

## **MAPS OF ATMOSPHERIC TRANSPORT, DISPERSION AND DEPOSITION MODELLING RESULTS**

UNSCEAR 2013 Report, Annex A, Levels and effects of radiation exposure due to the nuclear accident after the 2011 great east-Japan earthquake and tsunami, Appendix C (Assessment of doses to the public)

### **Contents**

This attachment provides maps of the NOAA-GDAS atmospheric transport, dispersion and deposition modelling (ATDM) results for estimates of time-integrated particulate and gaseous  $^{131}\text{I}$  concentration in air;  $^{131}\text{I}$  deposition density on the ground, time-integrated particulate  $^{137}\text{Cs}$  concentration in air and  $^{137}\text{Cs}$  deposition density on the ground. The corresponding Excel<sup>®</sup> workbooks with the results used by the Committee are provided in attachment C-9.

### **Notes**

The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

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This publication has not been formally edited.



Figure I. Estimated time-integrated concentrations of particulate <sup>131</sup>I in air over Japan based on the results of the atmospheric transport and dispersion modelling analyses (NOAA-GDAS model)

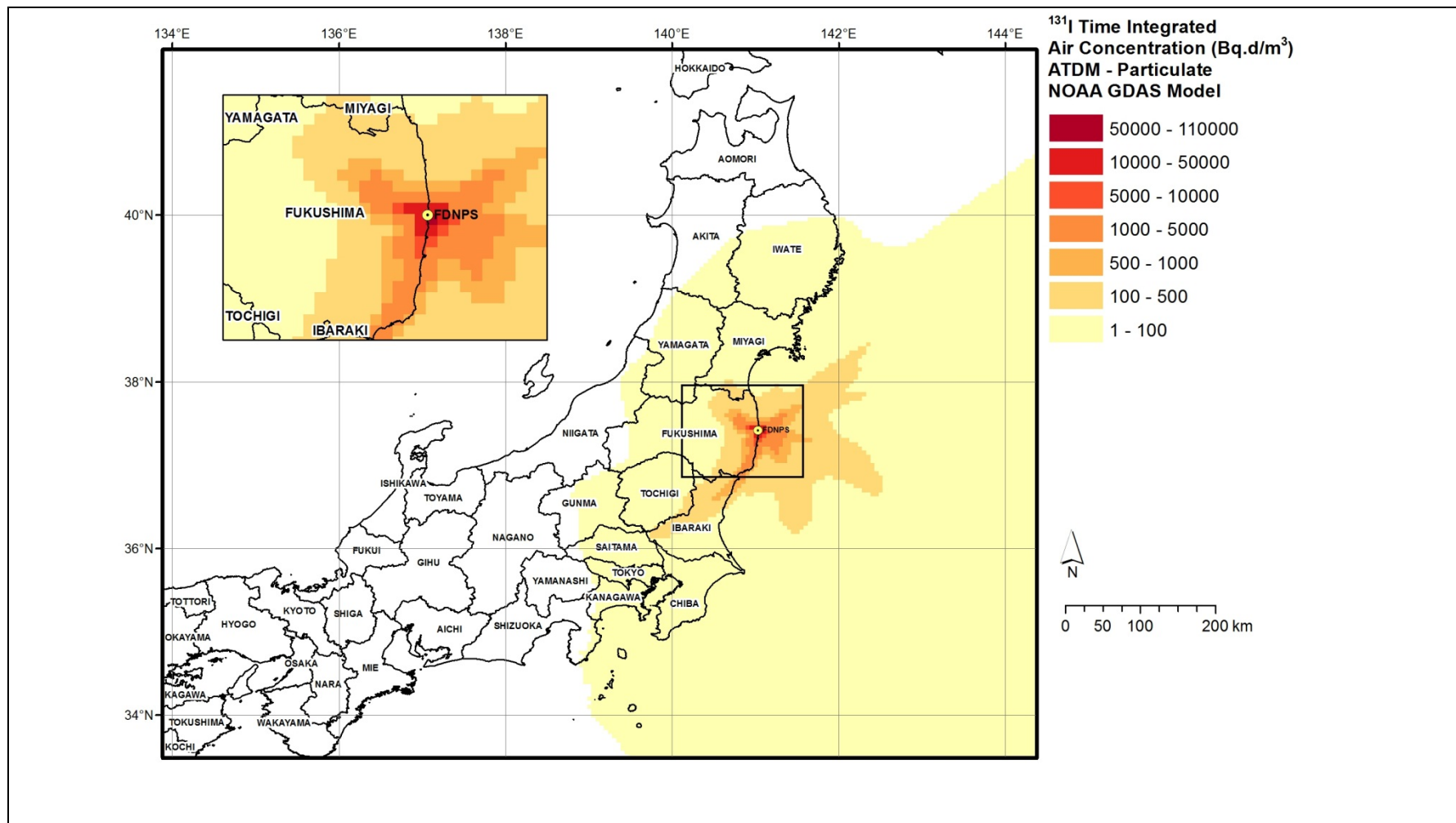


Figure II. Estimated deposition density of particulate  $^{131}\text{I}$  on the ground in Japan based on the results of the atmospheric transport and dispersion modelling analyses (NOAA-GDAS model) (decay corrected to 14 June 2011)

