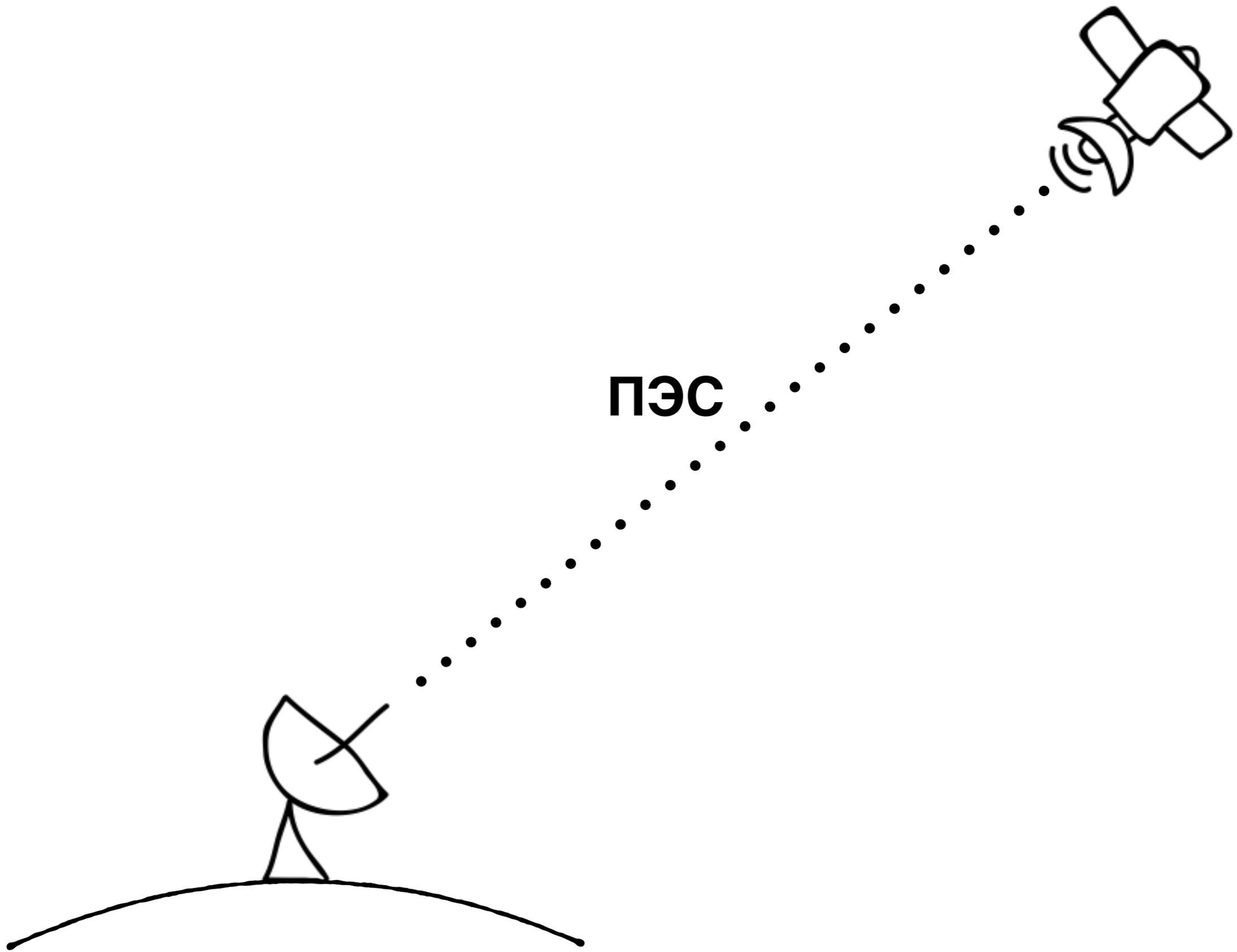
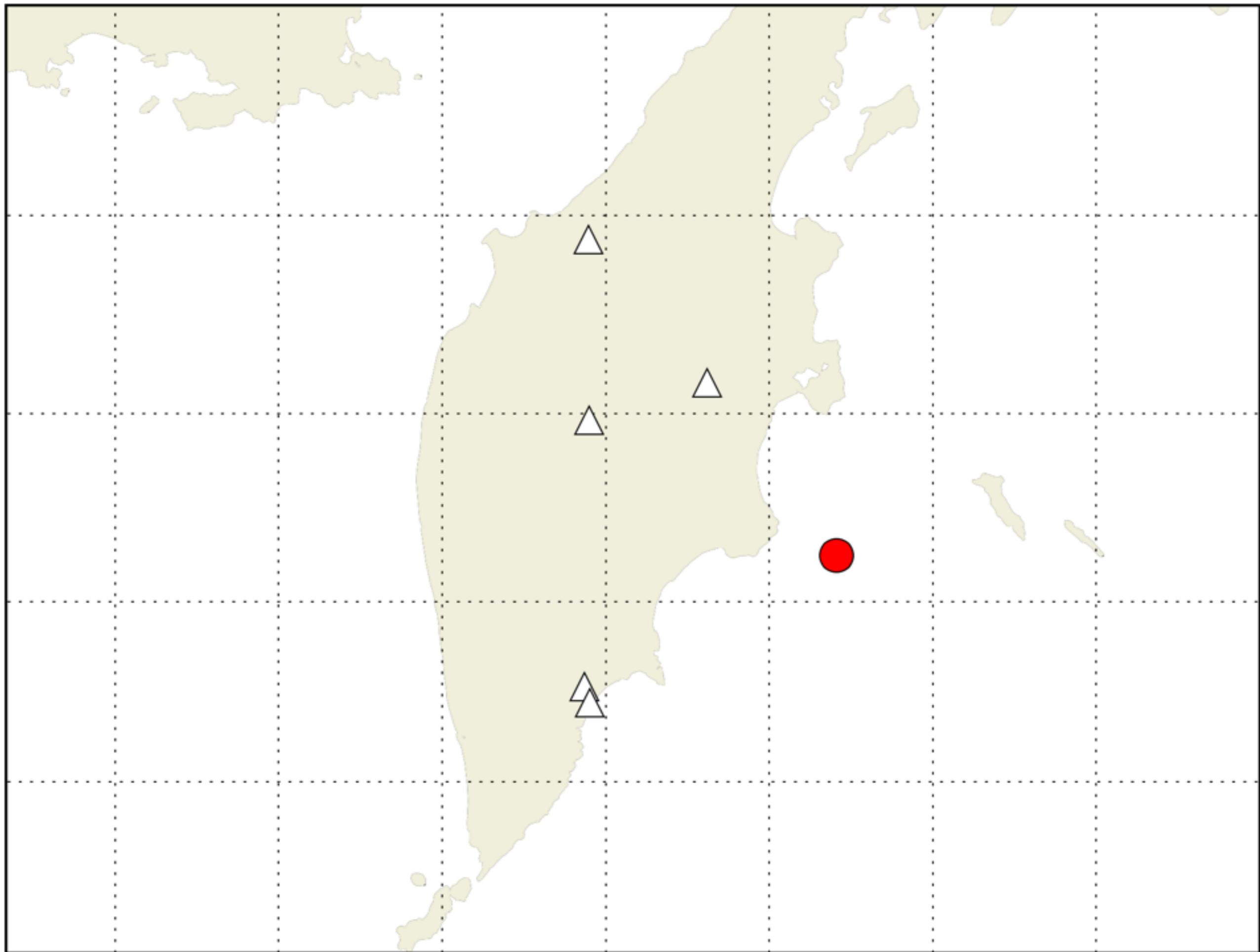


