

16. February 2018

Dr. Peter Bauer
Deputy Director
Research Department
European Centre for Medium-Range Weather Forecasts
Shinfield Park, Reading RG2 9AX, UK
+44 118 949 9080

Date:

Reference: ExtremeEarth Flagship proposal / Coordination and support actions / 1st stage of a two-stage submission procedure for FETFLAG-01-2018

Subject: Endorsement Letter

Dear Dr. Peter Bauer,

We are happy to be involved in the ExtremeEarth, and support its scientific, technological and programmatic objectives. We have ongoing projects on disturbance effects in boreal and sub-arctic ecosystems including the effect of forest fires on soil carbon and nitrogen cycles, permafrost thawing and their consequent effects on the emission greenhouse gases. These processes are being studied in projects "Long term effects of fire on carbon and nitrogen pools and fluxes in the arctic permafrost and subarctic forests (ARCTICFIRE)" funded by the Academy of Finland 2015-2018 and "Yedoma: an overlooked source of nitrous oxide (N₂O) from the Arctic?" (Yedoma-N) 2015-2019 in our team. We are also studying the effects of forest management and animal grazing on ecosystem carbon and nitrogen balance. All these processes play an important role in regulating the greenhouse gas fluxes between ecosystems and atmosphere.

The ExtremEarth supports the work conducted in our research unit and the top-level international research areas "Aerosols, Climate Change and Human Health" and "Forests, Global Change and Bioeconomy" in the University of Eastern Finland.

Sincerely yours



Jukka Pumpanen
Professor in Microbial Biogeochemistry
Department of Environmental and Biological Sciences
University of Eastern Finland
P.O. Box 1627
FI- 70211 Kuopio, FINLAND
Phone:+358 50 4486127



UNIVERSITY OF
EASTERN FINLAND

*University of
Eastern Finland*

JOENSUU

Yliopistokatu 2
P.O. Box 111, FI-80101
Joensuu, Finland

KUOPIO

Yliopistonranta 1
P.O. Box 1627, FI-70211
Kuopio, Finland

SAVONLINNA

Kuninkaankartanonkatu 5-7
P.O. Box 86, FI-57101
Savonlinna, Finland

uef.fi