportée dans la région de Fukushima : sensibilité à la distance entre les lignes de vol. *Congrès National de Radioprotection SFRP, La Rochelle*. [Link](#)



Masoudi, P., Le Coz, M., Gonze, M.A., Cazala, C. (2018) Optimizing flight-line distance for soil decontamination, application to contaminated Fukushima territories. *3rd European Radiological Protection Research Week*, Rovinj, Croatia. [Link](#)

Masoudi, P., Aïfa, T., Memarian, H., Tokhmechi, B. (2018) Uncertainty propagation from well-logs to petrophysical parameters, using clustering algorithm and fuzzy arithmetic. *7ème Colloque Maghrébin de Géophysique Appliqué*, Alger, Algeria.

Masoudi, P., Ataei, M., Aïfa, T., Memarian, H. (2016) Methodology-selection by fuzzy analytic hierarchy process for studying net pays. *4th International Mine and Mining Industries Congress*, Tehran, Iran.

Masoudi, P., Nadjar Araabi, B., Aïfa, T., Memarian, H. (2016) Clustering as an efficient tool for assessing fluid content and movability by resistivity logs. *4th International Mine and Mining Industries Congress*, Tehran, Iran.

Magazines:

Simon, C., Pelletier, B., **Masoudi, P.**, Binet, H., Lambert, F., Assy, Y. (2023) Comment mieux quantifier le risque géotechnique lié à la liquéfaction du sol ? *Solscope Mag*: 23. pp64-69. <https://www.calameo.com/read/00500337128b002591a22>