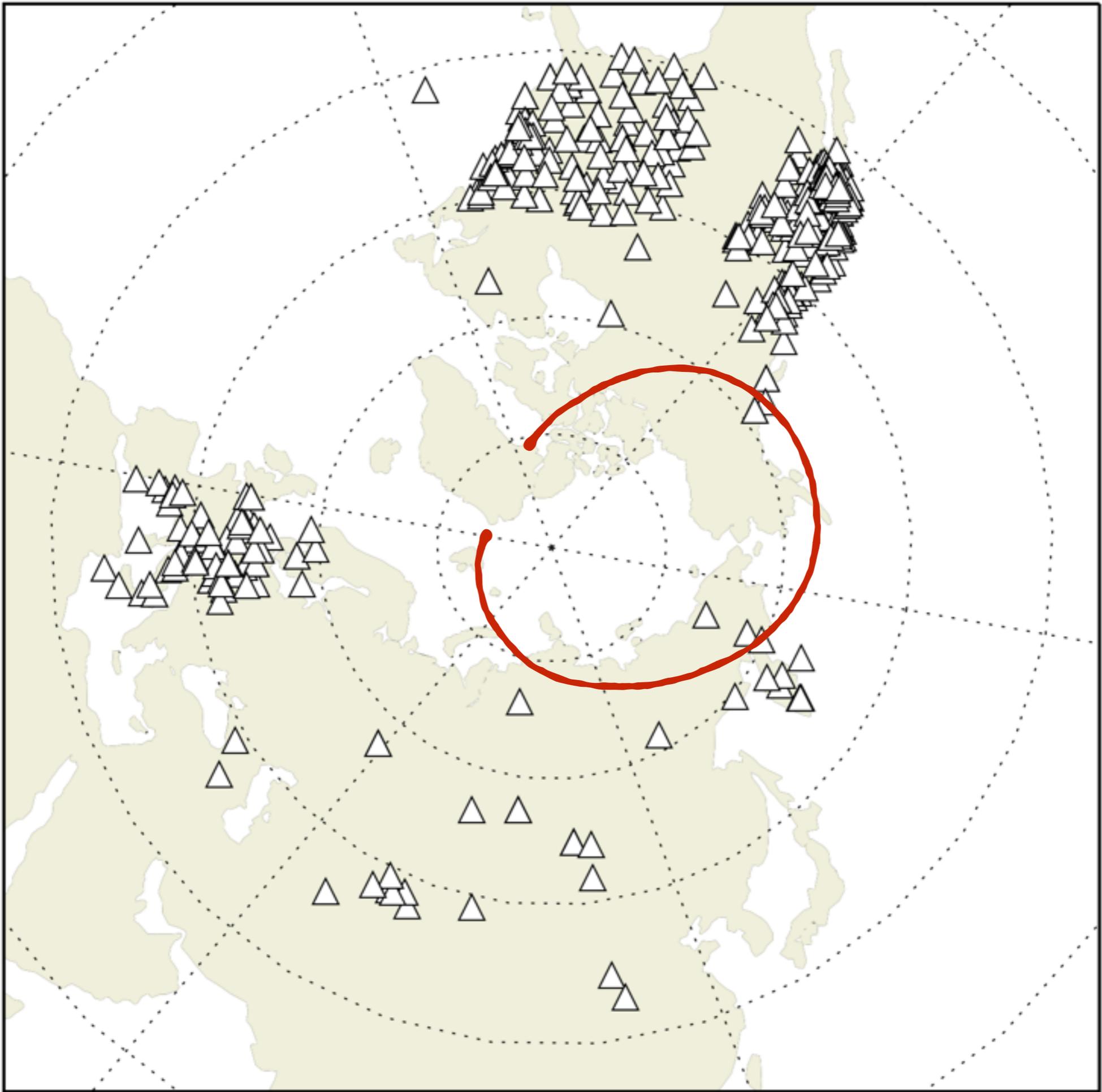
Теория графов для исследования ионосферы

