

# TREE-LINE MOVEMENTS AT A GLOBAL SCALE

Amanda Hansson

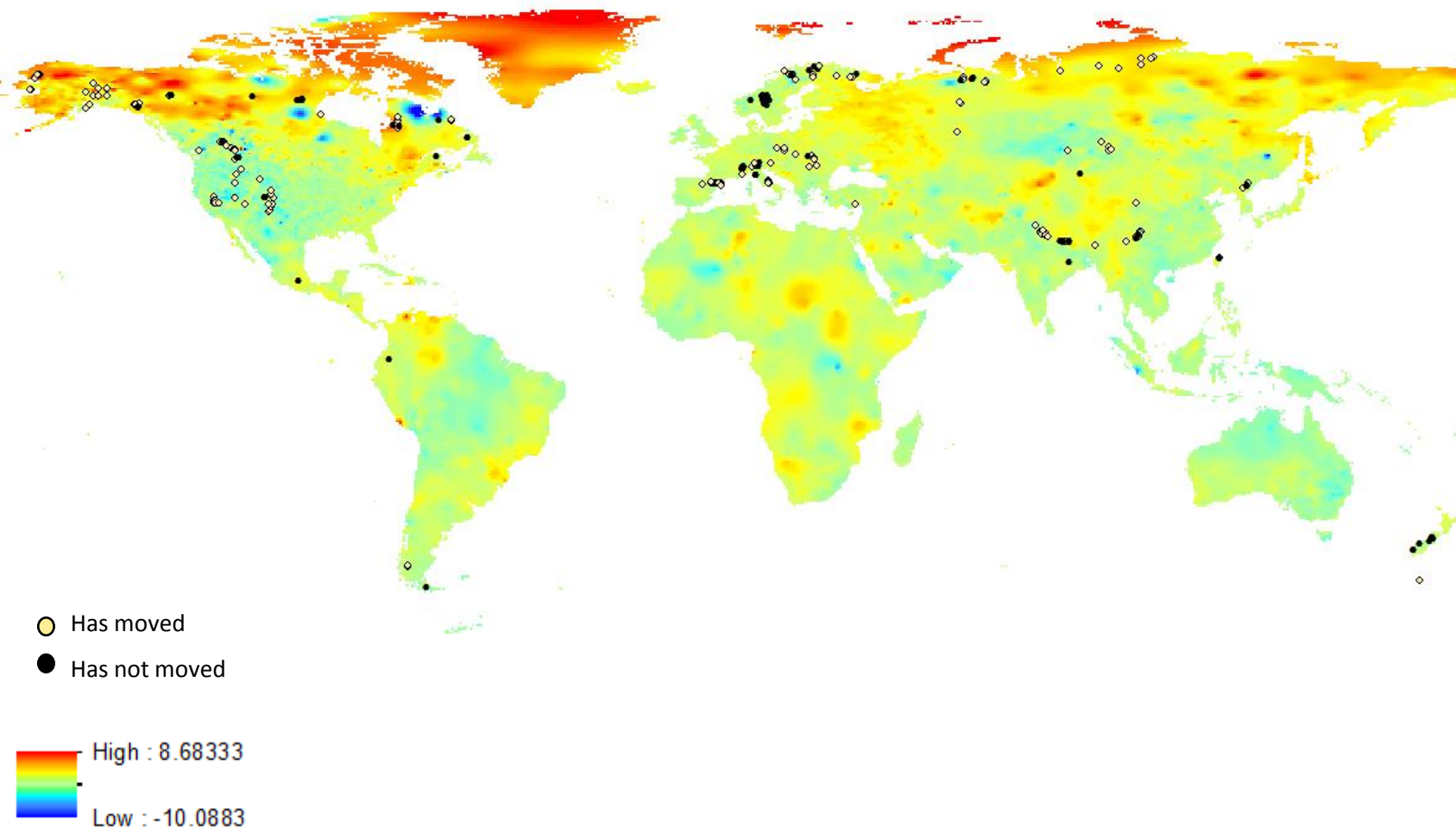


THE UNIVERSITY  
OF QUEENSLAND  
AUSTRALIA

# Summary of tree-line movements

		Total number	Has moved	Has not moved
Total data		414	<b>283 (68%)</b>	131 (32%)
Hemisphere	Northern	397	<b>278 (70%)</b>	119 (30%)
	Southern	17	5 (29%)	12 (71%)
Tree-line type	Altitudinal	382	<b>267 (70%)</b>	115 (30%)
	Latitudinal	32	16 (50%)	16 (50%)
Tree-line form	Abrupt	37	18 (49%)	19 (51%)
	Diffuse	125	<b>93 (74%)</b>	32 (26%)
	Krummholz	61	33 (54%)	28 (46%)
Aspect	Warm	105	68 (65%)	37 (35%)
	Neutral	52	29 (56%)	23 (44%)
	Cold	94	<b>66 (70%)</b>	28 (30%)
	All aspects	61	<b>53 (87%)</b>	8 (13%)

# Preliminary results



- Altitudinal tree-lines have on average increased by  **$1.5 \pm 2.44$**  meters per year, while latitudinal tree-lines have moved by  **$29 \pm 82.4$**  meters per year
- Temperatures have increased at 93% of study sites, and most so in winter.
- More rapid levels of warming does not appear to correlate to increased distances