

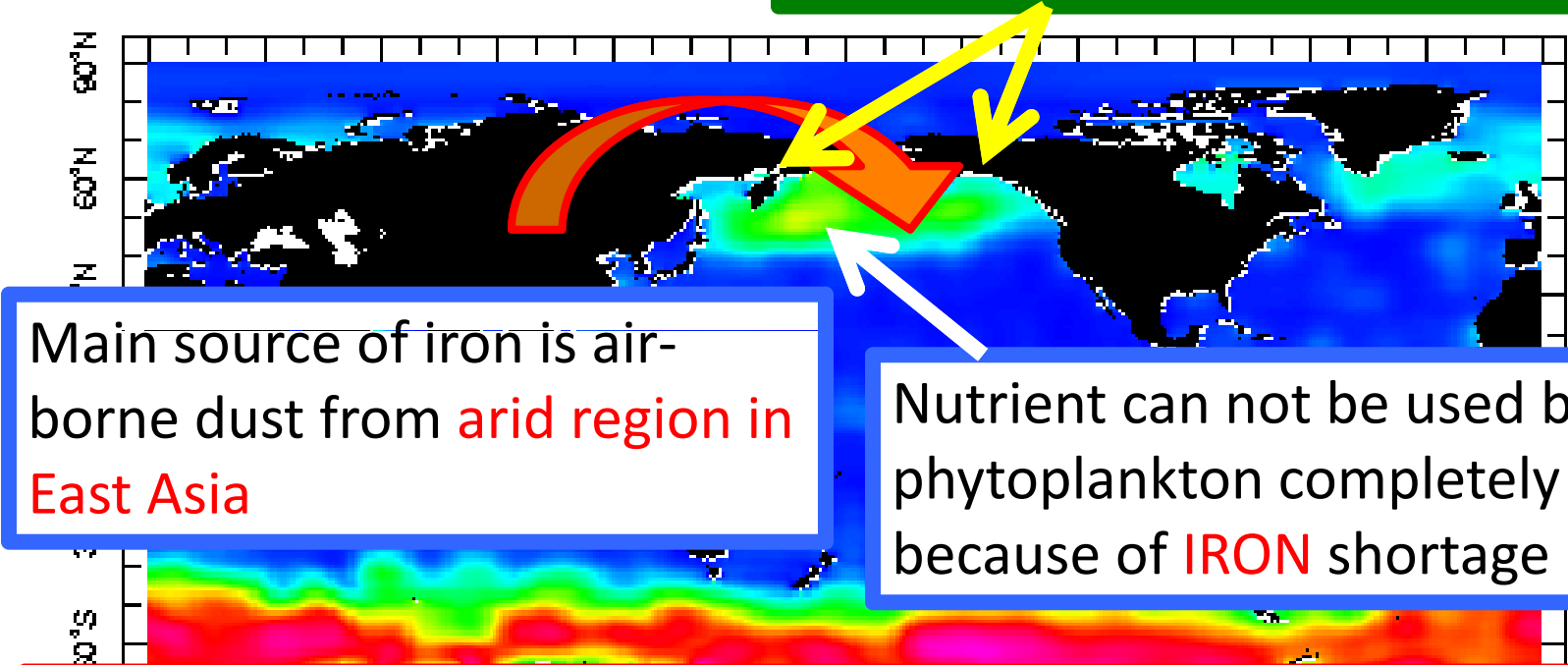
Air-borne iron flux into the northern North Pacific estimated by ice-cores

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Nitrate Concentration in sea water

