Supplemental Material for

Episodic basin-scale soil moisture anomalies associated with high relative humidity events in the McMurdo Dry Valleys, Antarctica

Joseph Levy1\*

1Colgate University Department of Geology, Hamilton, NY, 13346, USA. jlevy@colgate.edu

ORCID ID: 0000-0002-6222-139X

\*Corresponding Author

This supplement contains soil reflectivity versus soil relative humidity plots, colour-coded by day of month (blue = earliest day of record, red = last day of record), for all publicly-released 15-minute meteorological data for Lake Bonney. Raw data can be downloaded from [www.mcmlter.org](http://www.mcmlter.org). Data can be processed using R programming language scripts found at <https://github.com/jslevy/mdv_albedo>

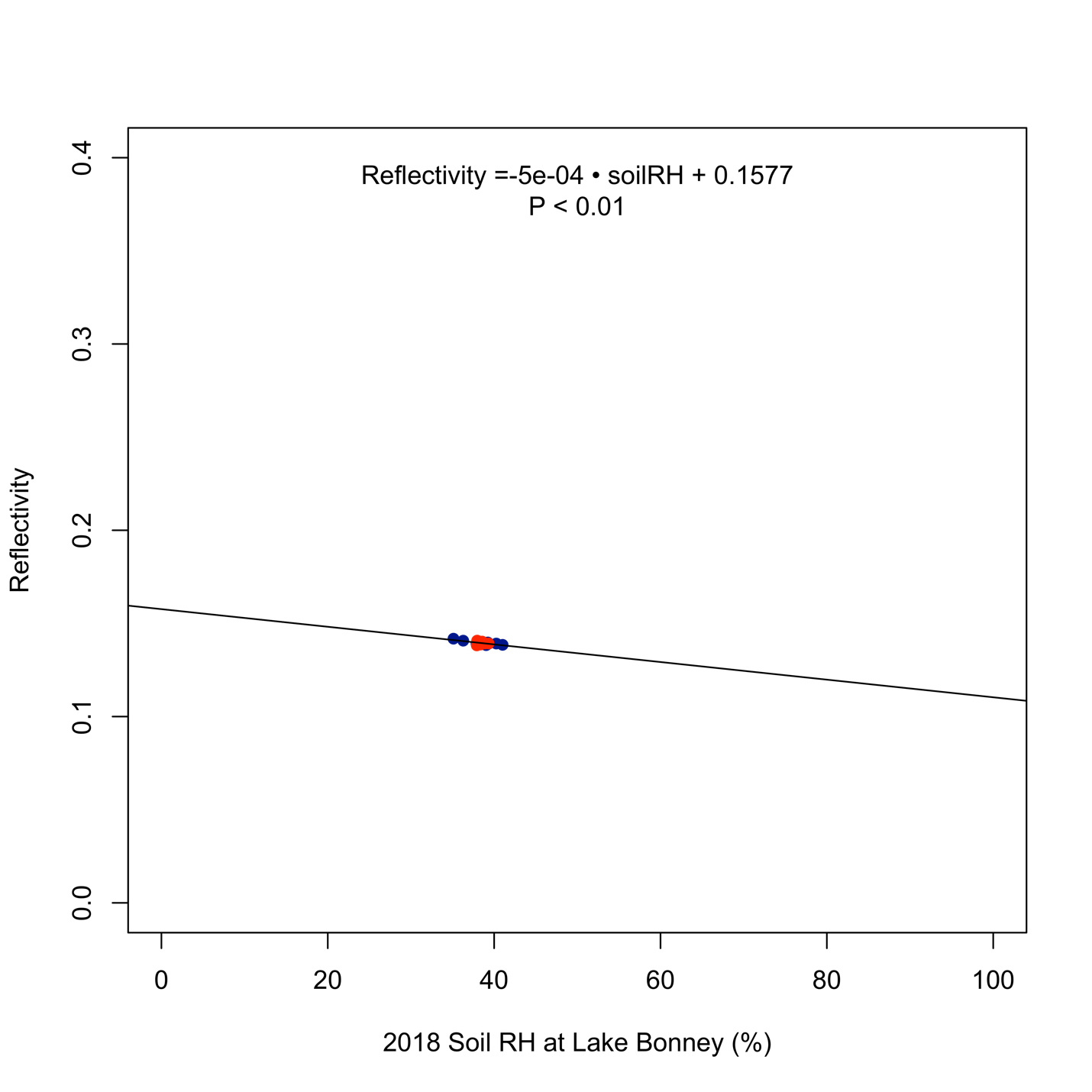


Fig. S1. 2018 soil relative humidity (soil RH) versus reflectivity. Blue = earliest day of record, red = last day of record.

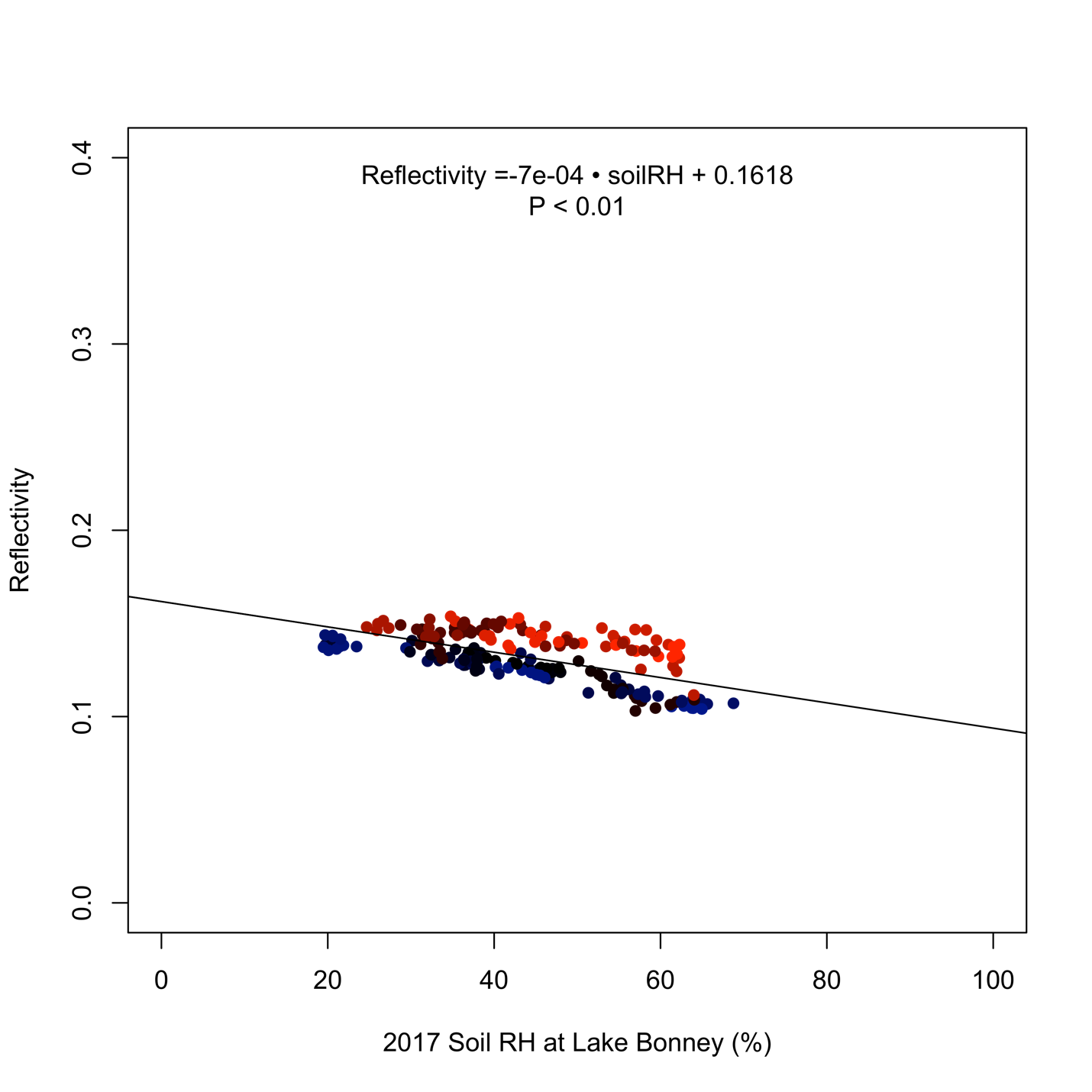


Fig. S2. 2017 soil relative humidity (soil RH) versus reflectivity. Blue = earliest day of record, red = last day of record.

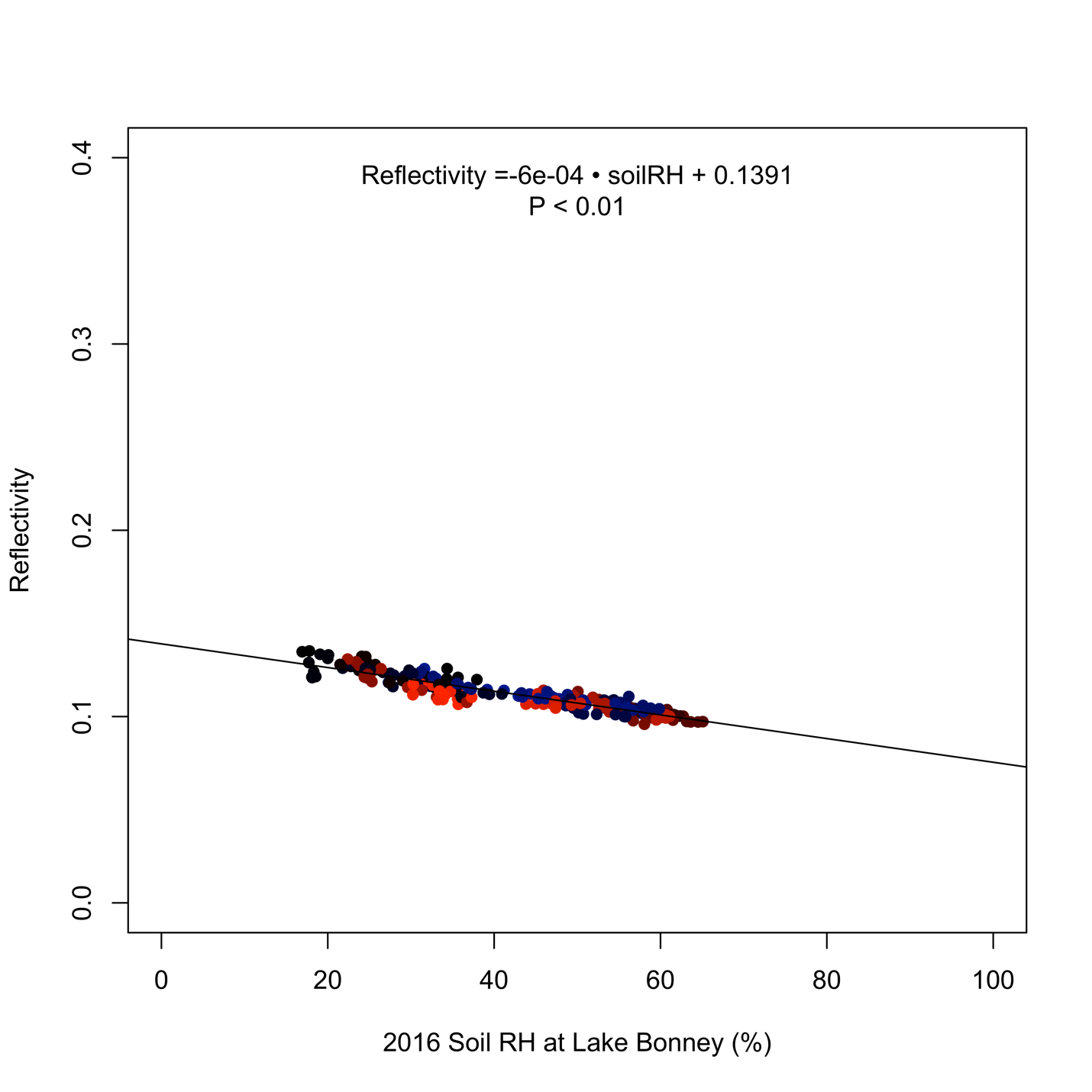


Fig. S3. 2016 soil relative humidity (soil RH) versus reflectivity. Blue = earliest day of record, red = last day of record.