Ю. Ясюкевич, И. Живетьев



ПЭС





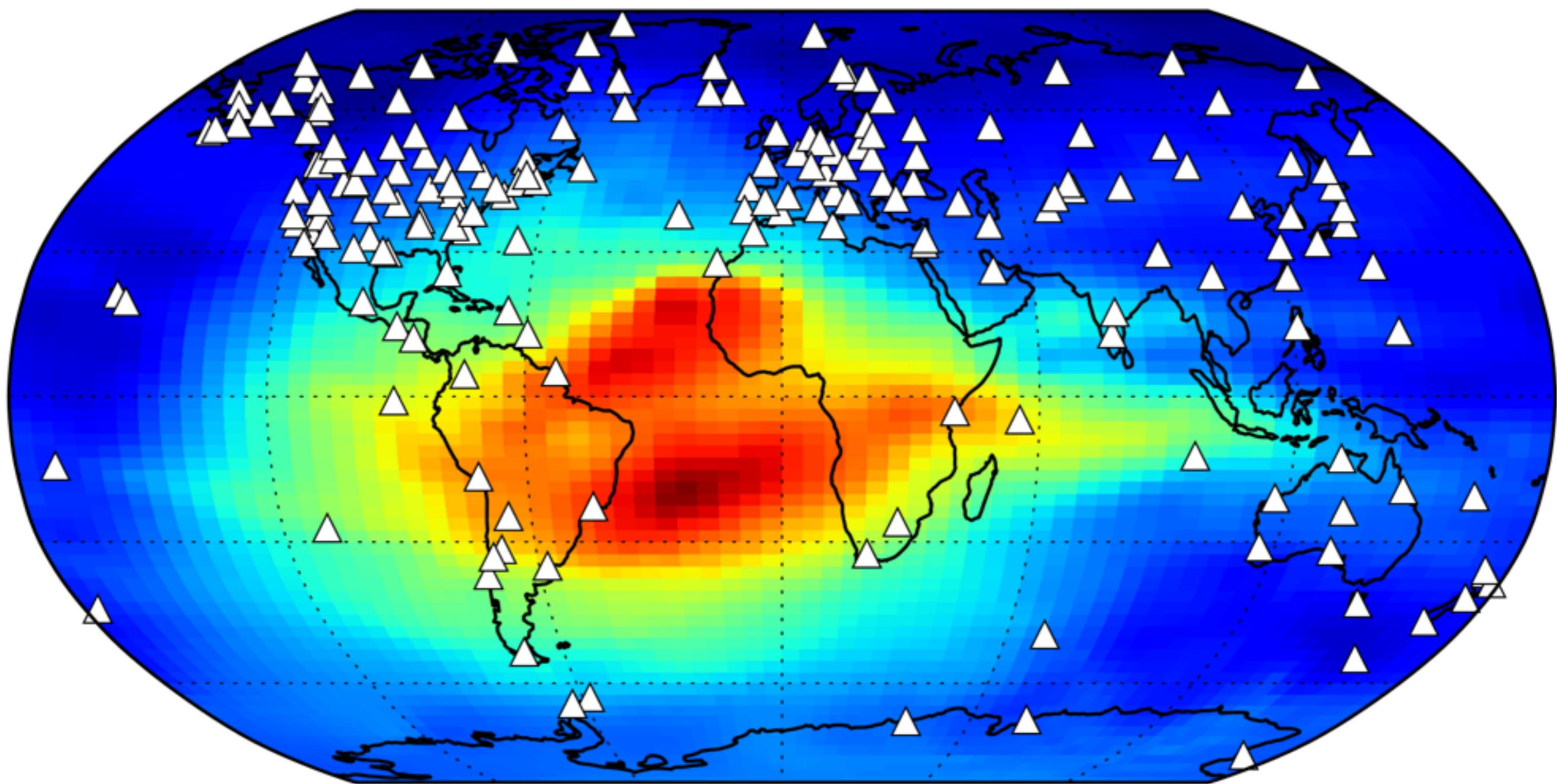




Исследование

1. Данные
2. Методика
3. Результат
4. Интерпретация

