NOTES FOR 2016 FORUM

Design of Rule Curves for the Namakan Reservoir / Rainy Lake Watershed

2015 International Rainy-Lake of the Woods Watershed Forum
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Github: http://jckantor.github.io/Rainy-Lake-Hydrology/

OVERVIEW

1. Evidence of Change
2. Ice Out Predictor
3. Discussion

EVIDENCE OF CHANGE

RAINY RIVER DRAINAGE BASIN

Source: International Rainy Lake Board of Control (now IRLWWB)

WINTERS ARE WARMER, KINL, 1948–2014

Source: Github Repository for this paper.

WINTER TEMPERATURES ARE LESS VARIABLE, KINL, 1948–2014

Source: Github Repository for this paper.

DISTRIBUTION OF JANUARY HIGHS AND LOWS, KINL, 1948–2014

Source: Github Repository for this paper.

DISTRIBUTION OF LOWS, KINL, 1948–2014

Source: Github Repository for this paper.

DISTRIBUTION OF HIGHS, KINL, 1948–2014

Source: Github Repository for this paper.

ICE OUT DATES ON RAINY LAKE ARE EARLIER

Ice out dates are earlier on Rainy Lake have become earlier. ($p < 0.01$)

Source: Github Repository for this paper.

ICE OUT DATES ON KABETOGOMA LAKE, 1985–2015

Source: Github Repository for this paper.

ICE OUT DATES ON LAKE OF THE WOODS, 1985–2015

Source: Github Repository for this paper.

ICE OUT PREDICTOR

ICE OUT DATES ON LAKE OF THE WOODS, 1985–2015

Source: Github Repository for this paper.

DISCUSSION