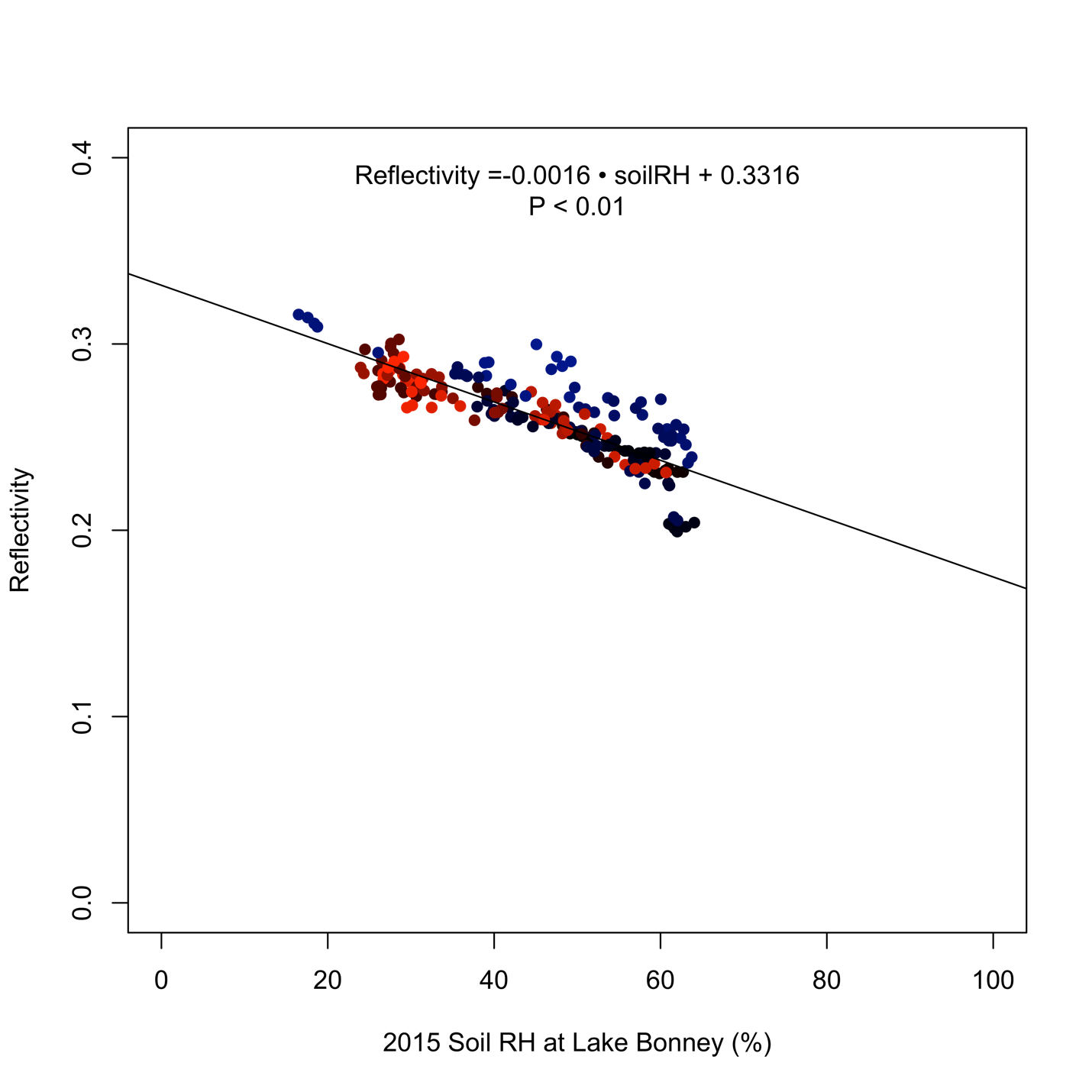


Fig. S4. 2015 soil relative humidity (soil RH) versus reflectivity. Blue = earliest day of record, red = last day of record.

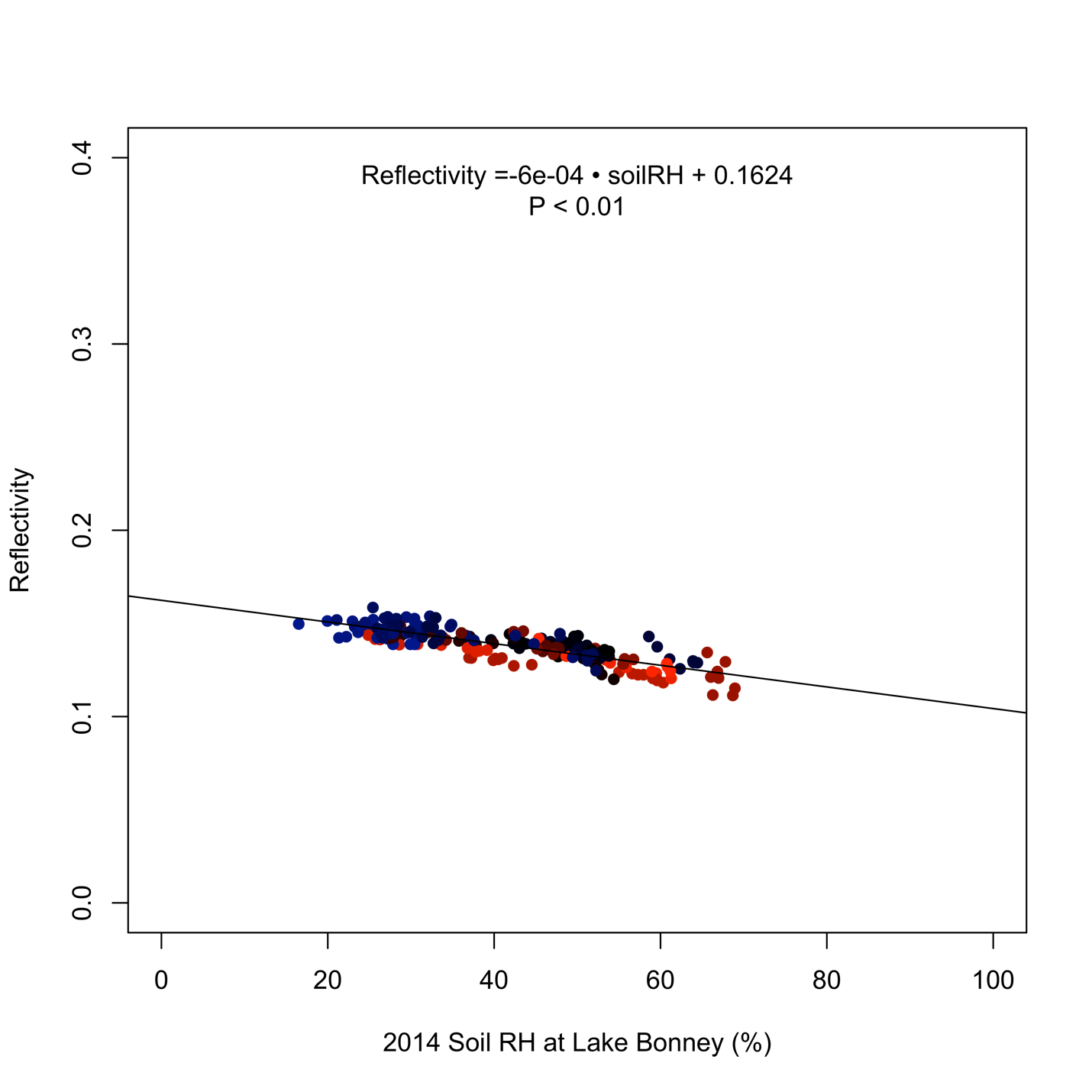


Fig. S5. 2014 soil relative humidity (soil RH) versus reflectivity. Blue = earliest day of record, red = last day of record.

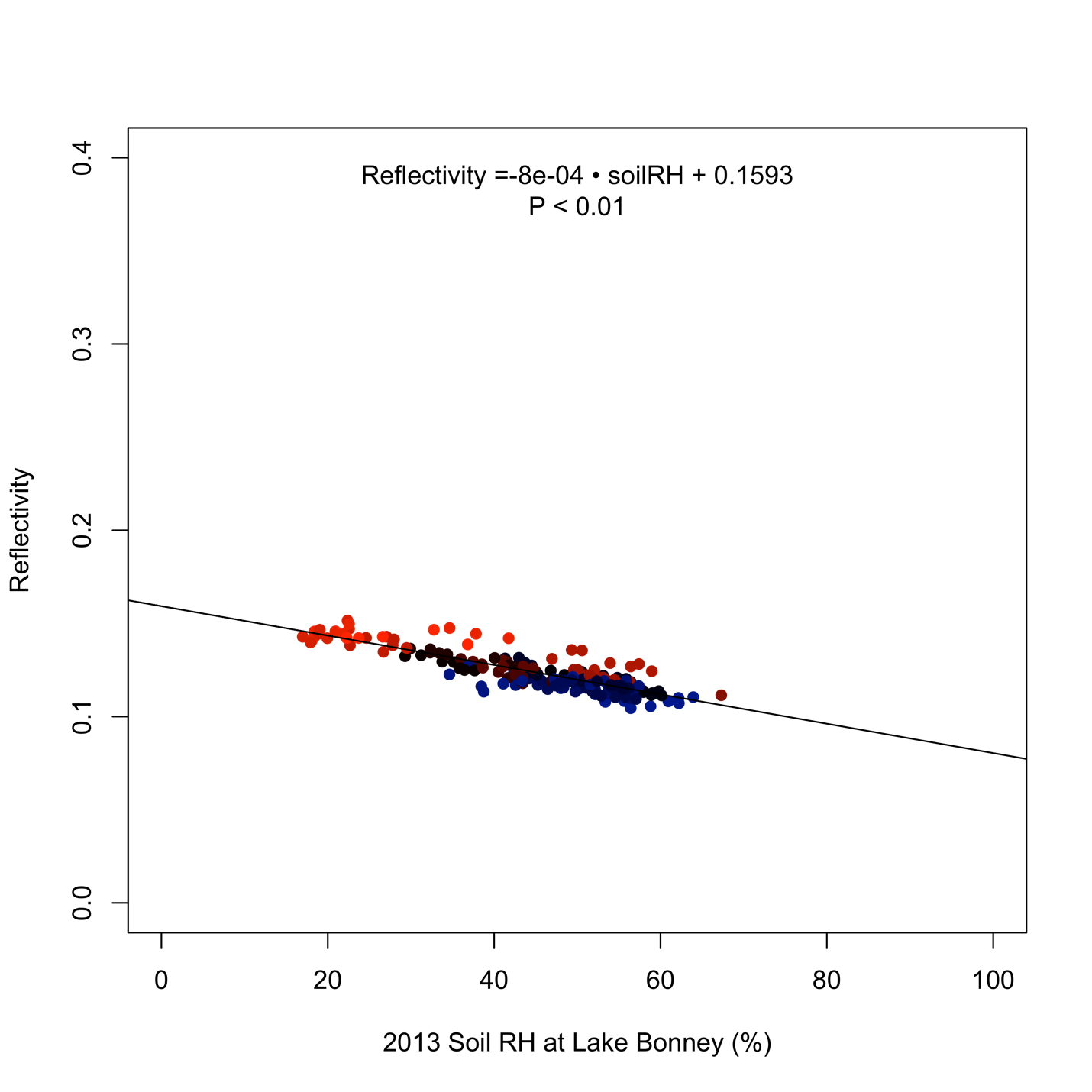


Fig. S6. 2013 soil relative humidity (soil RH) versus reflectivity. Blue = earliest day of record, red = last day of record.