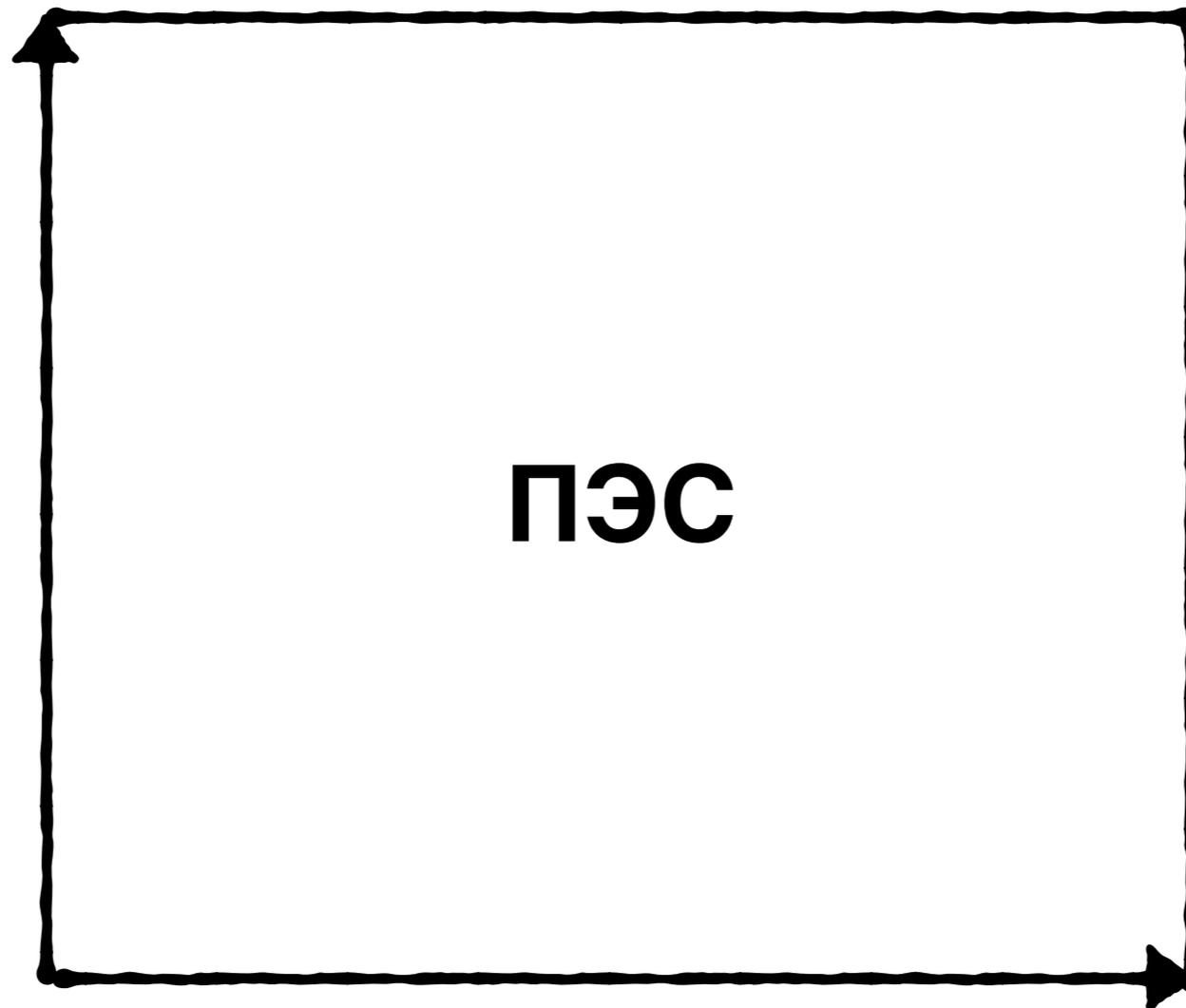
1. Данные



3 6 9 12 15 18 21 24 27

ПЭС, *TECU*

**2.5°,
широта**



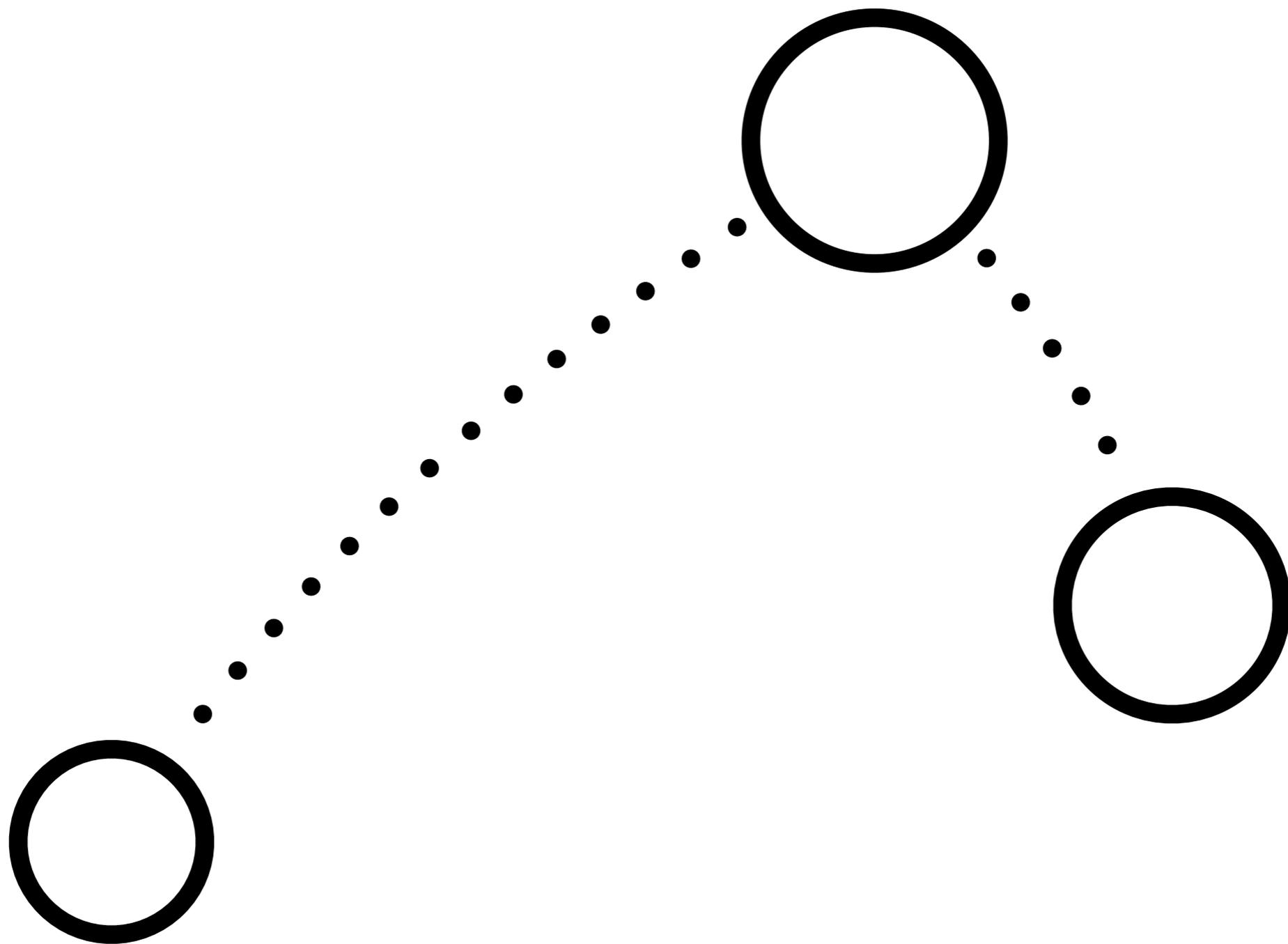
ПЭС