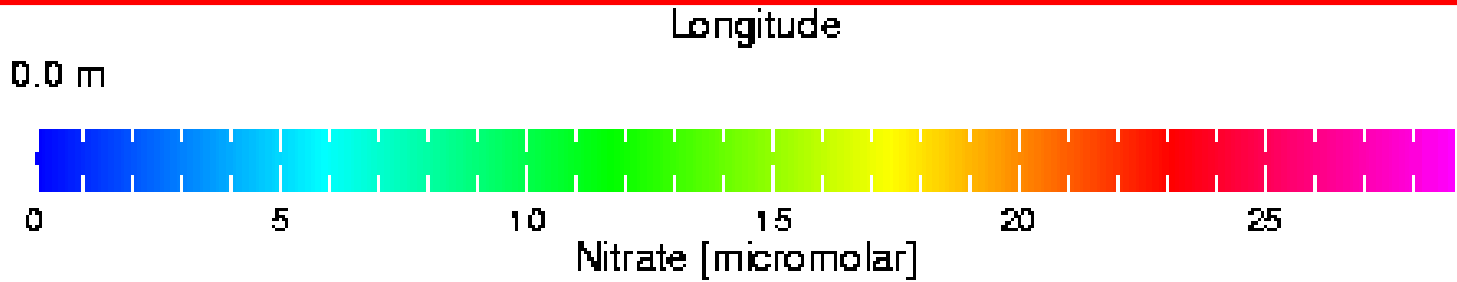
Ice-cores are obtained from Alaska and Kamchatka



Main source of iron is air-borne dust from **arid region in East Asia**

Nutrient can not be used by phytoplankton completely because of **IRON** shortage

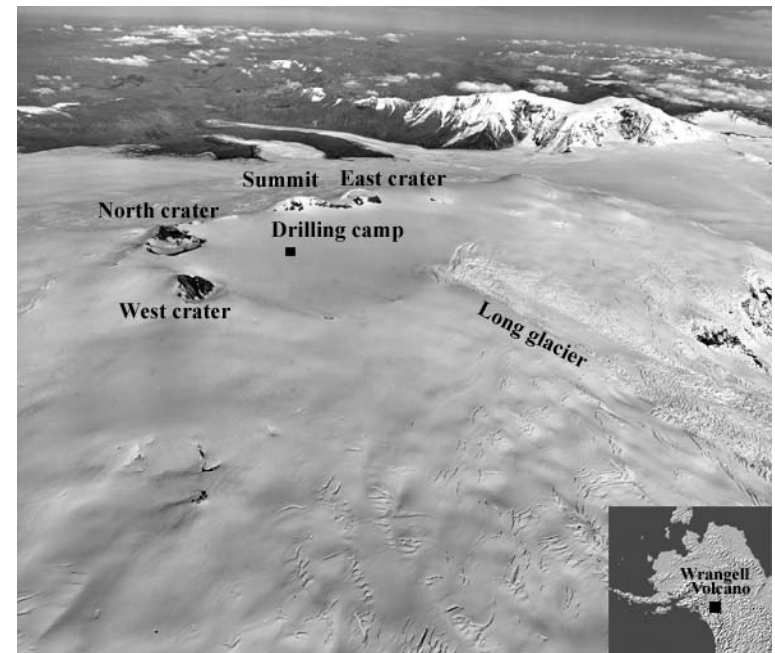
Air-borne Dust from East Asia might control Phytoplankton Growth

