



Validating the BERMS in situ soil water content data record with a large scale temporary network

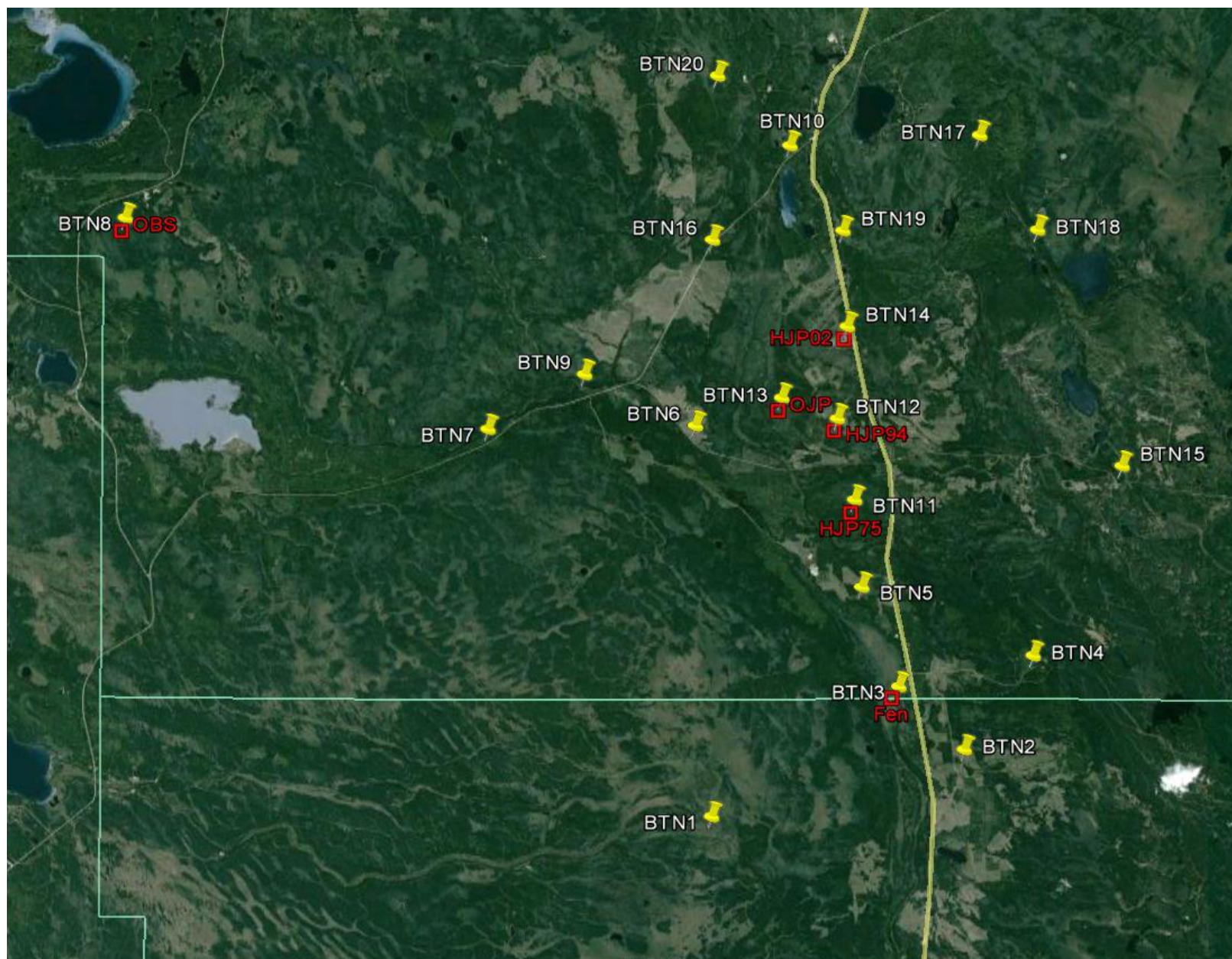
Michael H. Cosh¹, Thomas J. Jackson¹, Craig Smith², Brenda Toth³, and Aaron A. Berg⁴