5° , долгота

Лаборатории

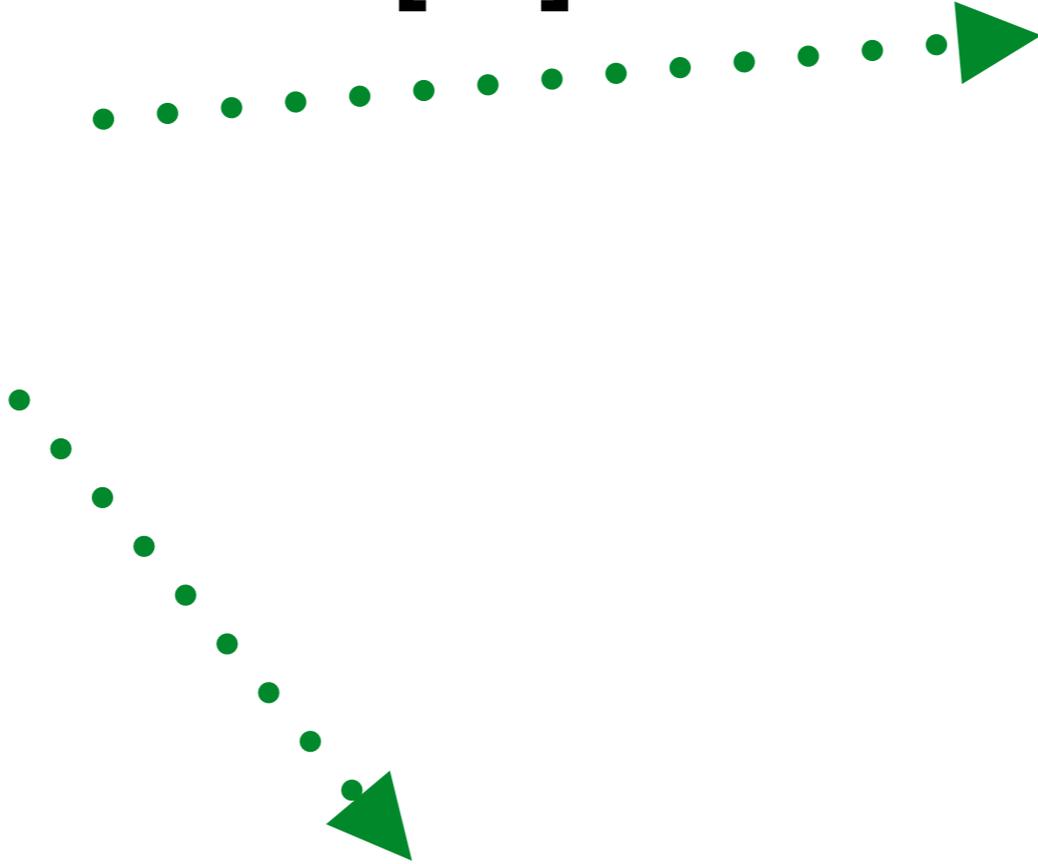
Разный подход к интерполяции

2. Методика





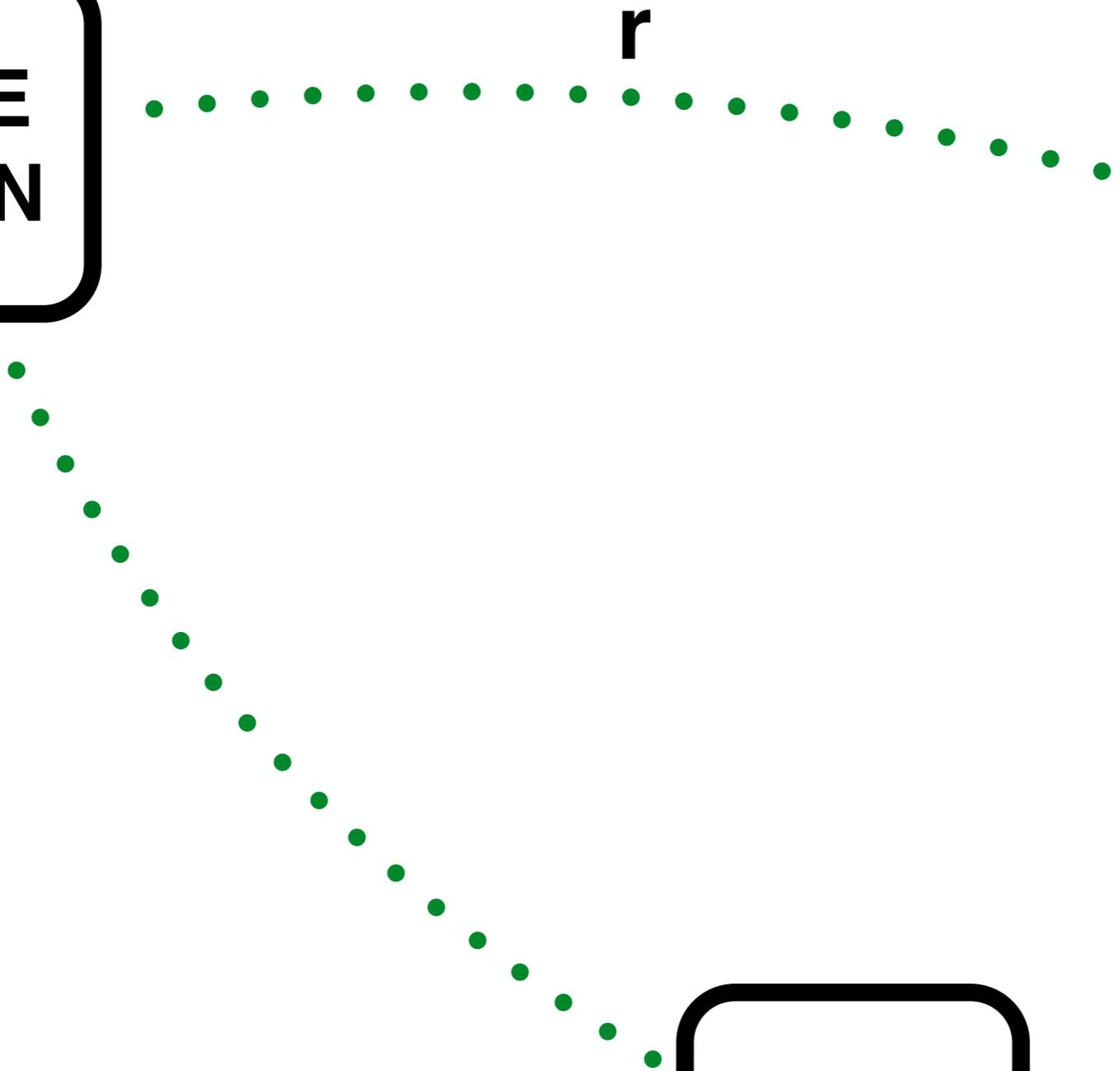
[...]