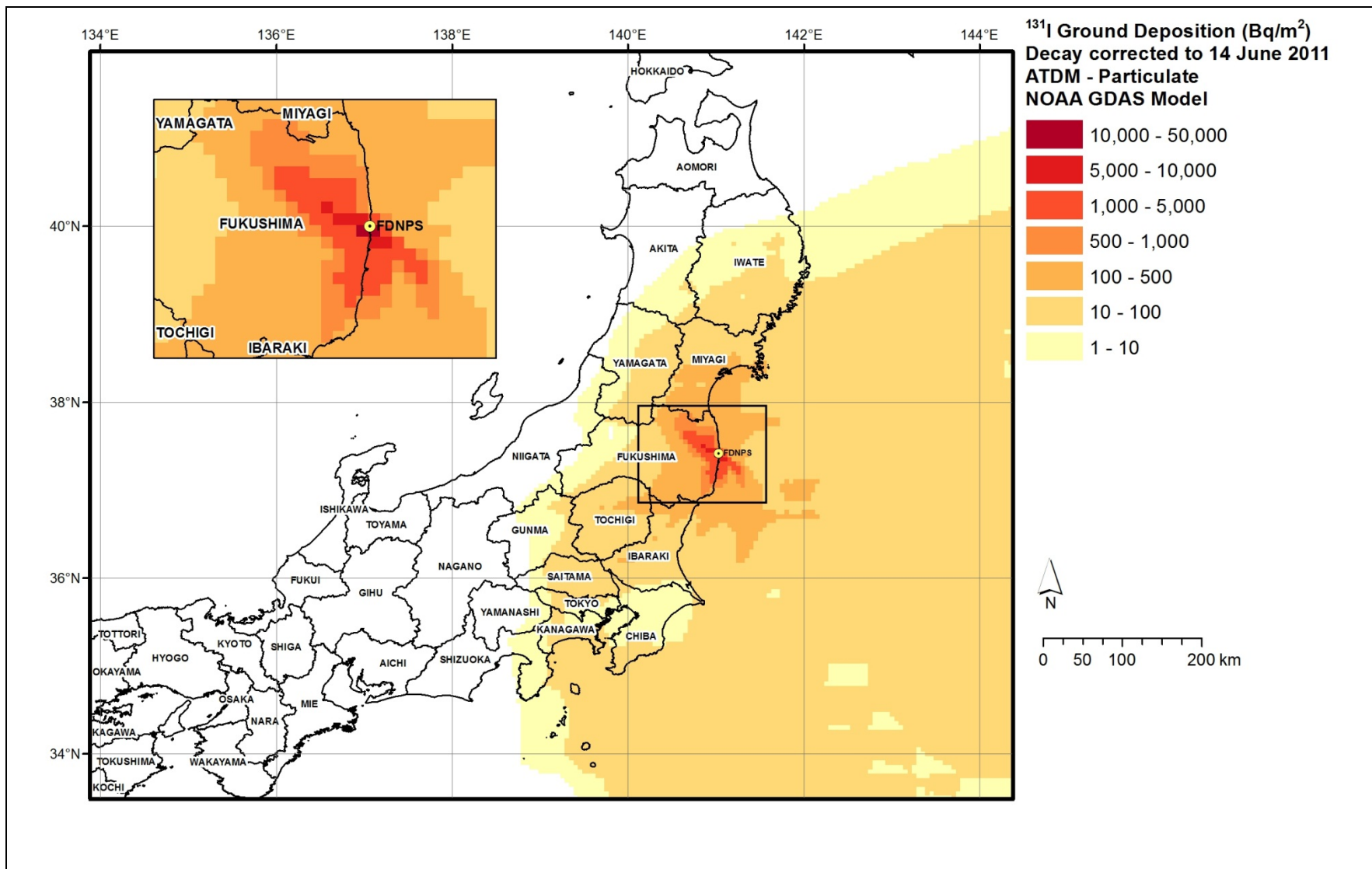


Figure III. Estimated time-integrated concentration of gaseous <sup>131</sup>I in air over Japan based on the results of the atmospheric transport and dispersion modelling analyses (NOAA-GDAS model)