¹ USDA-ARS-Hydrology and Remote Sensing Laboratory, Beltsville, MD, USA

² Climate Research Division, Science and Technology Branch, Environment Canada, Saskatoon, Saskatchewan, Canada

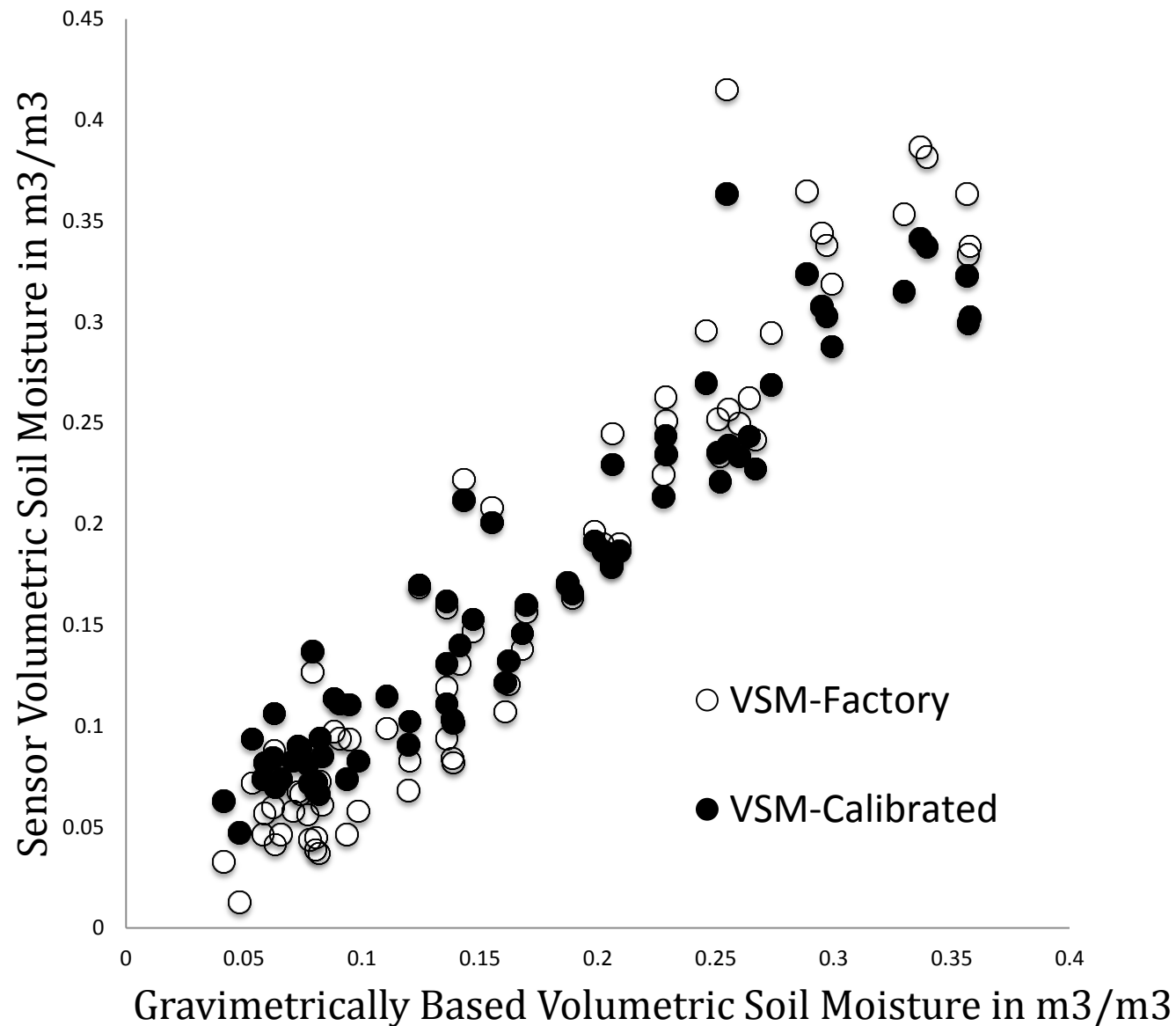
³ Hydrometeorological and Arctic Lab, MSC, Environment Canada, Saskatoon, Saskatchewan, Canada