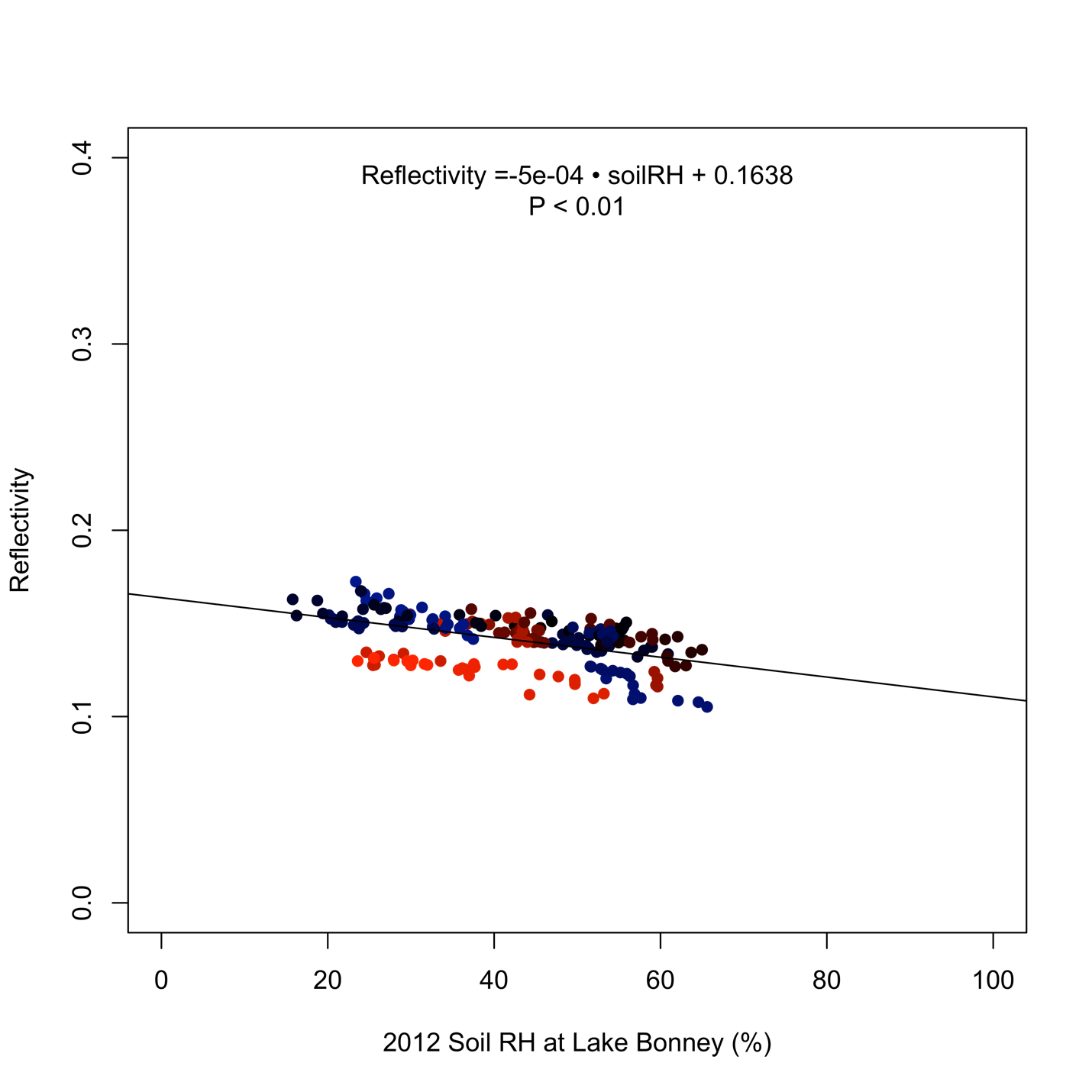


Fig. S7. 2012 soil relative humidity (soil RH) versus reflectivity. Blue = earliest day of record, red = last day of record.

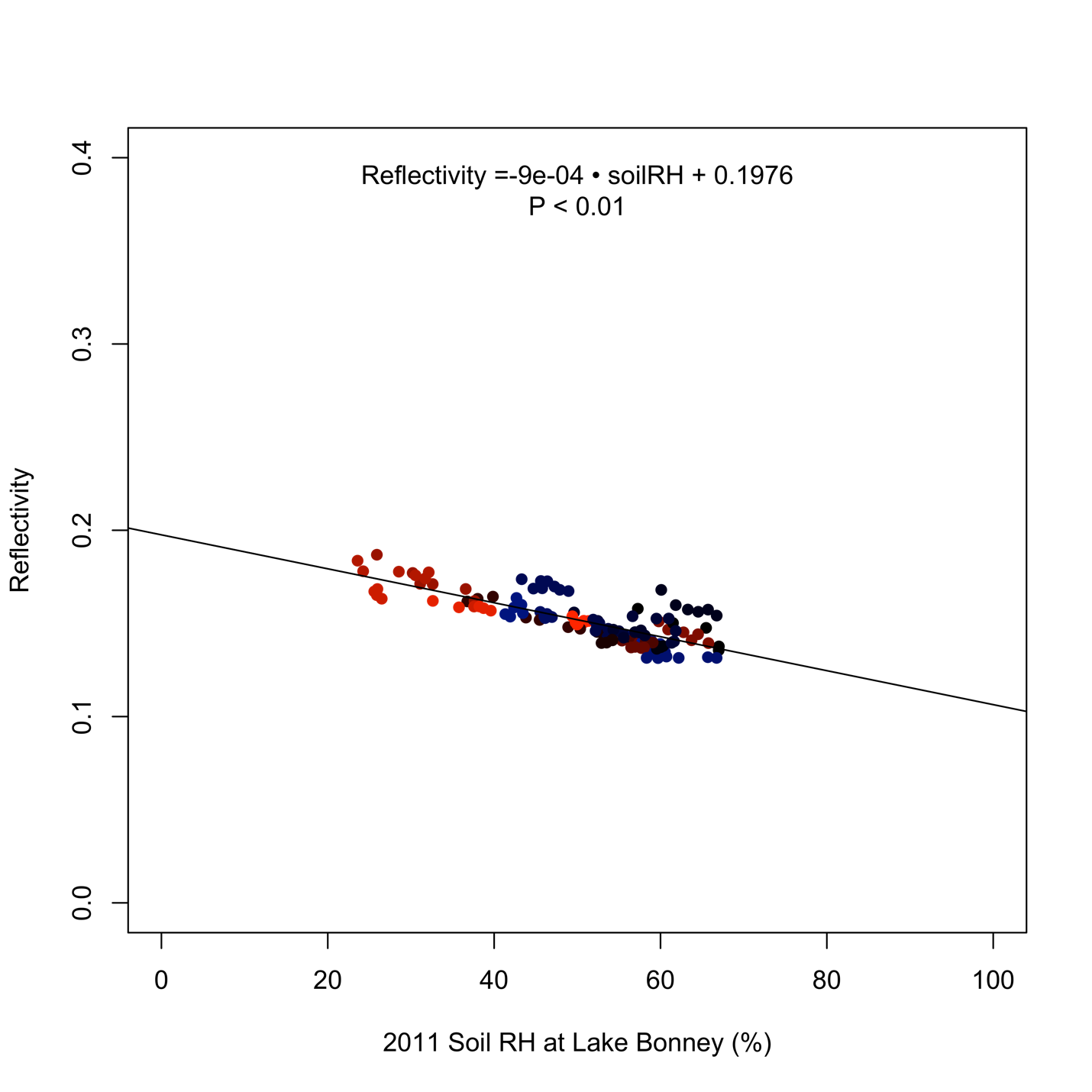


Fig. S8. 2011 soil relative humidity (soil RH) versus reflectivity. Blue = earliest day of record, red = last day of record.

