Supplementary File for

Reactivation Potential of Intraplate Faults in the Western Quebec Seismic Zone, Eastern Canada

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Introduction

This supplementary file includes maps of the reactivation potential of faults in the WQSZ (for SH azimuths of 28° and 73°) modelled using the 'Stress Analysis' module of the software Move™ by Petroleum Experts Limited (https://www.petex.com/), and the software 'Slicken 1.0' by Xu et al. (2017) (https://doi.org/10.1016/j.cageo.2016.07.015).

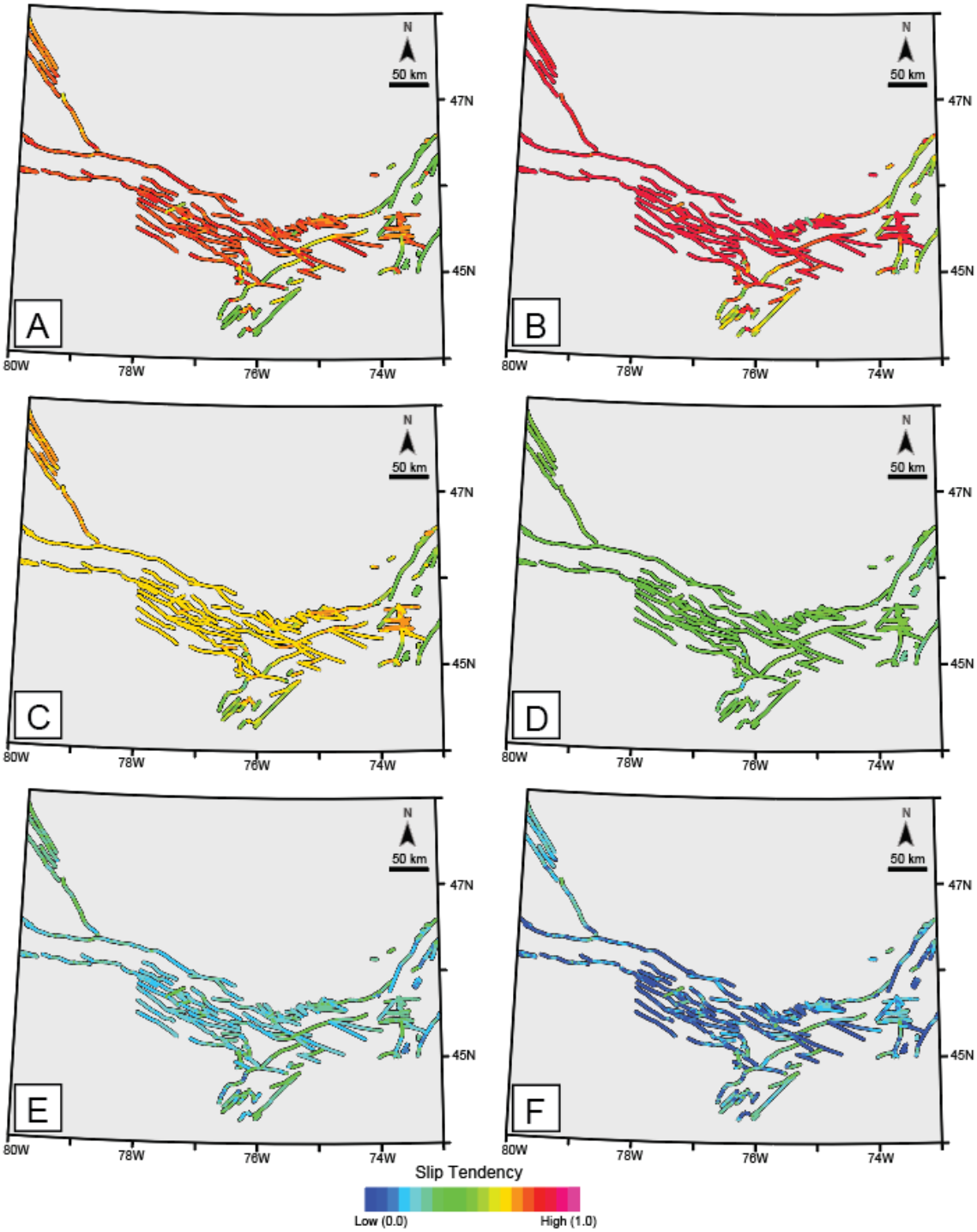

Figure S1. Slip tendency maps for different fault dip scenarios (with an S_H azimuth of 28°). **A)** 15°, **B)** 30°, **C)** 45°, **D)** 60°, **E)** 75°, and **F)** 90°.