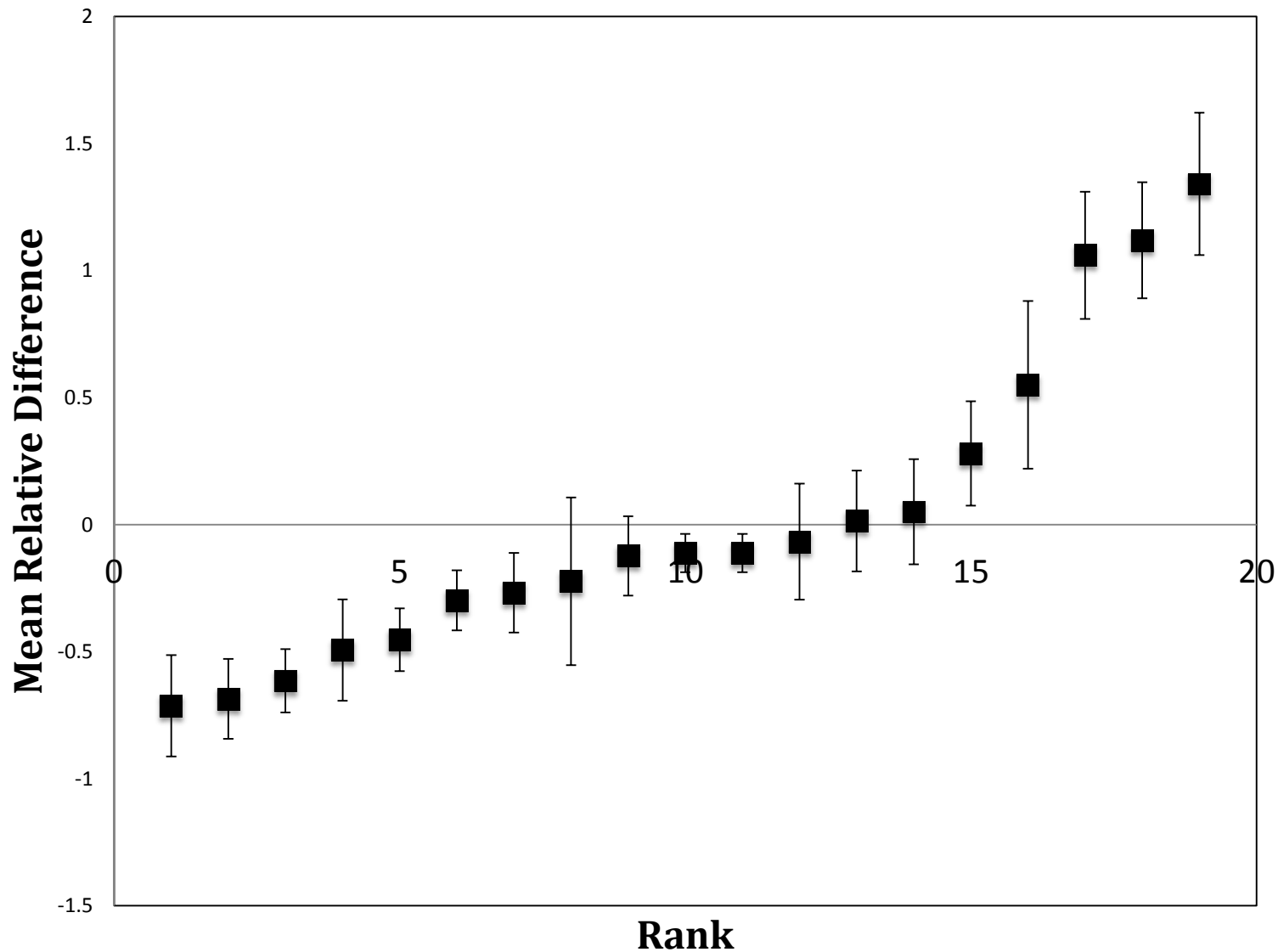
⁴ Department of Geography, University of Guelph, Guelph, Ontario, Canada