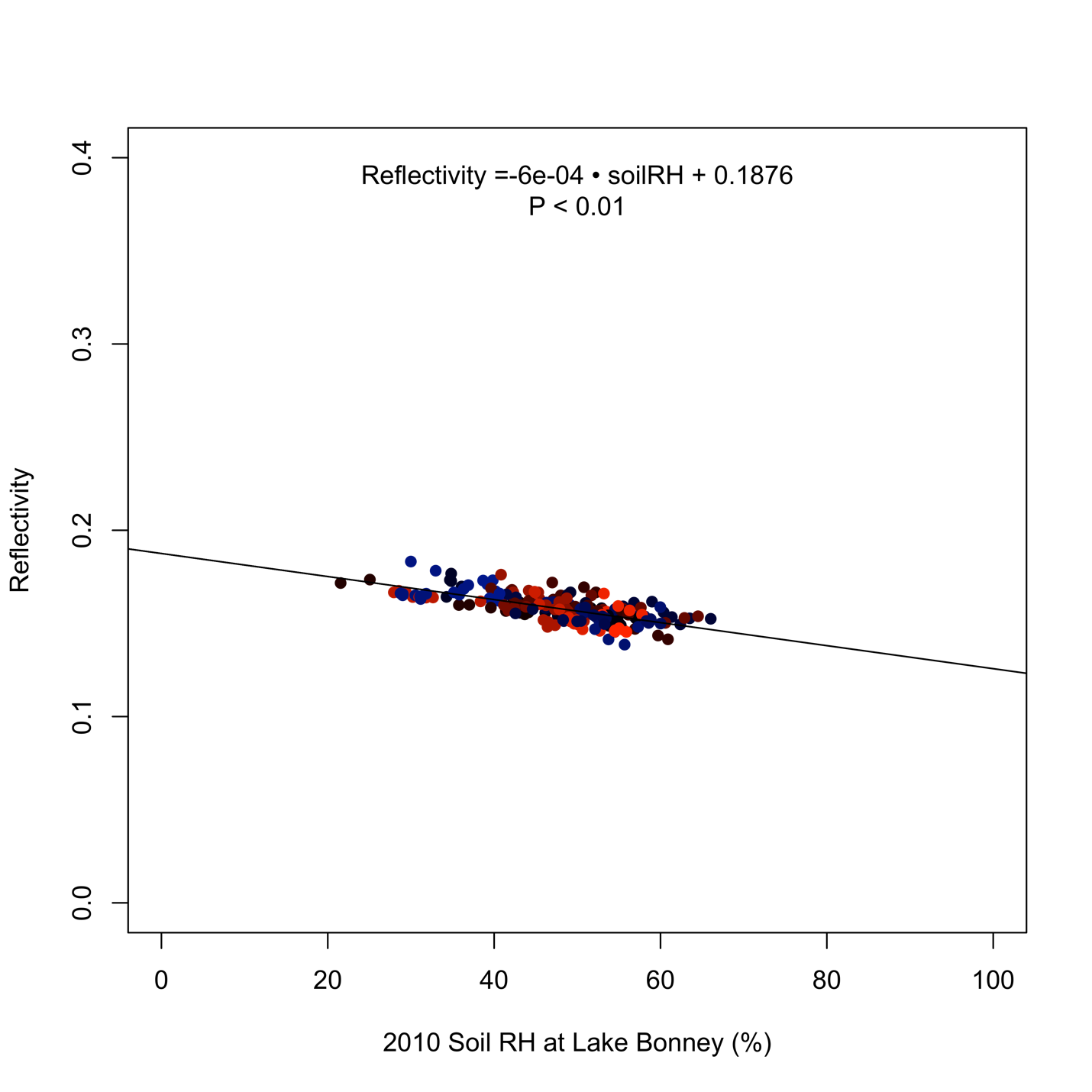


Fig. S9. 2010 soil relative humidity (soil RH) versus reflectivity. Blue = earliest day of record, red = last day of record.

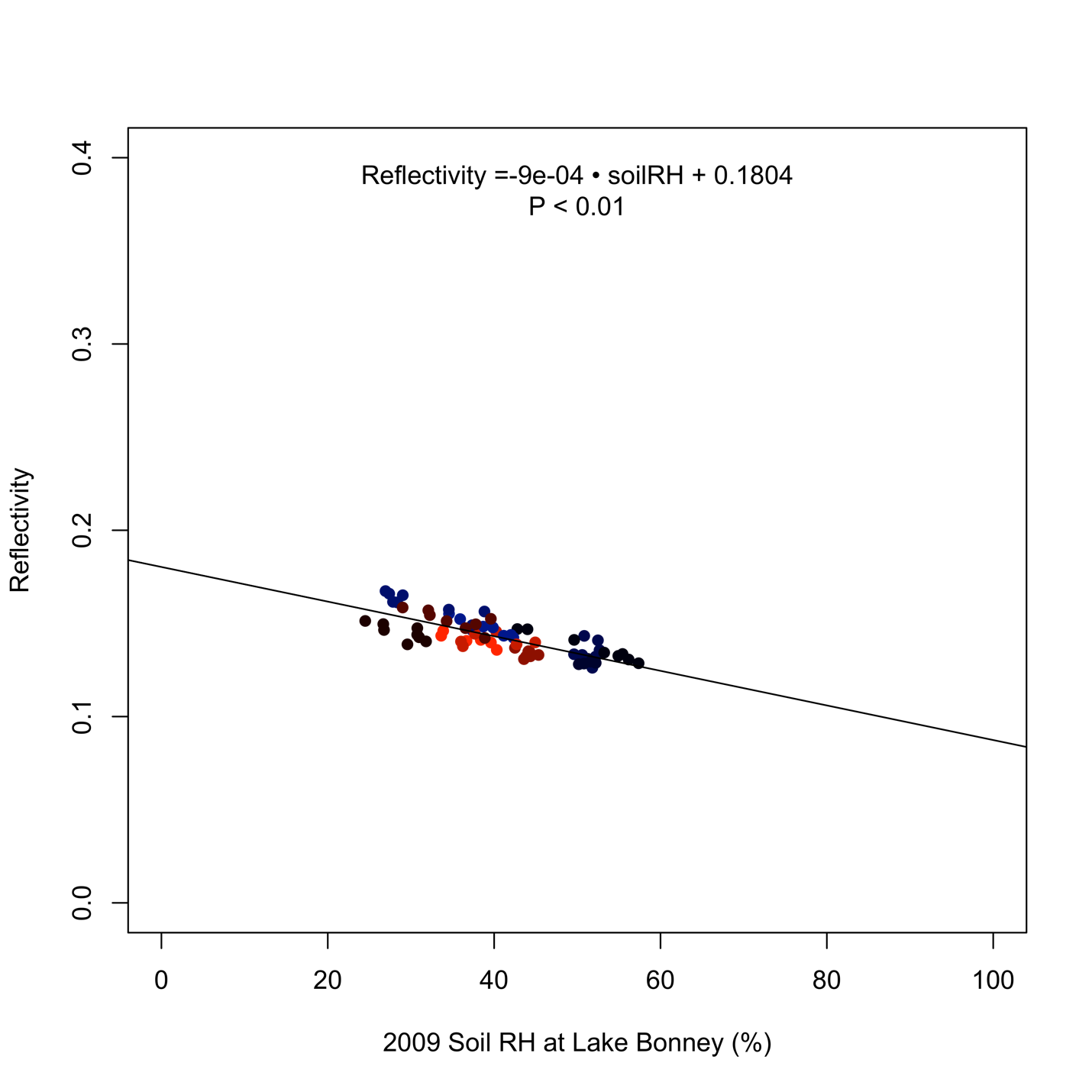


Fig. S10. 2009 soil relative humidity (soil RH) versus reflectivity. Blue = earliest day of record, red = last day of record.

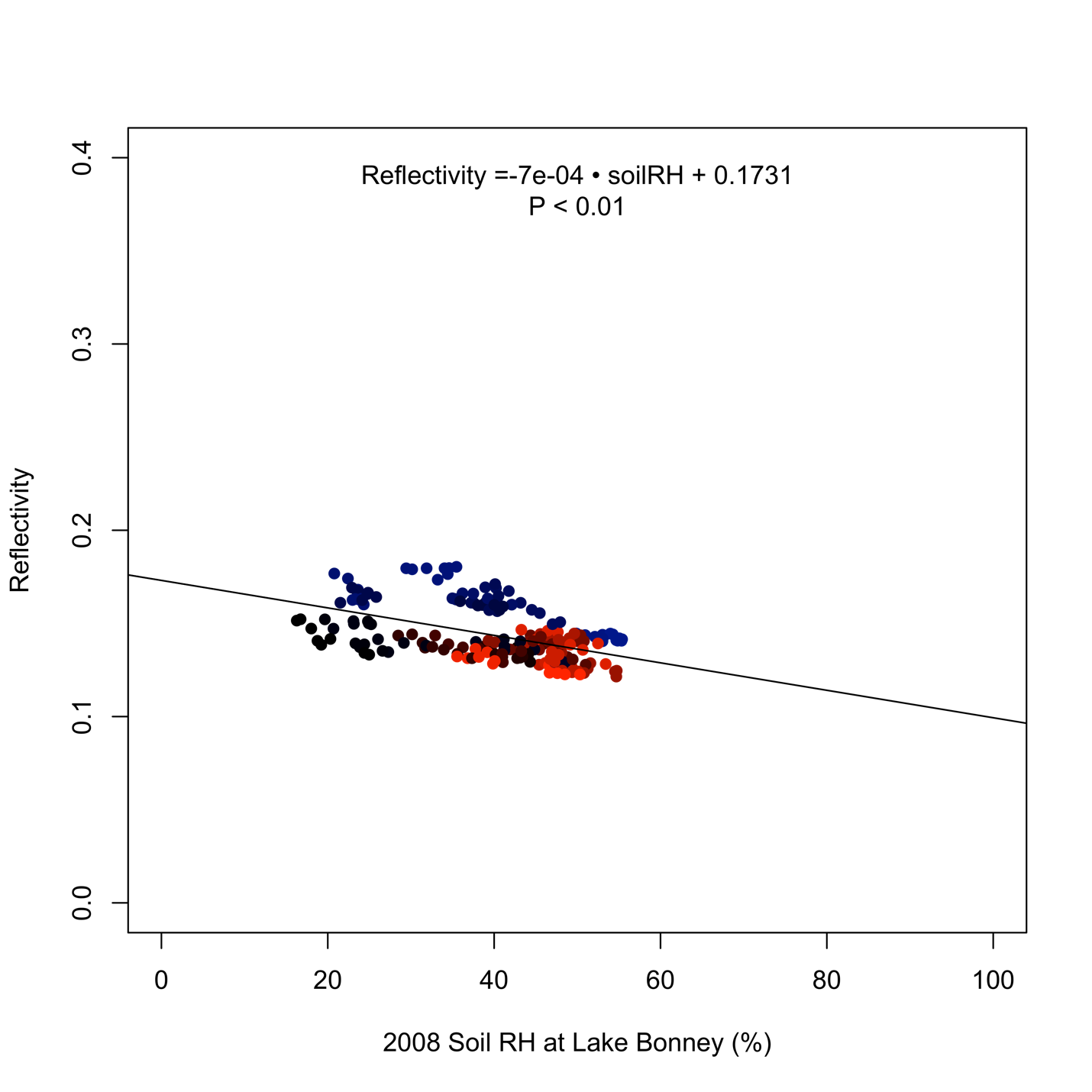


Fig. S11. 2008 soil relative humidity (soil RH) versus reflectivity. Blue = earliest day of record, red = last day of record.