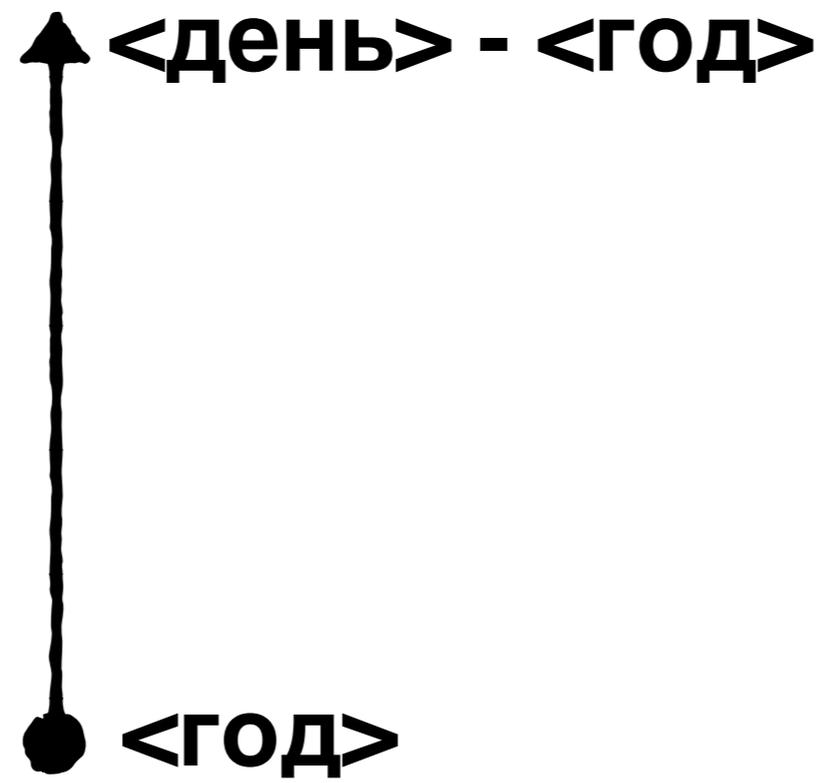


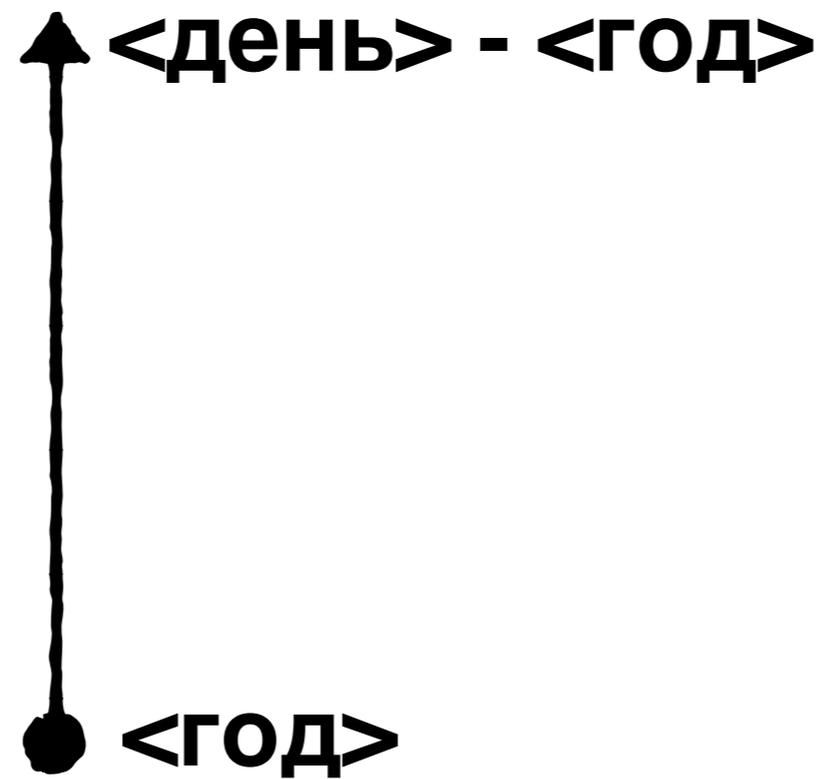
150° E
87.5° N

145° E