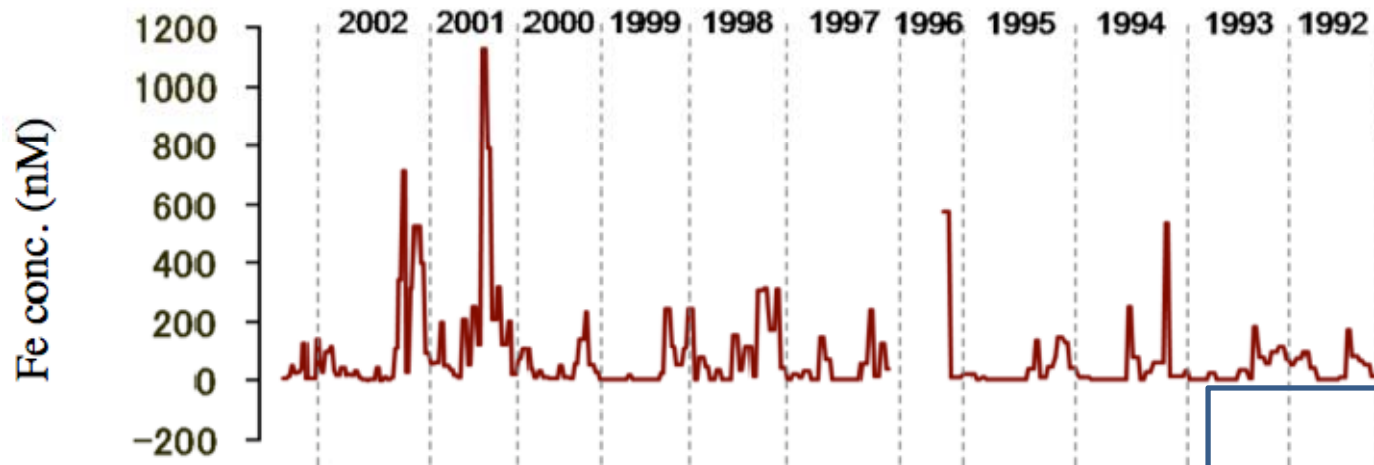


Air-borne iron flux into the northern North Pacific estimated by ice-cores

- Ice-core from Mount Wrangell, [Alaska](#), USA
- Reconstruct Iron deposition into the Northern North Pacific from arid region in [East Asia](#)
- Evaluate the effect of air-borne Iron to phytoplankton in the [northern North Pacific](#)

In Bishkek



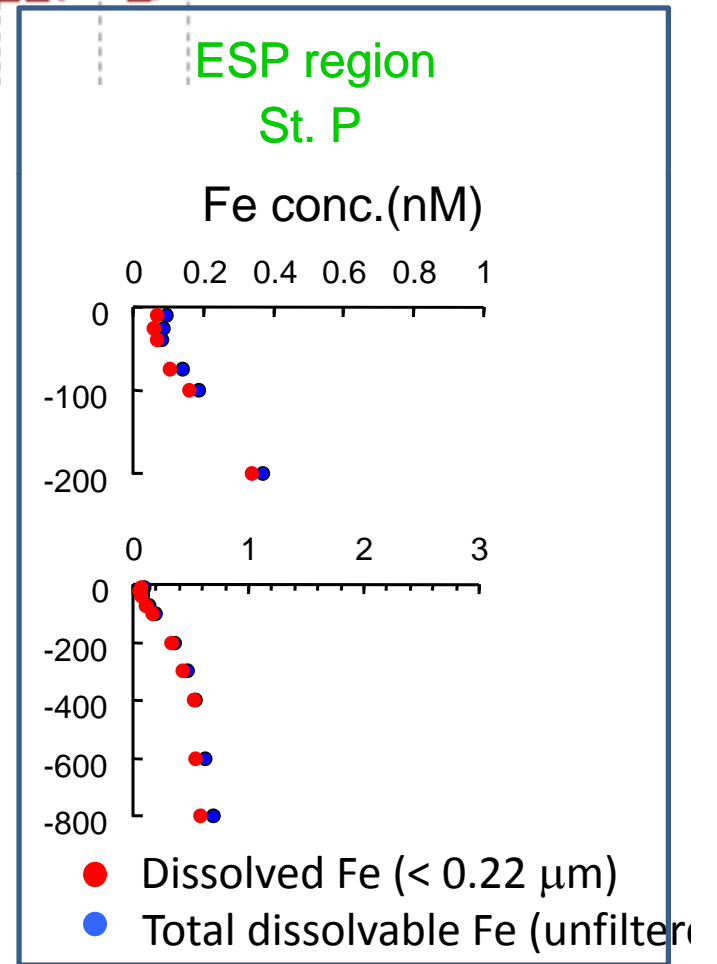


Average of annual Fe flux 7.7mg/m² yr

Solubility of air-borne Fe in sea water 2%
 Depth of mixing layer in winter 20m

Concentration of Fe
 in 20m sea water

0.13nM



International Glaciological Society

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