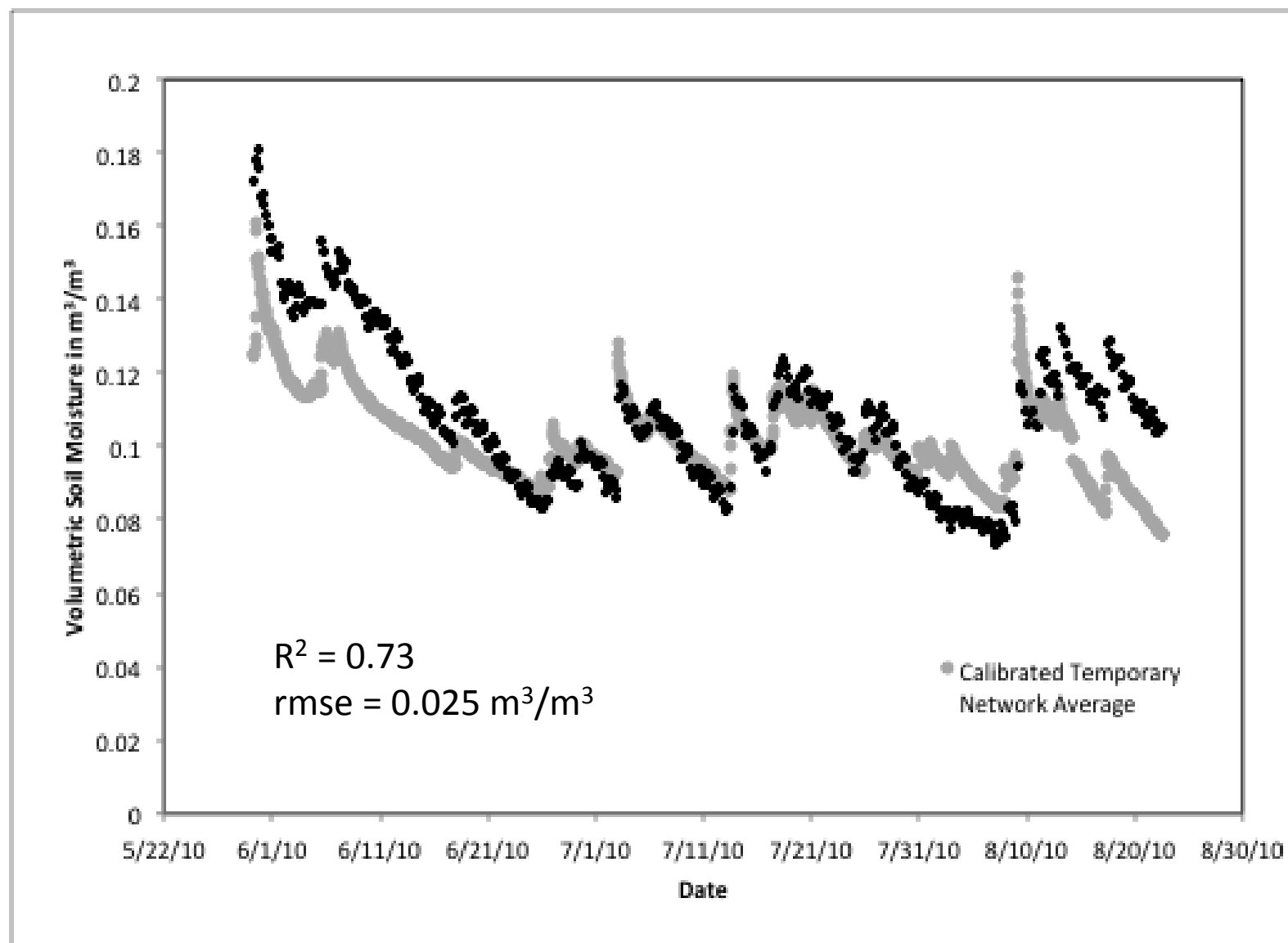


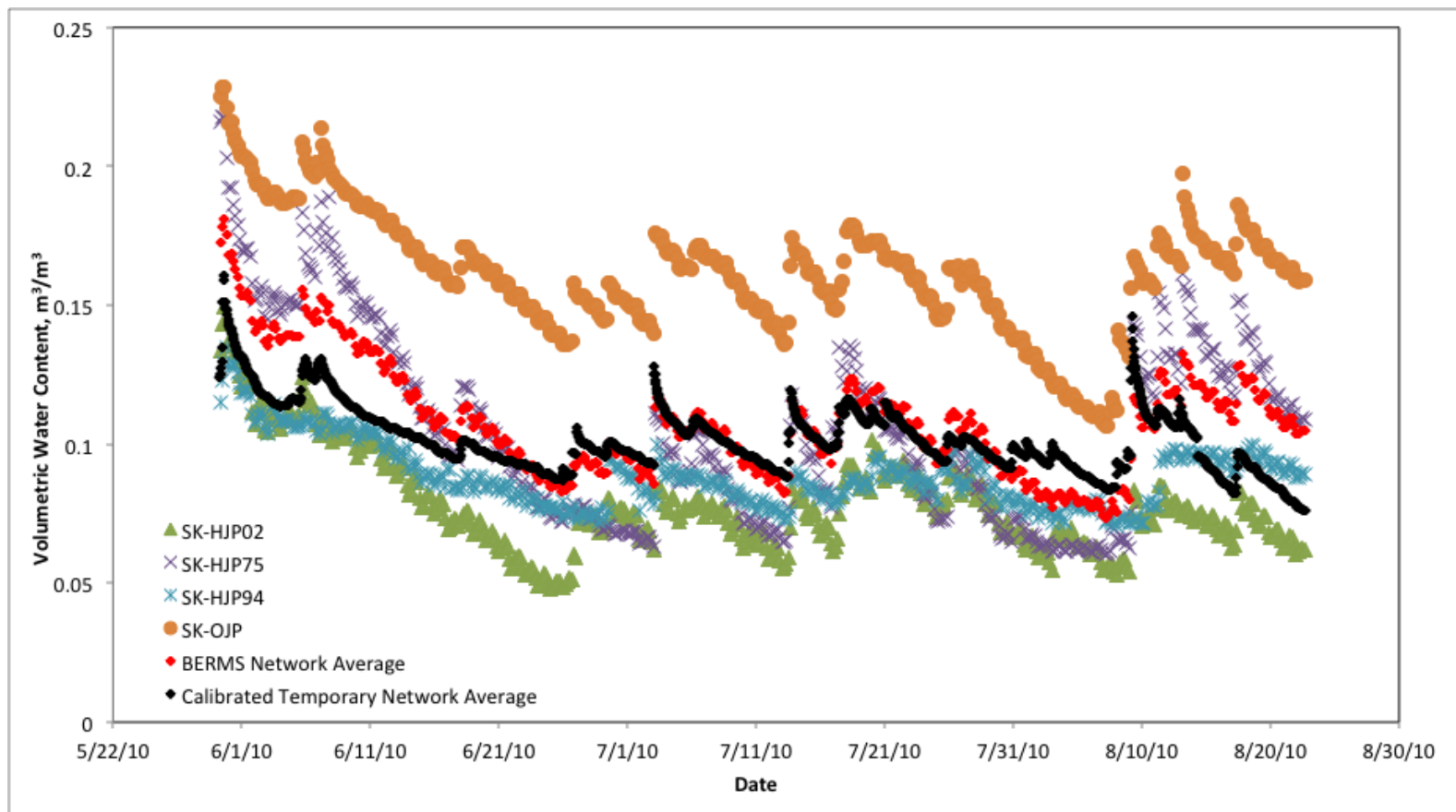
uncalibrated
rmse: 0.037 m³/m³

calibrated
rmse: 0.029 m³/m³









	HJP02	HJP75	HJP94	OJP
RMSE	0.025	.027	0.016	0.062
Bias	0.023	-0.004	0.013	-0.060

Conclusions

Established calibration for Hydra probe sensors in the BERMS domain with an rmse of $0.029 \text{ m}^3/\text{m}^3$.

The permanent network approximates the large scale average with an rmse of $0.025 \text{ m}^3/\text{m}^3$. (FEN removed)