

Table S2. Geographic records used to infer the ecological niche of bat SARS-CoV-like viruses

Country	locality	Latitude	Longitude	References
China	Guangdong	22.65334	113.05734	[1,2]
China	Guangxi, Nanning	22.81700	108.36653	[1,3]
China	Guizhou, Anlong	25.09900	105.44269	[4]
China	Hebei	38.71913	114.80067	[1,2]
China	Henan, Jiyuan	35.06725	112.60192	[1,4]
China	Hong Kong	22.37425	114.08477	[5]
China	Hong Kong	22.42819	114.06778	[5]
China	Hubei, Yichang	30.69197	111.28647	[3]
China	Jilin, Tonghua county	41.67981	125.75925	[1,6]
China	Shaanxi	33.99589	107.48343	[1,2]
China	Shanxi	37.27425	111.24516	[1,2]
China	Yunnan, Baoshan	25.11206	99.16175	[7]
China	Yunnan, Kunming	24.88008	102.83289	[7-9]
China	Yunnan, Lufeng	25.15011	102.07903	[10]
China	Yunnan, Mangshi	24.43369	98.58808	[11]
China	Yunnan, Menglian	22.32911	99.58417	[6]
China	Zhejiang, Longquan	28.07464	119.14147	[4]
China	Zhejiang, Daishan	30.26671	122.22394	[1,12]
Korea	Jeongbuk	35.42772	127.13625	[13,14]

References

1. Wu, Z.; Yang, L.; Ren, X.; He, G.; Zhang, J.; Yang, J.; Qian, Z.; Dong, J.; Sun, L.; Zhu, Y.; et al. Deciphering the bat virome catalog to better understand the ecological diversity of bat viruses and the bat origin of emerging infectious diseases. *The ISME journal*, **2016**, *10*, 609-620. doi:10.1038/ismej.2015.138
2. Fan, Y.; Zhao, K.; Shi, Z. L.; Zhou, P. Bat Coronaviruses in China. *Viruses*, **2019**, *11*, 210. doi:10.3390/v11030210
3. Li, W.; Shi, Z.; Yu, M.; Ren, W.; Smith, C.; Epstein, J. H.; Wang, H.; Crameri, G.; Hu, Z.; Zhang, H.; et al. Bats are natural reservoirs of SARS-like coronaviruses. *Science*, **2005**, *310*, 676-679. doi:10.1126/science.1118391
4. Lin, X.D.; Wang, W.; Hao, Z.Y.; Wang, Z.X.; Guo, W.P.; Guan, X.Q.; Wang, M.R.; Wang, H.W.; Zhou, R.H.; Li, M.H.; et al. Extensive diversity of coronaviruses in bats from China. *Virology*, **2017**, *507*, 1-10. doi:10.1016/j.virol.2017.03.019
5. Lau, S.K.; Woo, P.C.; Li, K.S.; Huang, Y.; Tsoi, H.W.; Wong, B.H.; Wong, S.S.; Leung, S.Y.; Chan, K.H.; Yuen, K.Y. Severe acute respiratory syndrome coronavirus-like virus in Chinese horseshoe bats. *Proc. Natl. Acad. Sci. U.S.A.*, **2005**, *102*, 14040-14045. doi:10.1073/pnas.0506735102
6. Xu, L.; Zhang, F.; Yang, W.; Jiang, T.; Lu, G.; He, B.; Li, X.; Hu, T.; Chen, G.; Feng, Y.; et al. Detection and characterization of diverse alpha- and betacoronaviruses from bats in China. *Virol. Sin.*, **2016**, *31*, 69-77. doi:10.1007/s12250-016-3727-3
7. Ge, X.Y.; Li, J.L.; Yang, X.L.; Chmura, A.A.; Zhu, G.; Epstein, J.H.; Mazet, J.K.; Hu, B.; Zhang, W.; Peng, C.; et al. Isolation and characterization of a bat SARS-like coronavirus that uses the ACE2 receptor. *Nature*, **2013**, *503*, 535-538. doi:10.1038/nature12711

8. He, B.; Zhang, Y.; Xu, L.; Yang, W.; Yang, F.; Feng, Y.; Xia, L.; Zhou, J.; Zhen, W.; Feng, Y.; et al. Identification of diverse alphacoronaviruses and genomic characterization of a novel severe acute respiratory syndrome-like coronavirus from bats in China. *J. Virol.*, **2014**, *88*, 7070-7082. doi:10.1128/JVI.00631-14
9. Hu, B.; Zeng, L.P.; Yang, X.L.; Ge, X.Y.; Zhang, W.; Li, B.; Xie, J.Z.; Shen, X.R.; Zhang, Y.Z.; Wang, N.; et al. Discovery of a rich gene pool of bat SARS-related coronaviruses provides new insights into the origin of SARS coronavirus. *PLoS Pathog.*, **2017**, *13*, e1006698. doi:10.1371/journal.ppat.1006698
10. Lau, S.K.; Feng, Y.; Chen, H.; Luk, H.K.; Yang, W.H.; Li, K.S.; Zhang, Y.Z.; Huang, Y.; Song, Z.Z.; Chow, W.N.; et al. Severe Acute Respiratory Syndrome (SARS) Coronavirus ORF8 Protein Is Acquired from SARS-Related Coronavirus from Greater Horseshoe Bats through Recombination. *J. Virol.*, **2015**, *89*, 10532-10547. doi:10.1128/JVI.01048-15
11. Wang, L.; Fu, S.; Cao, Y.; Zhang, H.; Feng, Y.; Yang, W.; Nie, K.; Ma, X.; Liang, G. Discovery and genetic analysis of novel coronaviruses in least horseshoe bats in southwestern China. *Emerg. microbes & infect.*, **2017**, *6*, e14. doi:10.1038/emi.2016.140
12. Hu, D.; Zhu, C.; Ai, L.; He, T.; Wang, Y.; Ye, F.; Yang, L.; Ding, C.; Zhu, X.; Lv, R.; et al. Genomic characterization and infectivity of a novel SARS-like coronavirus in Chinese bats. *Emerg. microbes & infect.*, **2018**, *7*, 154. doi:10.1038/s41426-018-0155-5
13. Lee, S.; Jo, S.D.; Son, K.; An, I.; Jeong, J.; Wang, S.J.; Kim, Y.; Jheong, W.; Oem, J.K. Genetic Characteristics of Coronaviruses from Korean Bats in 2016. *Microb. Ecol.*, **2018**, *75*, 174-182. doi:10.1007/s00248-017-1033-8
14. Kim, Y.; Son, K.; Kim, Y.S.; Lee, S.Y.; Jheong, W.; Oem, J.K. Complete genome analysis of a SARS-like bat coronavirus identified in the Republic of Korea. *Virus genes*, **2019**, *55*, 545-549. doi:10.1007/s11262-019-01668-w