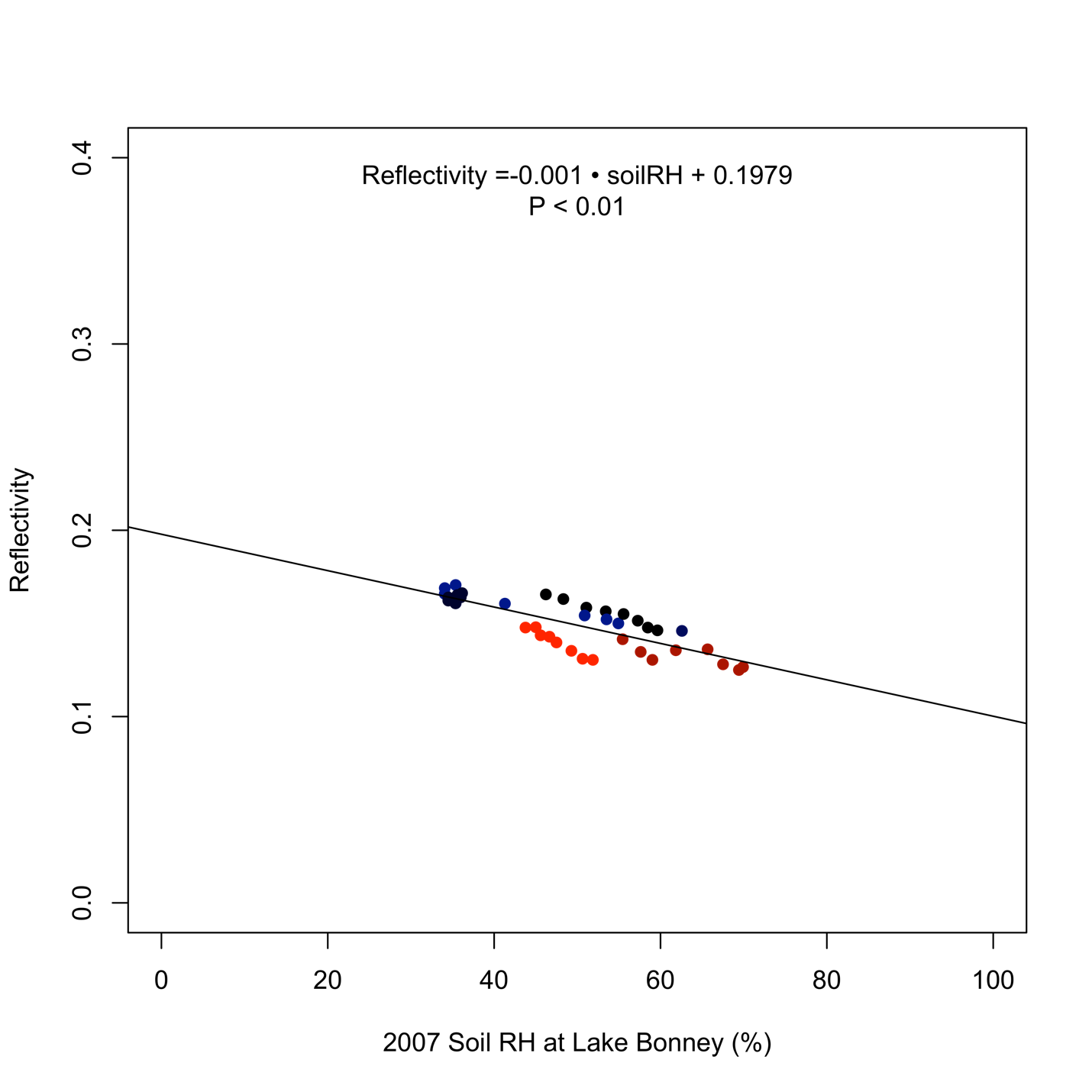


Fig. S12. 2007 soil relative humidity (soil RH) versus reflectivity. Blue = earliest day of record, red = last day of record.

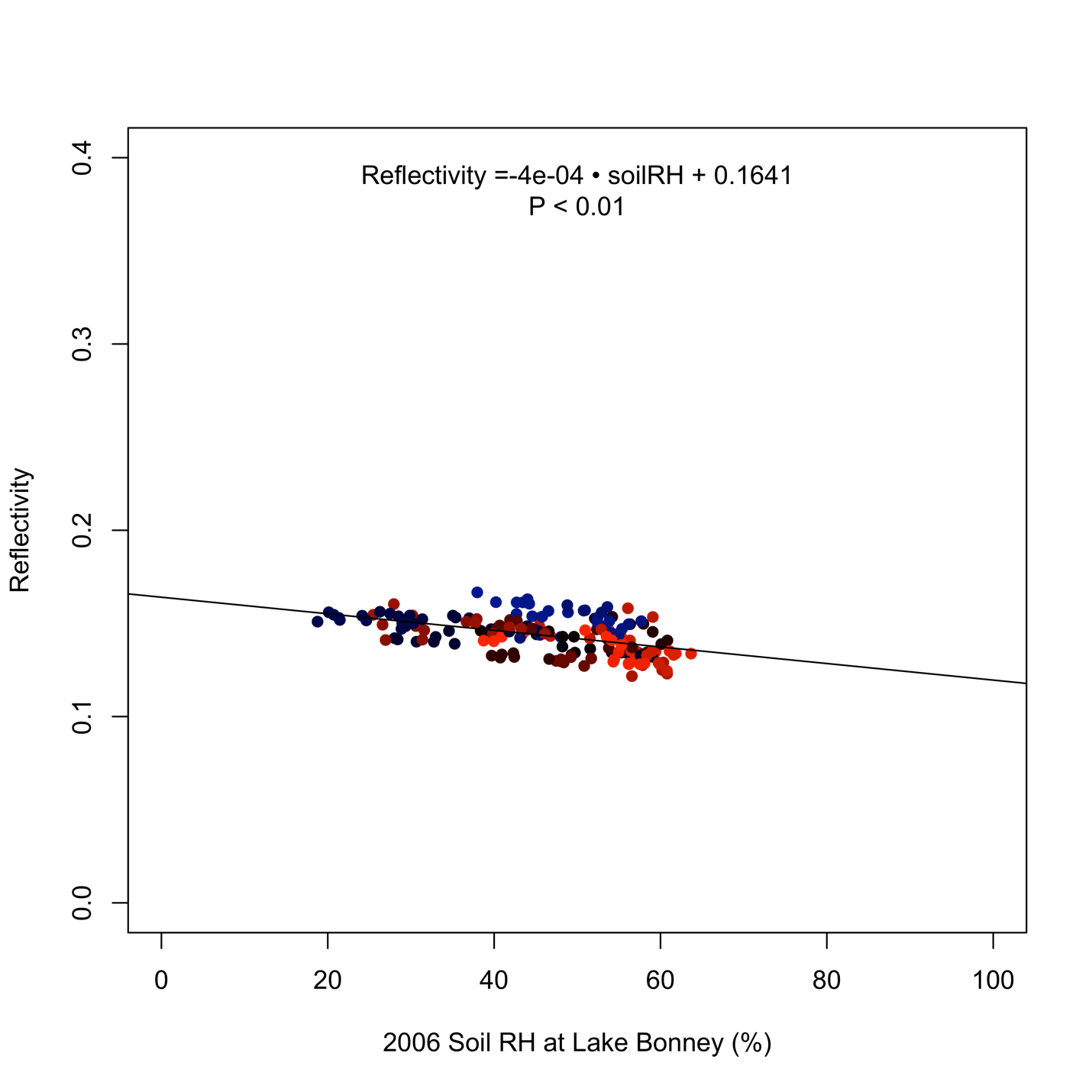


Fig. S13. 2006 soil relative humidity (soil RH) versus reflectivity. Blue = earliest day of record, red = last day of record.

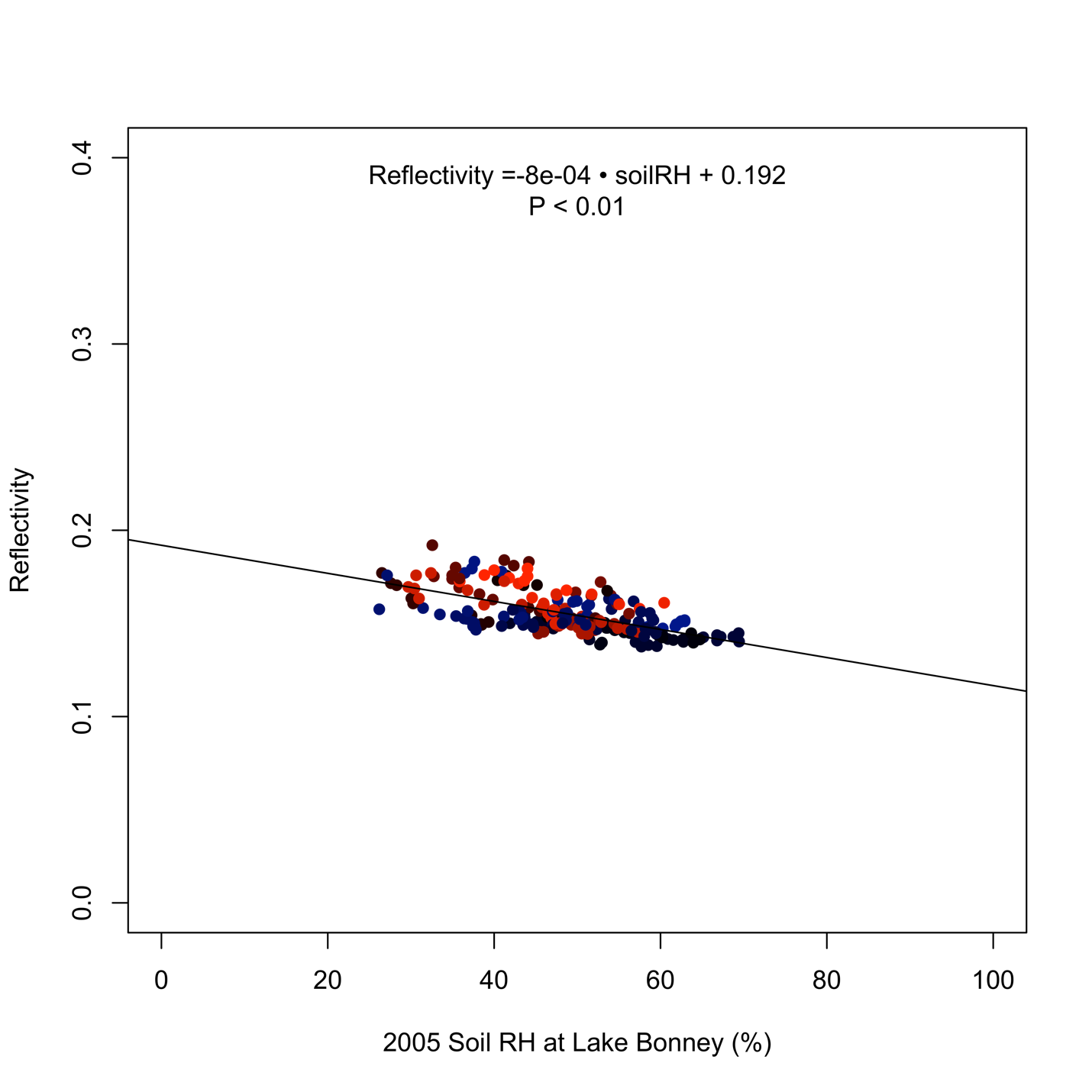


Fig. S14. 2005 soil relative humidity (soil RH) versus reflectivity. Blue = earliest day of record, red = last day of record.