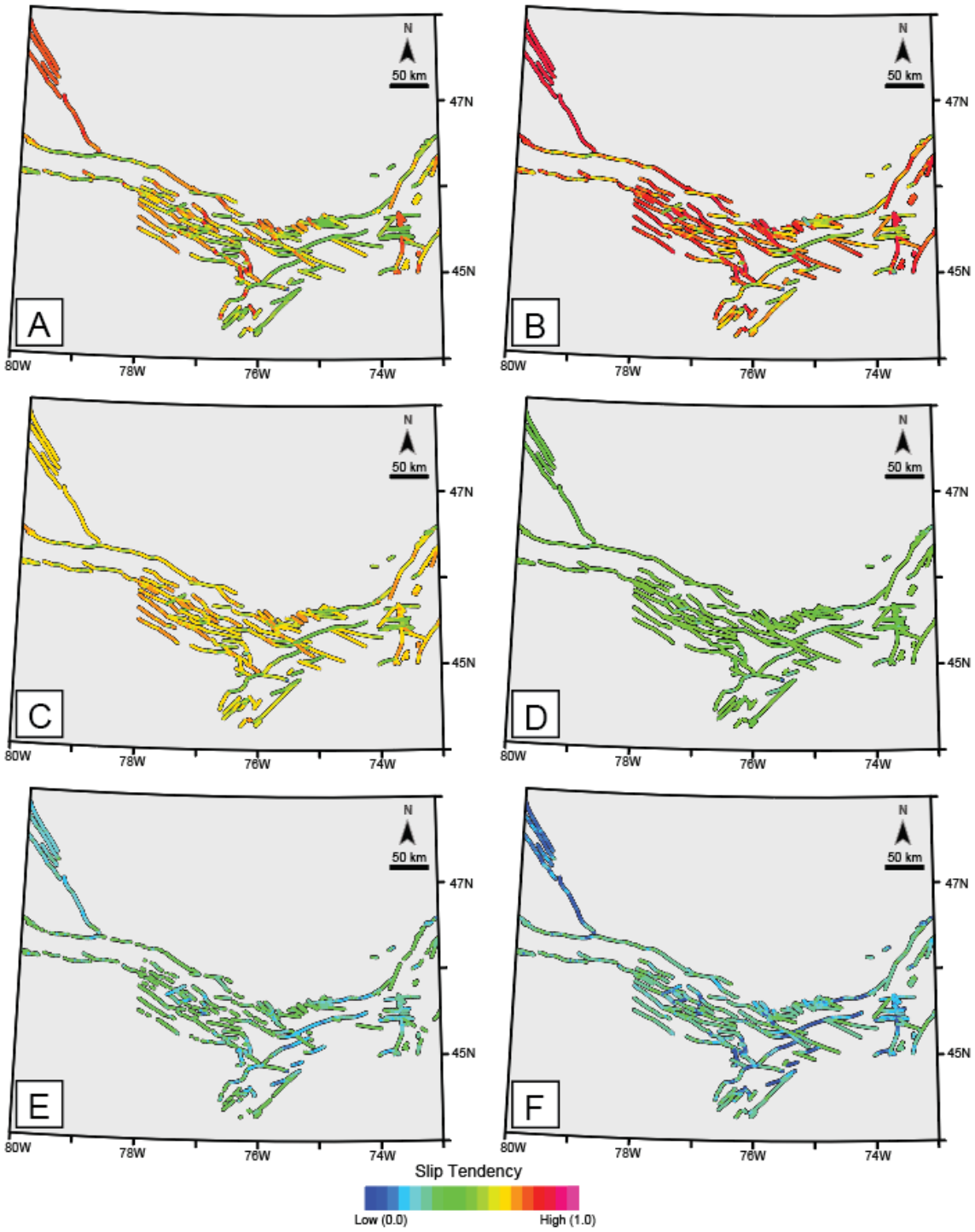

Figure S2. Slip tendency maps for different fault dip scenarios (with an S_H azimuth of 73°). **A)** 15°, **B)** 30°, **C)** 45°, **D)** 60°, **E)** 75°, and **F)** 90°.