87.5° N

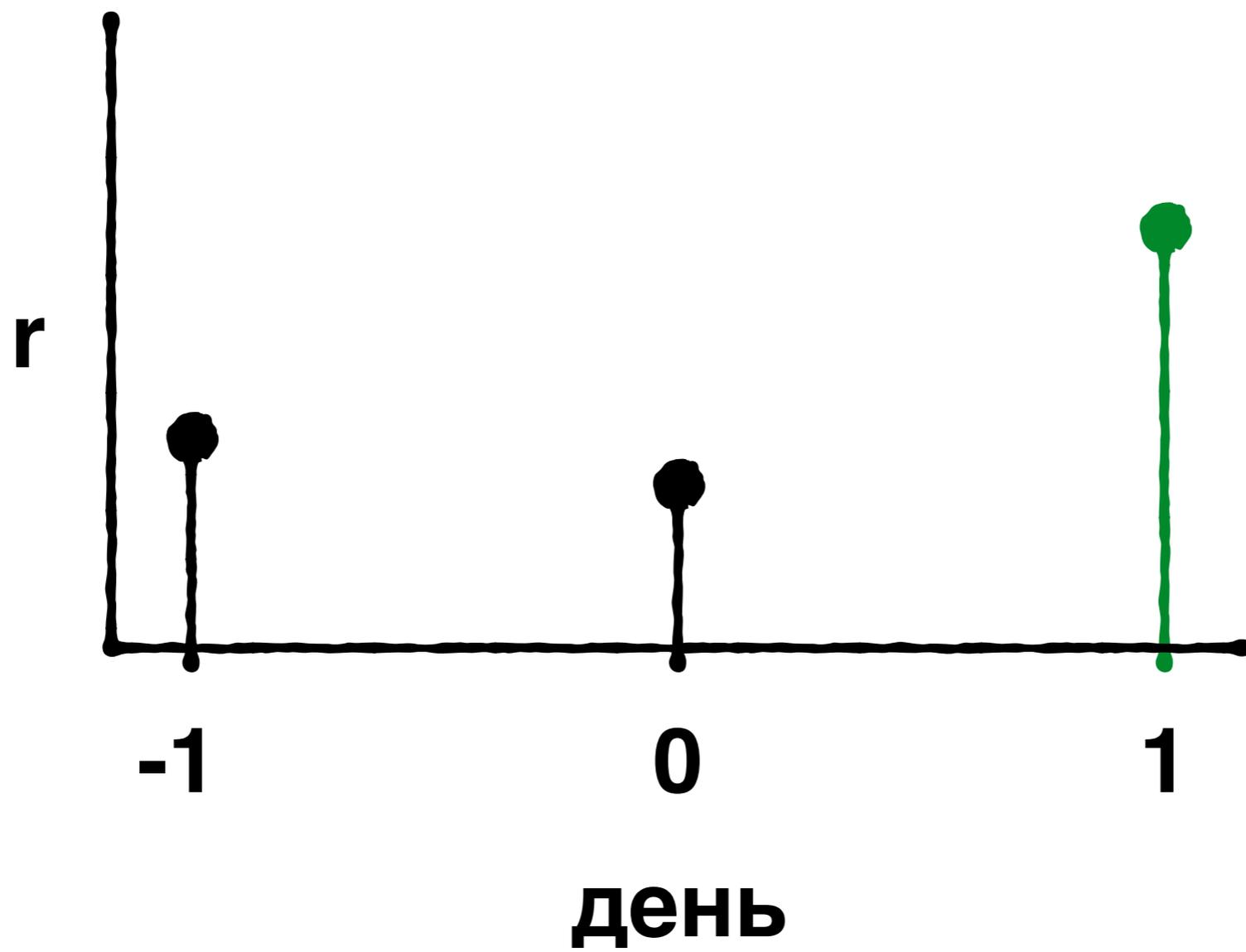
120° E
47.5° N







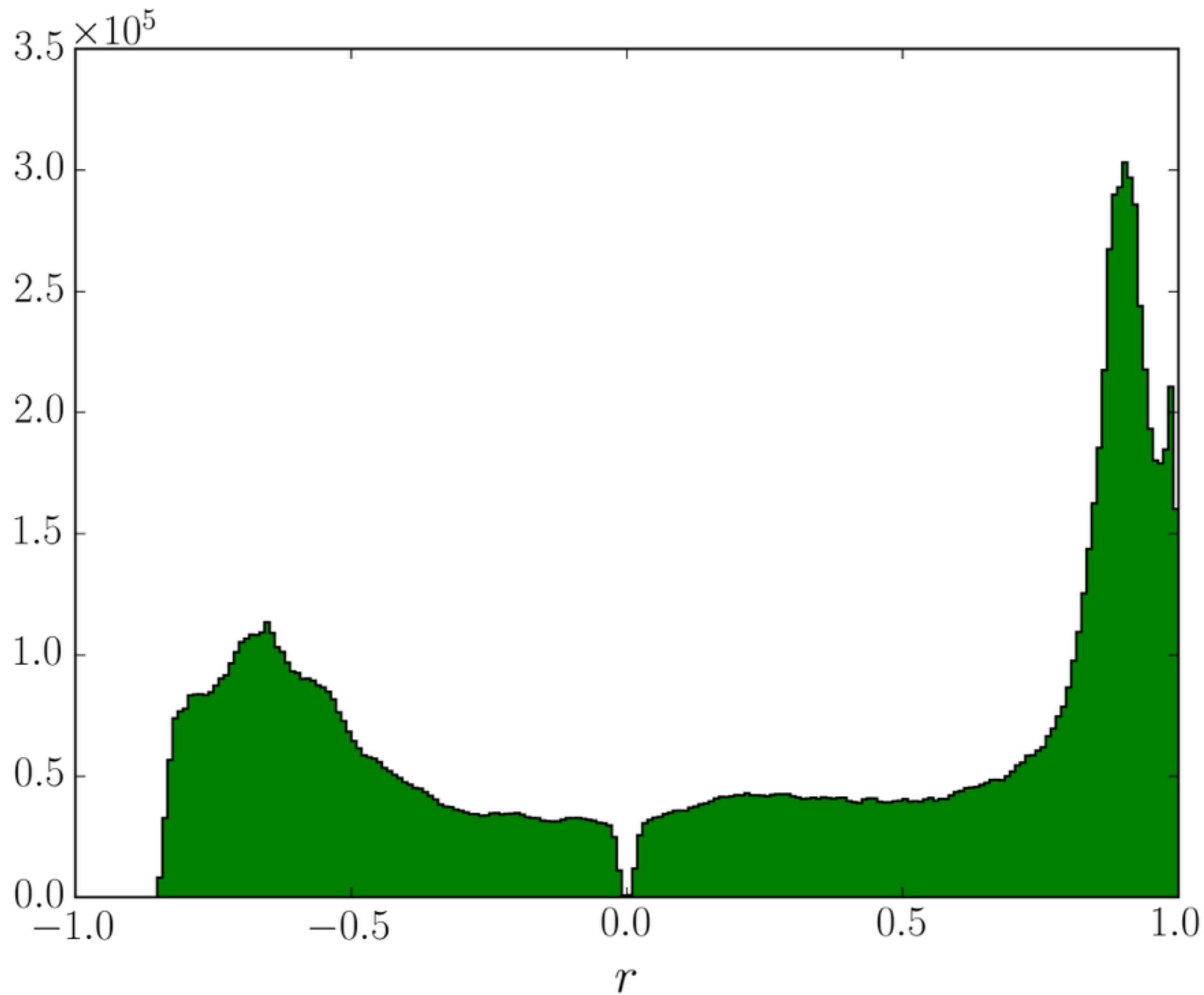