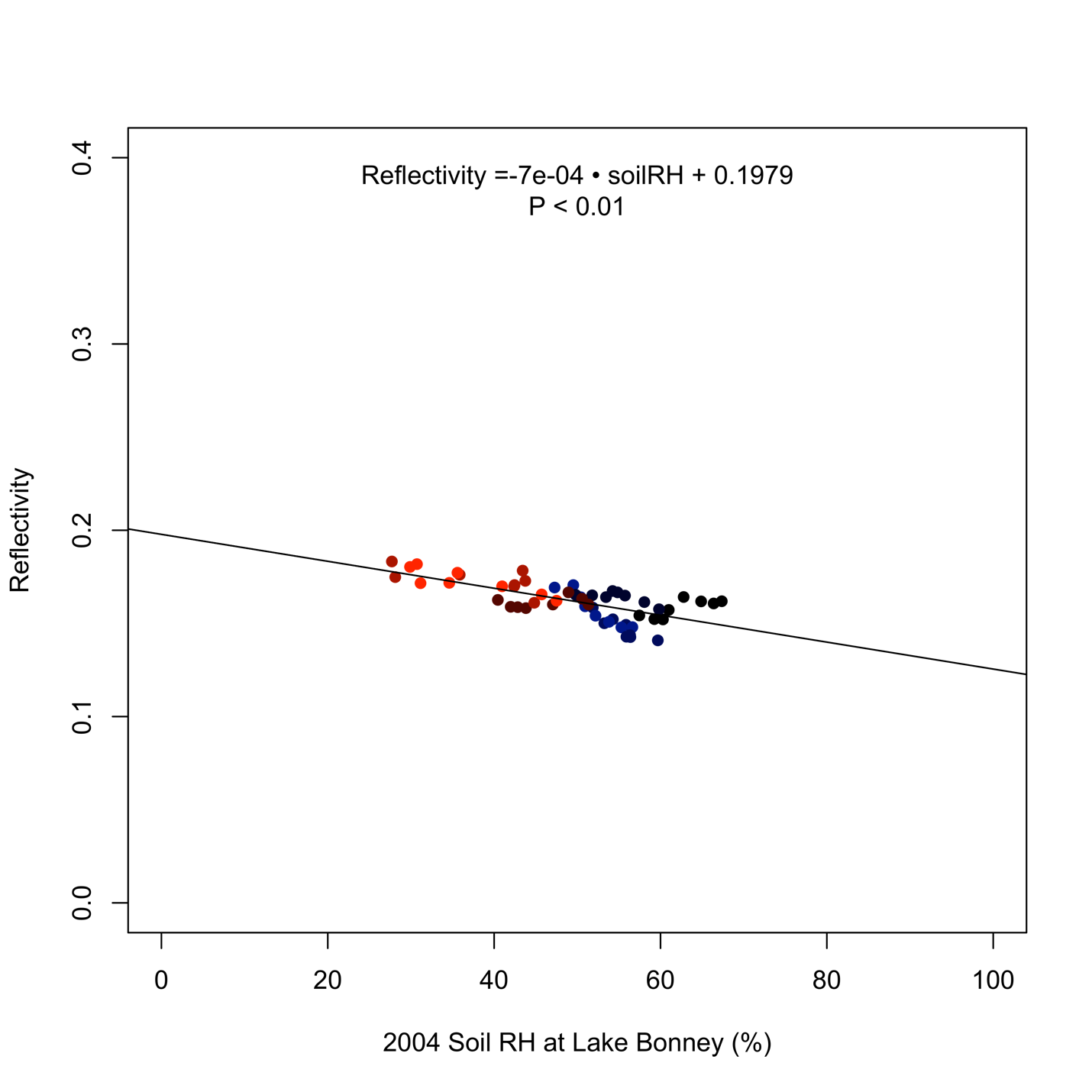


Fig. S15. 2004 soil relative humidity (soil RH) versus reflectivity. Blue = earliest day of record, red = last day of record.

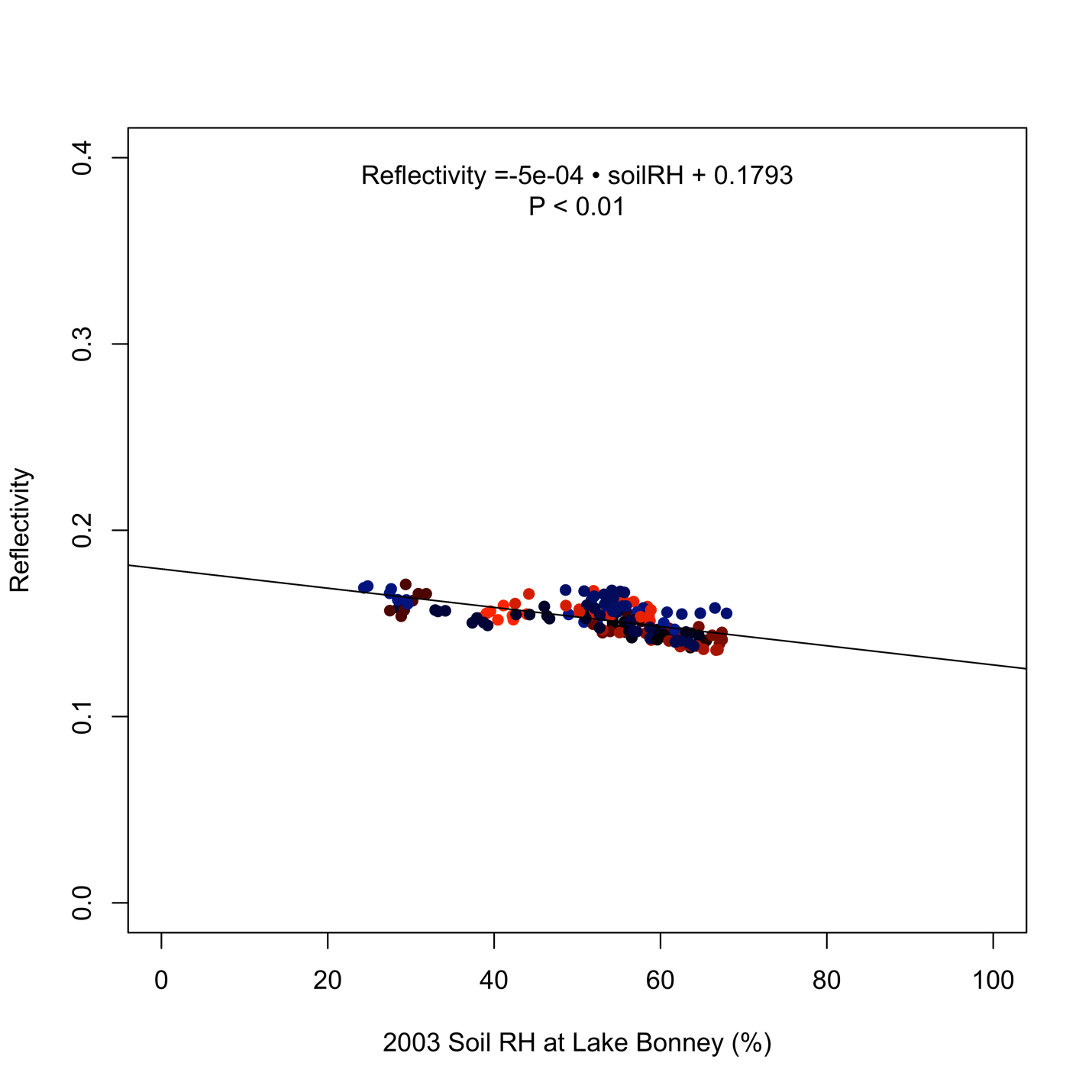


Fig. S16. 2003 soil relative humidity (soil RH) versus reflectivity. Blue = earliest day of record, red = last day of record.

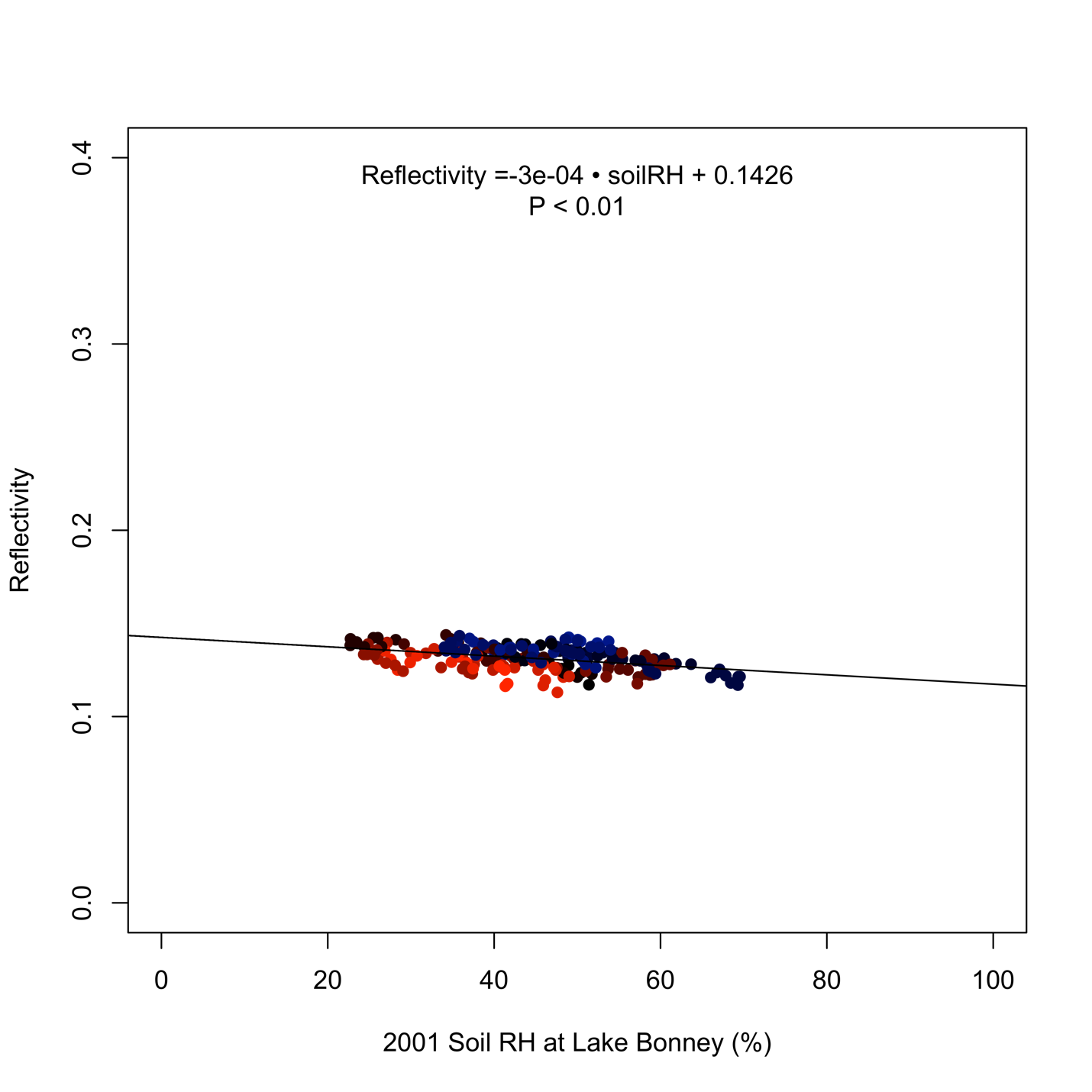


Fig. S17. 2001 soil relative humidity (soil RH) versus reflectivity. Blue = earliest day of record, red = last day of record.