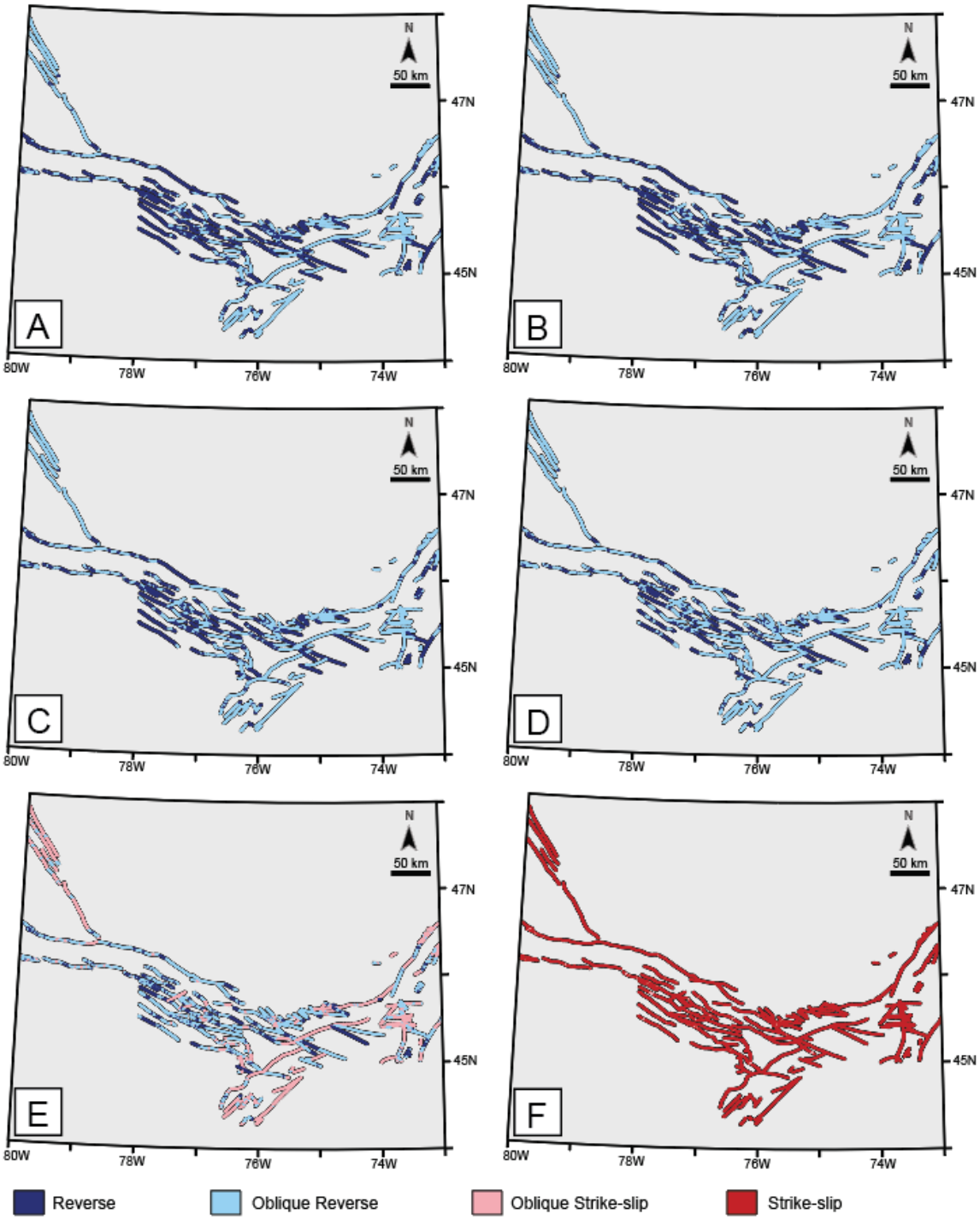

Figure S3. Predicted slip kinematics for different fault dip scenarios (with an S_H azimuth of 28°). **A)** 15°, **B)** 30°, **C)** 45°, **D)** 60°, **E)** 75°, and **F)** 90°.