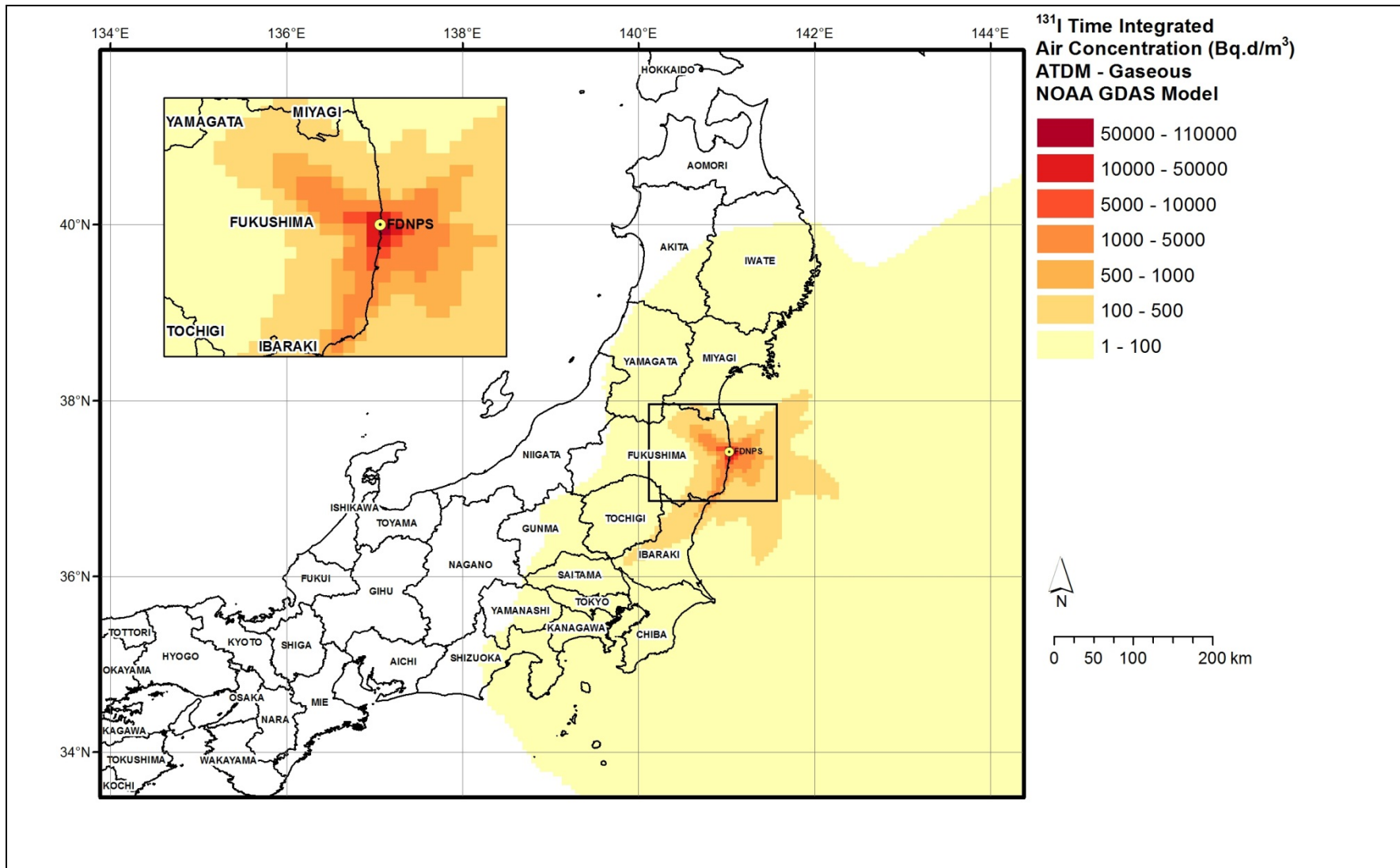


Figure IV. Estimated deposition density of gaseous  $^{131}\text{I}$  on the ground in Japan based on the results of the atmospheric transport and dispersion modelling analyses (NOAA-GDAS Model) (decay corrected to 14 June 2011)