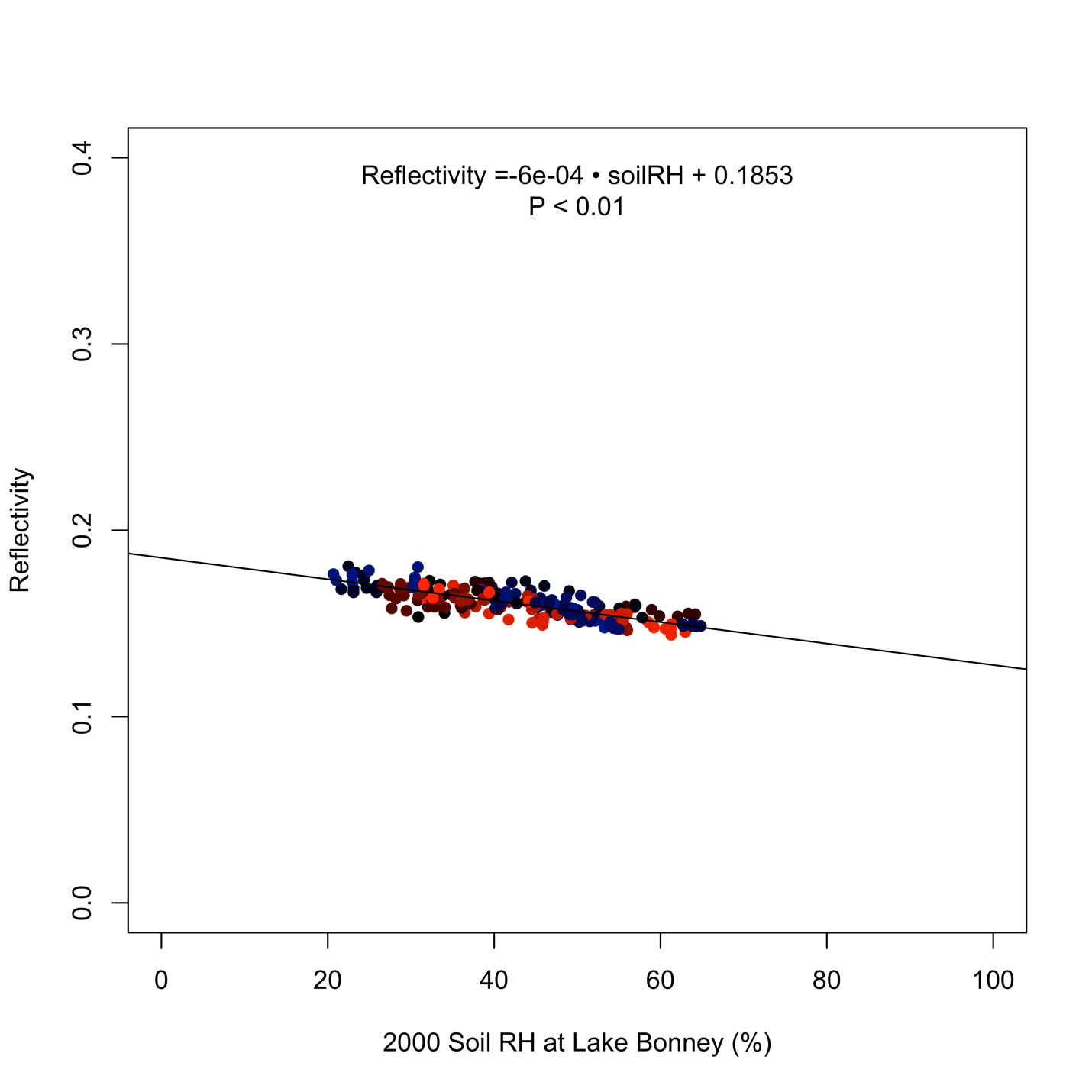


Fig. S18. 2000 soil relative humidity (soil RH) versus reflectivity. Blue = earliest day of record, red = last day of record.

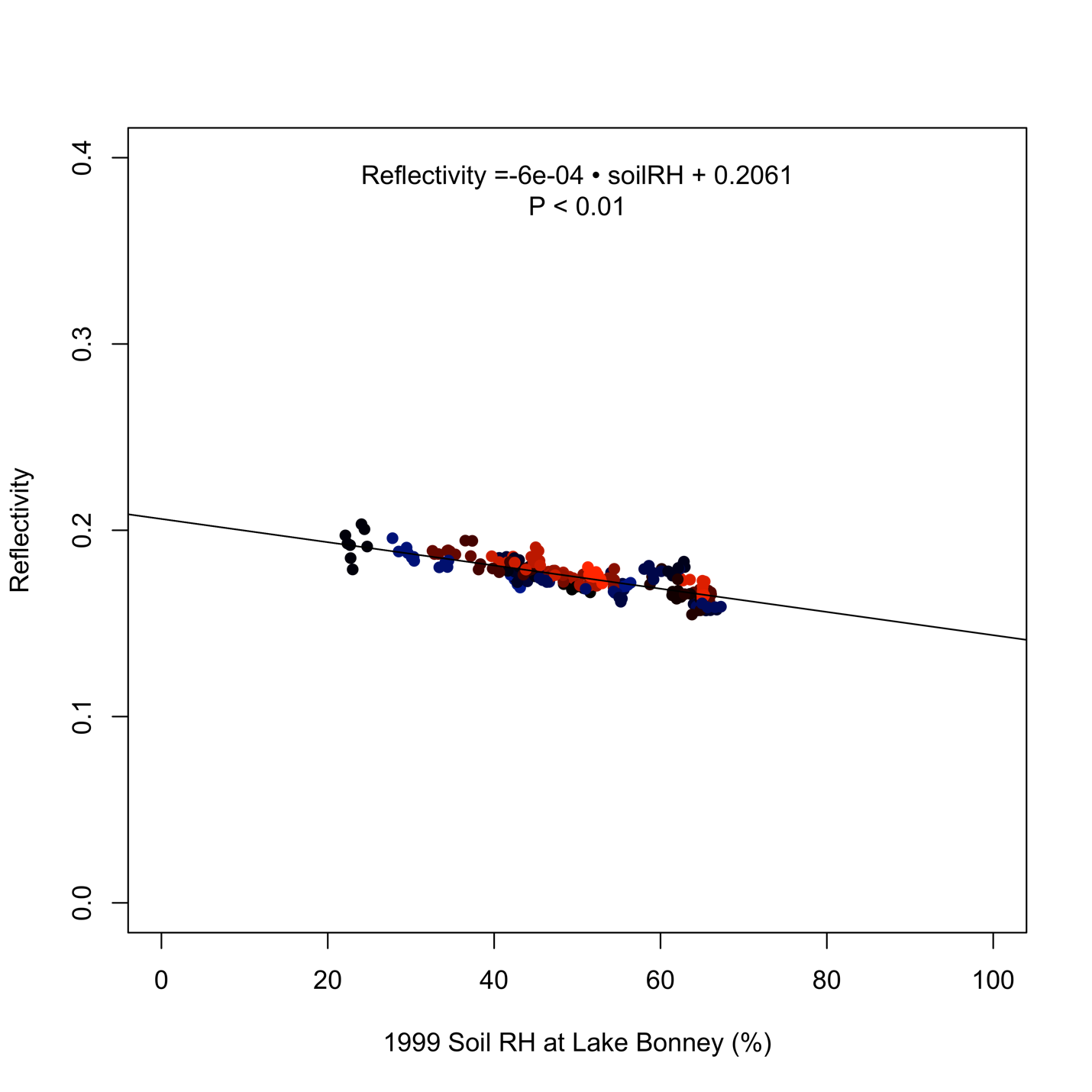


Fig. S19. 1999 soil relative humidity (soil RH) versus reflectivity. Blue = earliest day of record, red = last day of record.

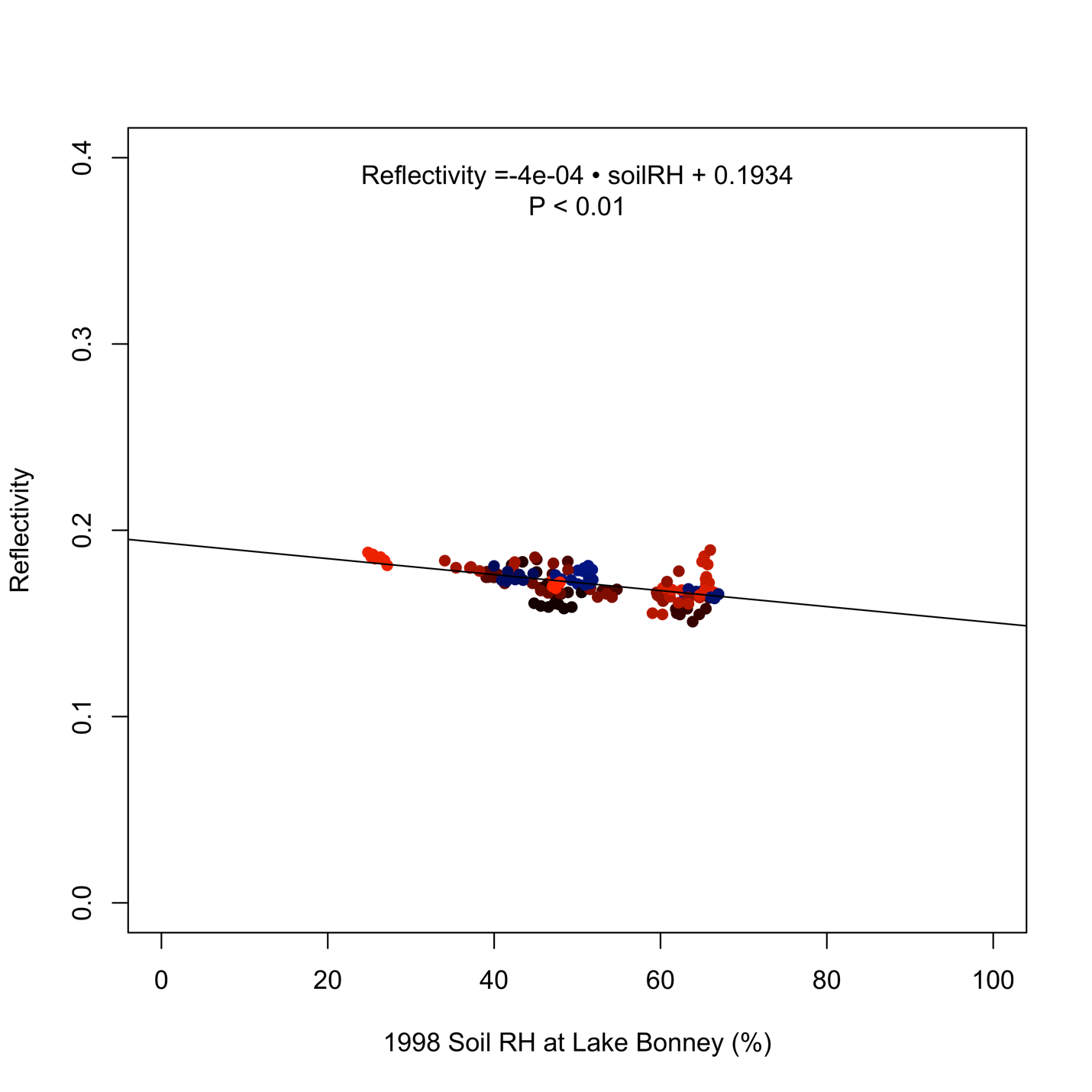


Fig. S20. 1998 soil relative humidity (soil RH) versus reflectivity. Blue = earliest day of record, red = last day of record.

