CHEN Jie

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Research Interests

Mid-ocean Ridges, Passive seismicity, oceanic detachment faults, Submarine volcanism, magma plumbing system, Hydrothermal circulation, Geological mapping, Numerical thermal modelling.

Education

2018-	Ph.D., Marine Geoscience, IPGP, Université de Paris
	Dissertation title: The impact of melt supply on fault distribution, volcanism,
	and the thermal regime at ultraslow spreading ridges.
	Thesis advisor: Dr. Mathilde Cannat.
2015-2018	M. E., Marine geophysics, Second Institute of Oceanography, MNR
2011-2015	B. E., College of Marine Geosciences, Ocean University of China

Publications

- 1. **Chen J.**, Cannat M., Tao C., Sauter D., and Munschy M. (2021). 780 thousand years of upper-crustal construction at a melt-rich segment of the ultraslow spreading Southwest Indian Ridge 50°28′E. Journal of Geophysical Research: Solid Earth. https://doi.org/10.1029/2021JB022152.
- 2. **Chen J.**, Crawford W. C., and Cannat M. Microseismicity of a nearly amagmatic mid-ocean ridge flip-flop detachment fault system. (Submitted to Nature Geoscience)
- 3. **Chen J.**, Olive J.A., and Cannat M. Melt supply control on the thermal regime of slow and ultraslow spreading ridges. (In prep)
- 4. **Chen J.**, Zhang T., Li H., Tao C., Cannat M., and Sauter D. Evolution of enhanced magmatism at the ultraslow spreading Southwest Indian Ridge between 46°E and 53°E. (In prep)
- 5. Ding T., Wang J., Tao C., Dias Á.A., Liang J., Wang Y., Chen J. et al. (2021). Trace-element compositions of sulfides from inactive Tianzuo hydrothermal field, Southwest Indian Ridge: Implications for ultramafic rocks hosting mineralization. Ore Geology Reviews. https://doi.org/10.1016/j.oregeorev.2021.104421.
- 6. Ding T., Tao C., Dias Á.A., Liang J., **Chen J.** et al. (2021). Sulfur isotopic compositions of sulfides along the Southwest Indian Ridge: implications for mineralization in ultramafic rocks. Mineralium Deposita. https://doi.org/10.1007/s00126-020-01025-0.
- 7. Li, H., Tao, C., Yue, X., Baker, E.T., Deng, X., Zhou, J., Wang, Y., Zhang, G., Chen, J. et al. (2020). Enhanced hydrothermal activity on an ultraslow-spreading supersegment with a seismically detected melting anomaly. Marine Geology. https://doi.org/10.1016/j.margeo.2020.106335.
- 8. **Chen J**, Tao C, Liang J, et al., (2018). Newly discovered hydrothermal fields along the ultraslow-spreading Southwest Indian Ridge around 63°E. Acta Oceanologica Sinica. https://doi.org/10.1007/s13131-018-1333-y.

Conferences

- 1. **Chen J**, Crawford W C, and Cannat M. Microseismicity constraints on brittle lithosphere thickness at a nearly amagmatic spreading corridor of the ultraslow Southwest Indian Ridge. AGU Fall Meeting, 2020. (Poster available here)
- 2. **Chen J**, Cannat M, and Tao C. 780-thousand years of volcanic seafloor accretion at a melt-rich segment of the ultraslow-spreading Southwest Indian Ridge 50°28'E. AGU Fall Meeting, 2019. (Poster)
- 3. **Chen J**, Li H, Zhang T, et al., Segmentation and melt supply along the ultraslow-spreading Southwest Indian Ridge (46°E to 52°20'E). China Oceanography Academy, Qingdao, October 31, 2017. (Poster)
- 4. **Chen J**, Li H, Zhang T, et al., Characteristics and mechanisms of magma supply along Southwest Indian Ridge between 46°E and 52.3°E. Chinese Geophysical Union Fall meeting, Beijing, October 15-18, 2017. (Oral presentation)

Funding

2018-2021 China Scholarship Council (CSC)

Sea-going Experience

Pourquoi Pas? Momarsat19 at Mid-Atlantic Ridge, June 10-July 4, 2019 XueLong icebreaker, trial in the Pacific, July 7-14, 2017

Invited Talks

2021.09	Southern University of Science and Technology
2021.06	Institut de Physique du Globe de Paris, Université de Paris
2020.04	Institut de Physique du Globe de Paris, Université de Paris

Relevant Skills & Others

Computer Skills: GMT (professional), Global Mapper, MATLAB, Python, SEISAN, GitHub

Language: English (fluent), Chinese (native), French (beginner)

Hobby: Kungfu (professional)