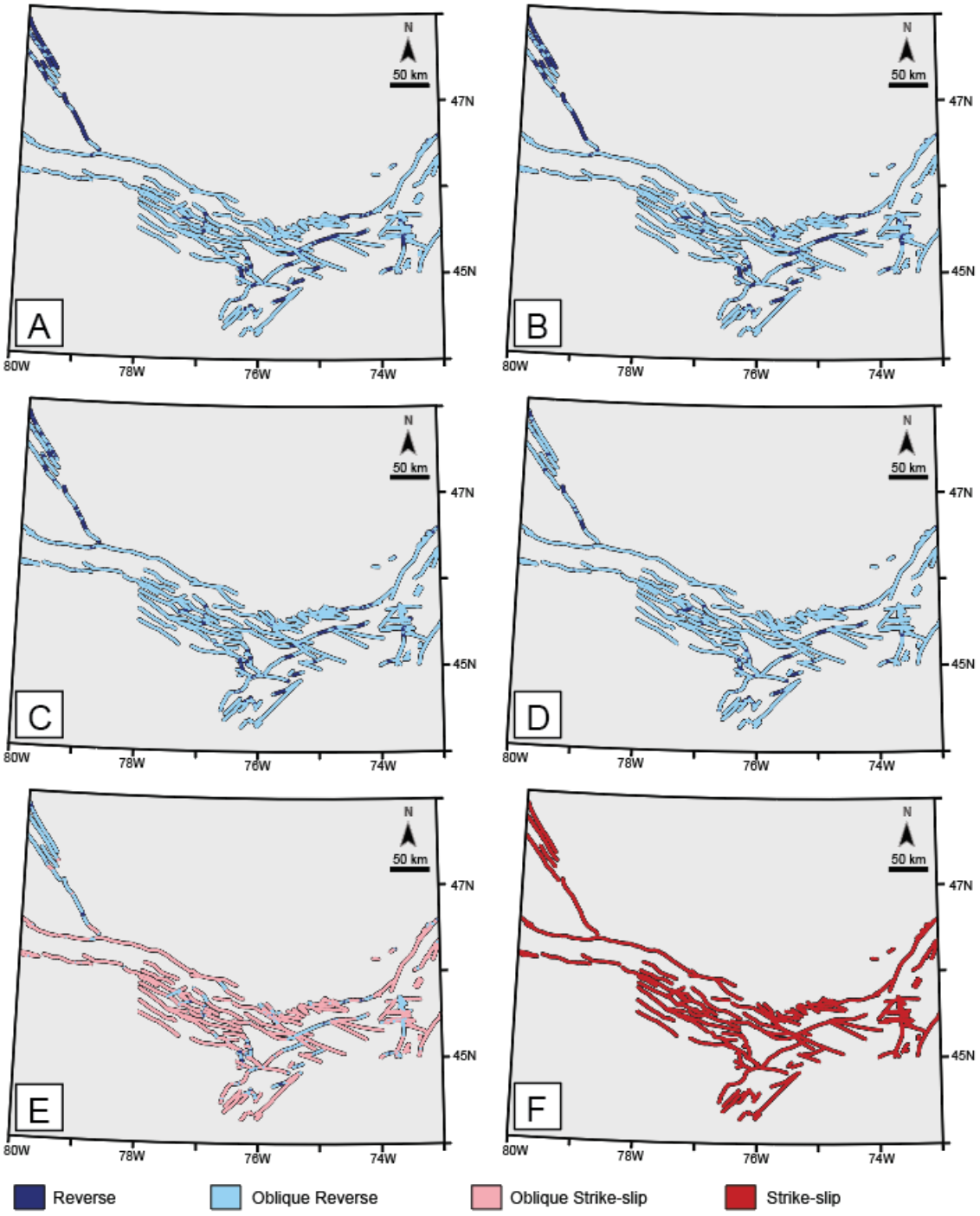

Figure S4. Predicted slip kinematics for different fault dip scenarios (with an S_H azimuth of 73°). **A)** 15°, **B)** 30°, **C)** 45°, **D)** 60°, **E)** 75°, and **F)** 90°**.**

σ_1 Azimuth	Fault Dip	Slip tendency							
		NW-striking faults				NE-striking faults			
		Mean	Std. Dev.	Min	Max	Mean	Std. Dev.	Min	Max
28°	15°	0.78	0.00	0.34	0.90	0.55	0.00	0.37	0.83
	30°	0.86	0.00	0.25	0.87	0.69	0.00	0.41	0.85
	45°	0.67	0.00	0.33	0.69	0.60	0.00	0.31	0.69
	60°	0.45	0.00	0.26	0.52	0.44	0.00	0.20	0.52
	75°	0.25	0.00	0.15	0.39	0.30	0.00	0.10	0.39
	90°	0.12	0.00	0.00	0.33	0.23	0.00	0.00	0.33
45°	15°	0.76	0.00	0.27	0.88	0.50	0.00	0.37	0.76
	30°	0.85	0.00	0.13	0.87	0.64	0.00	0.41	0.81
	45°	0.68	0.00	0.25	0.69	0.57	0.00	0.28	0.69
	60°	0.46	0.00	0.20	0.52	0.43	0.00	0.18	0.52
	75°	0.28	0.00	0.13	0.37	0.30	0.00	0.11	0.39
	90°	0.17	0.00	0.00	0.32	0.23	0.00	0.00	0.33
73°	15°	0.64	0.00	0.08	0.88	0.49	0.00	0.37	0.88
	30°	0.77	0.00	0.06	0.87	0.63	0.00	0.39	0.86
	45°	0.65	0.00	0.06	0.69	0.56	0.00	0.29	0.69
	60°	0.48	0.00	0.05	0.52	0.49	0.00	0.23	0.52
	75°	0.34	0.00	0.03	0.39	0.29	0.00	0.14	0.39
	90°	0.27	0.00	0.00	0.33	0.22	0.00	0.00	0.33

Table S1. Average slip tendency values for different σ_1 azimuths and fault dips.