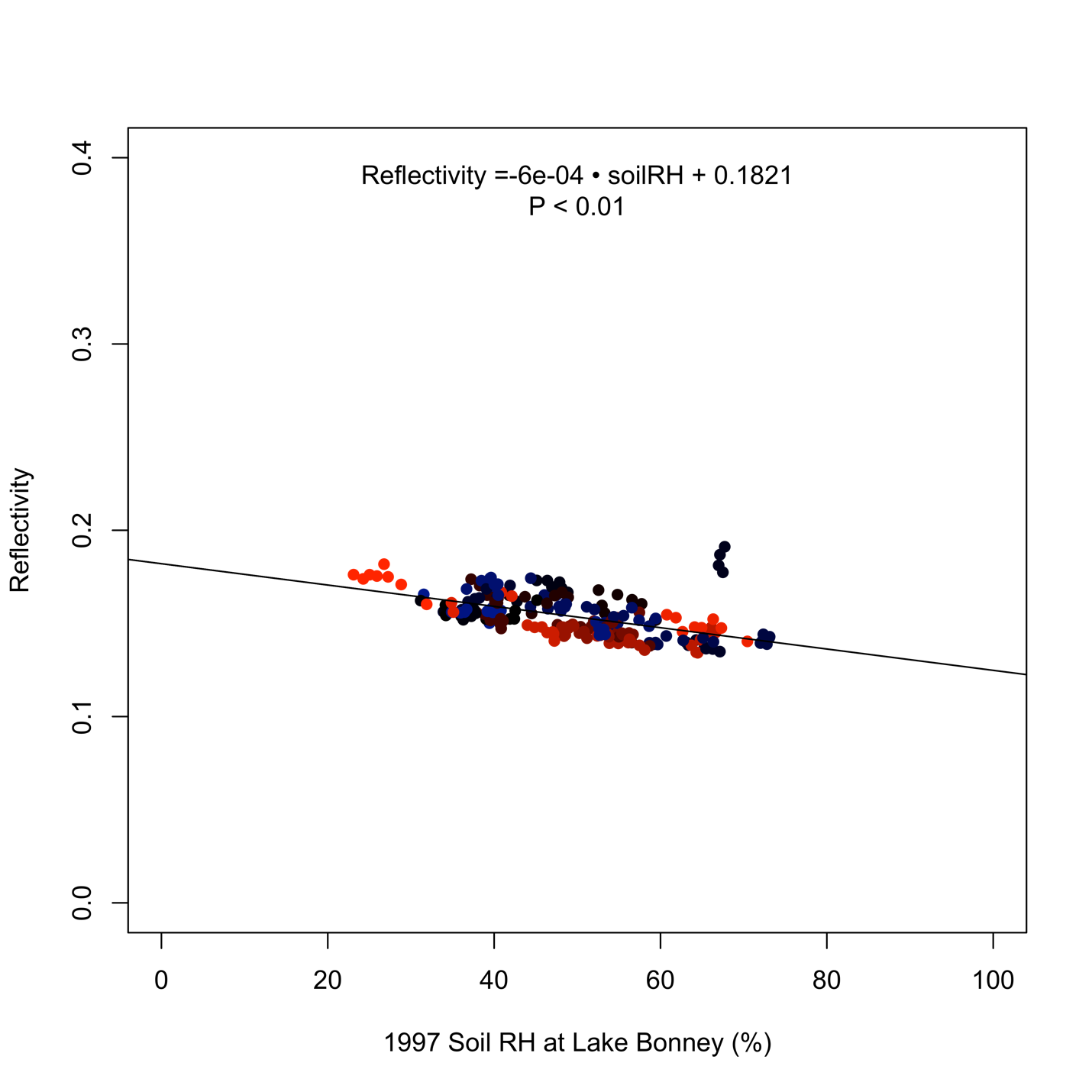


Fig. S21. 1997 soil relative humidity (soil RH) versus reflectivity. Blue = earliest day of record, red = last day of record.

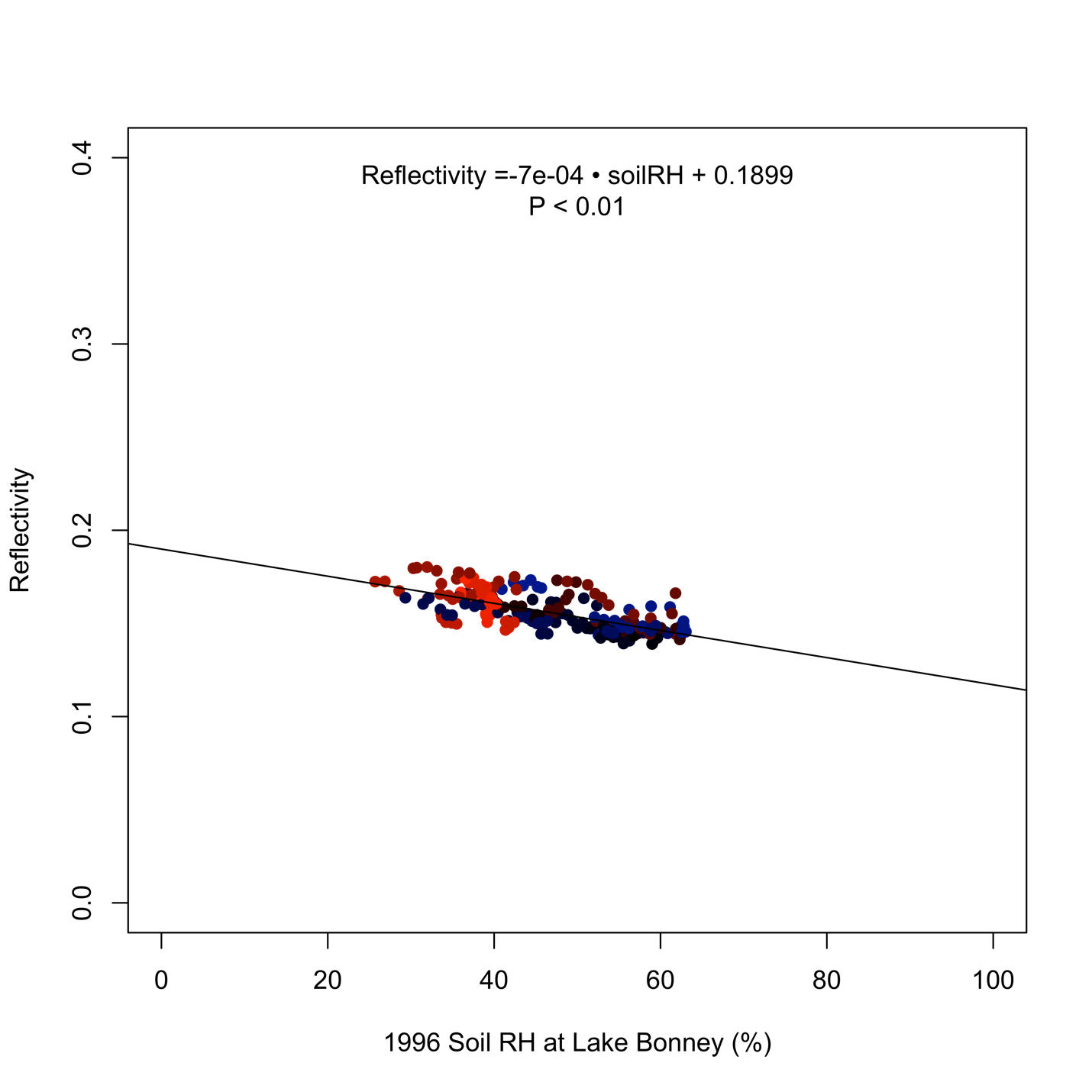


Fig. S22. 1996 soil relative humidity (soil RH) versus reflectivity. Blue = earliest day of record, red = last day of record.

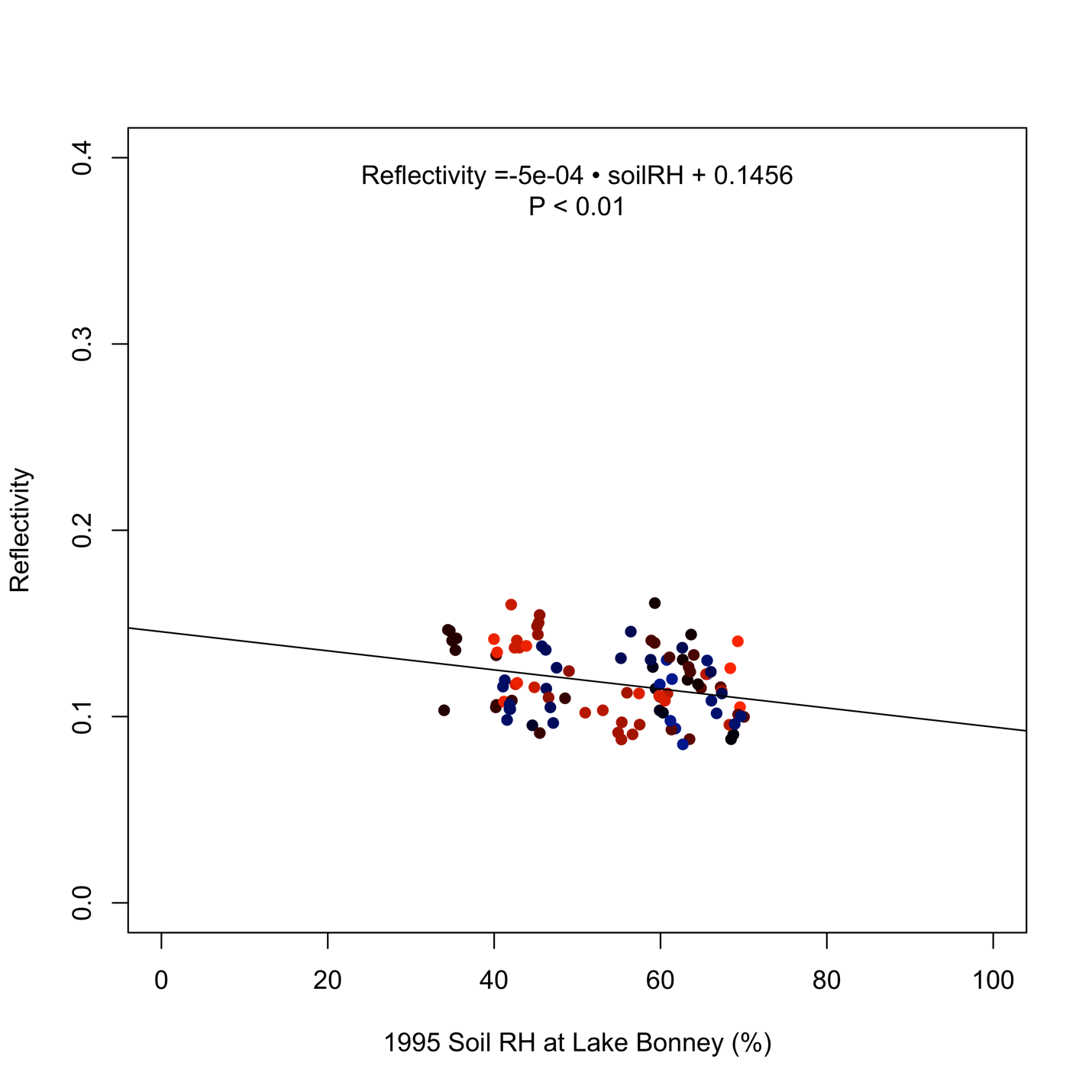


Fig. S23. 1995 soil relative humidity (soil RH) versus reflectivity. Blue = earliest day of record, red = last day of record.