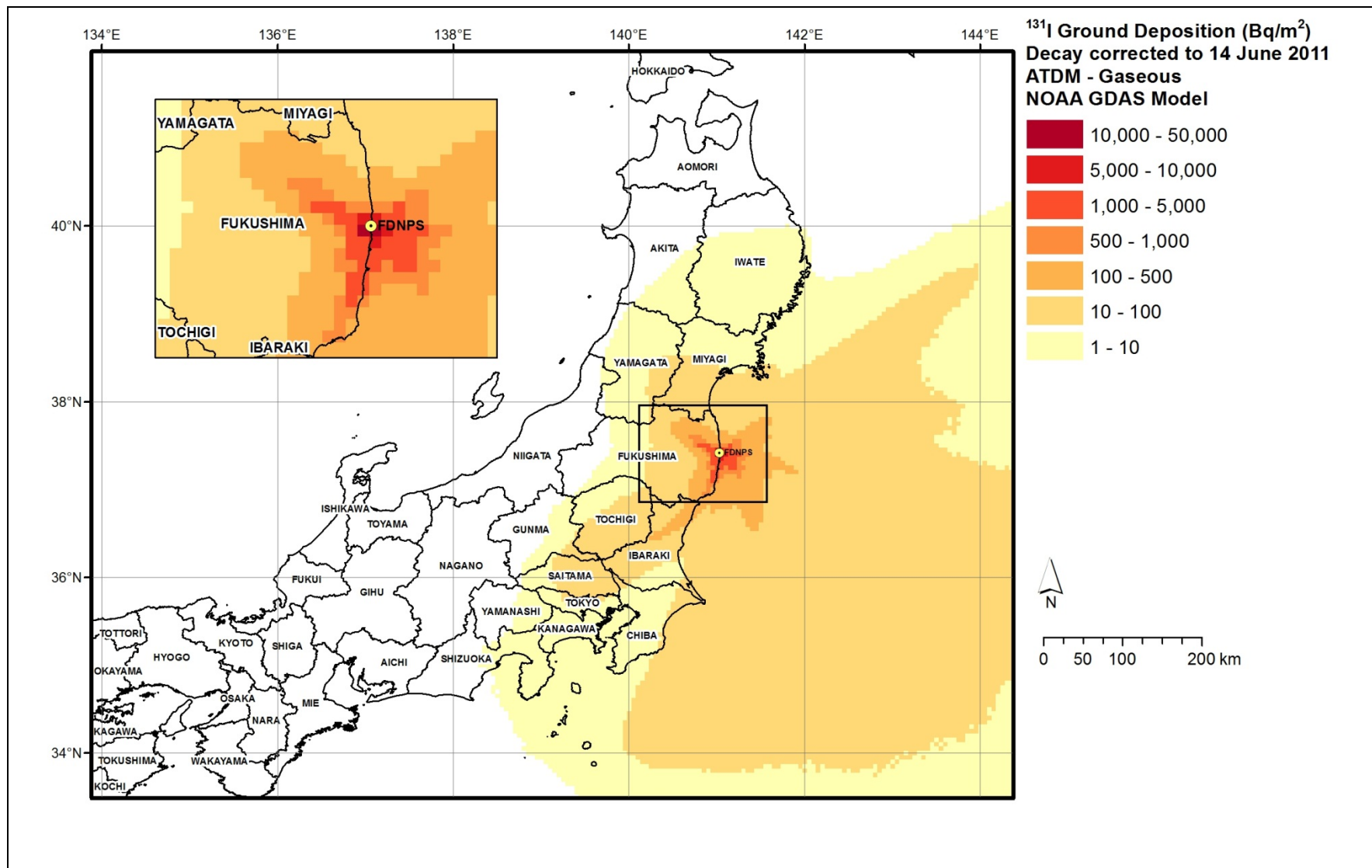


Figure V. Estimated time-integrated concentrations of particulate  $^{137}\text{Cs}$  in air over Japan based on the results of the atmospheric transport and dispersion modelling analyses (NOAA-GDAS Model)

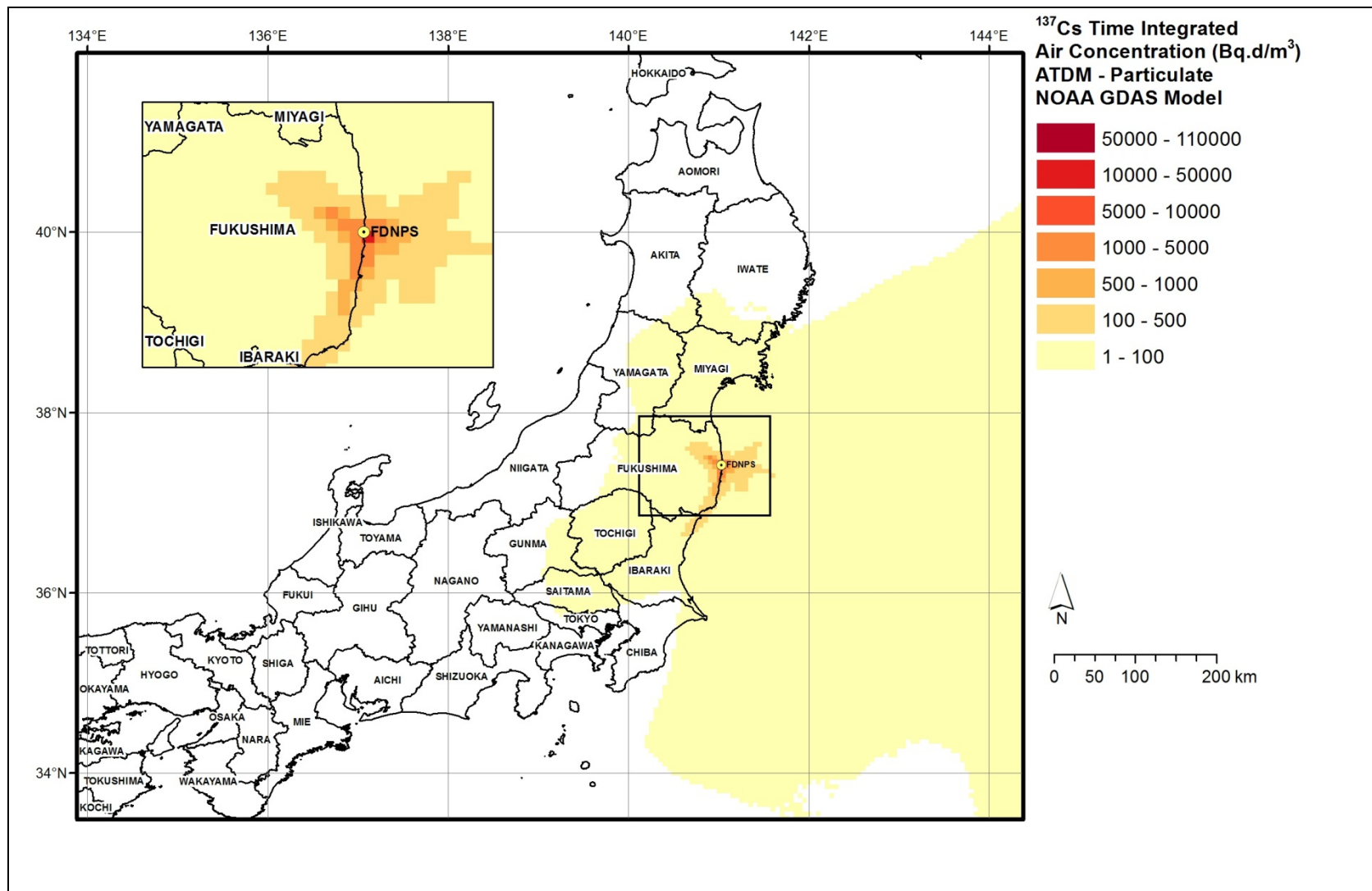




Figure VI. Estimated deposition density of <sup>137</sup>Cs on the ground in Japan based on the results of the atmospheric transport and dispersion modelling analyses (NOAA-GDAS Model) (decay corrected to 14 June 2011)