с 2005 по 2010, UРС

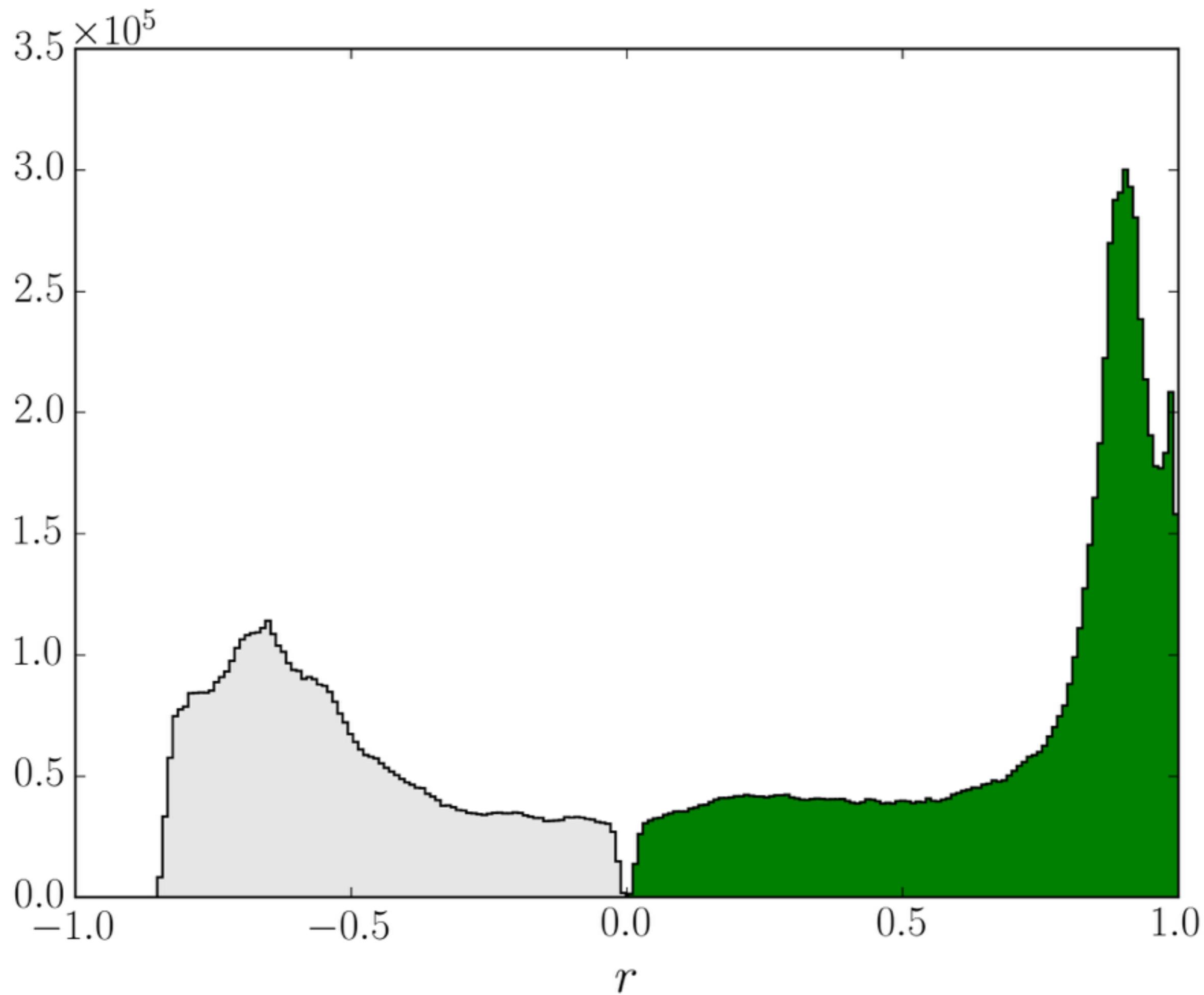


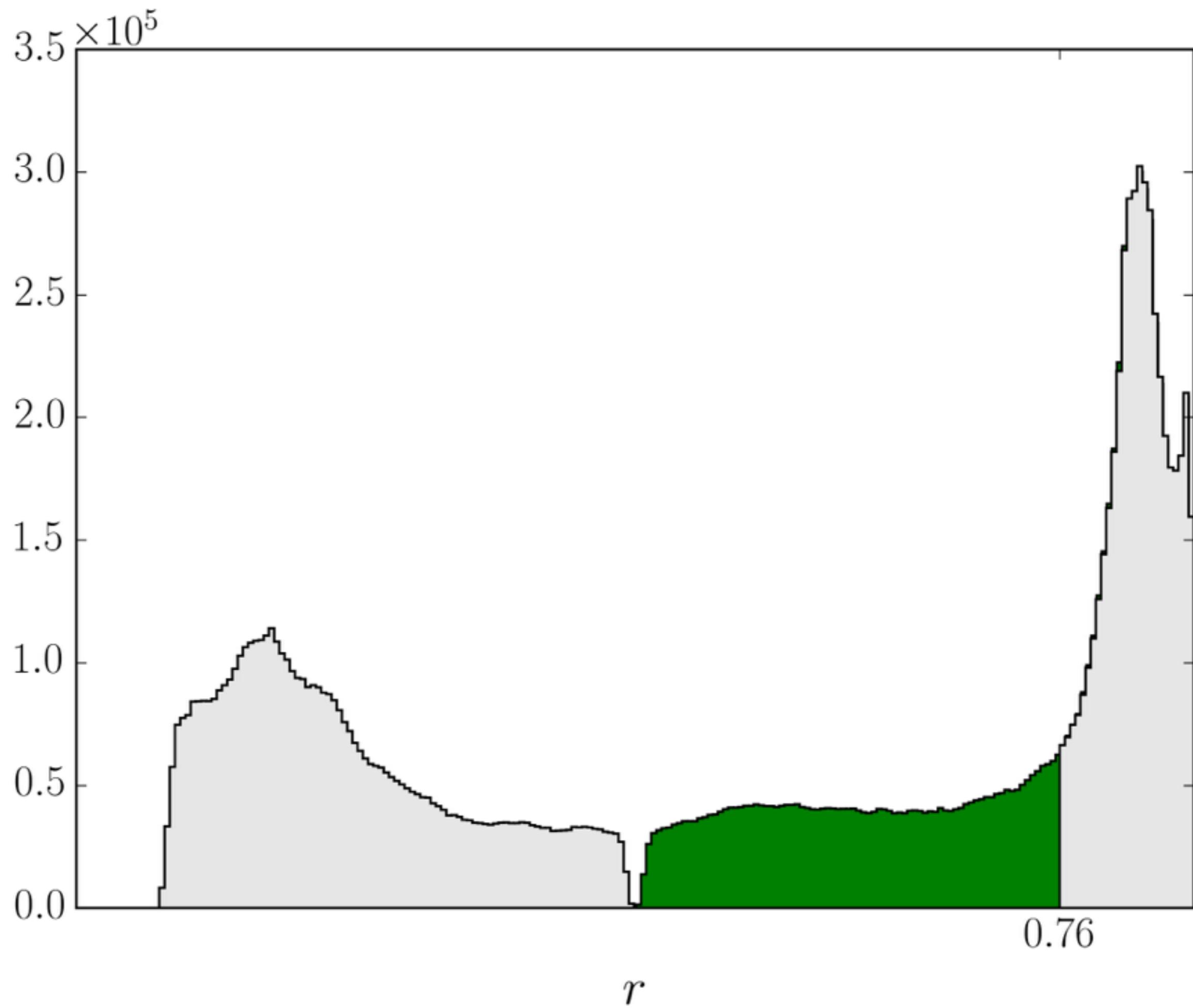
Порог?

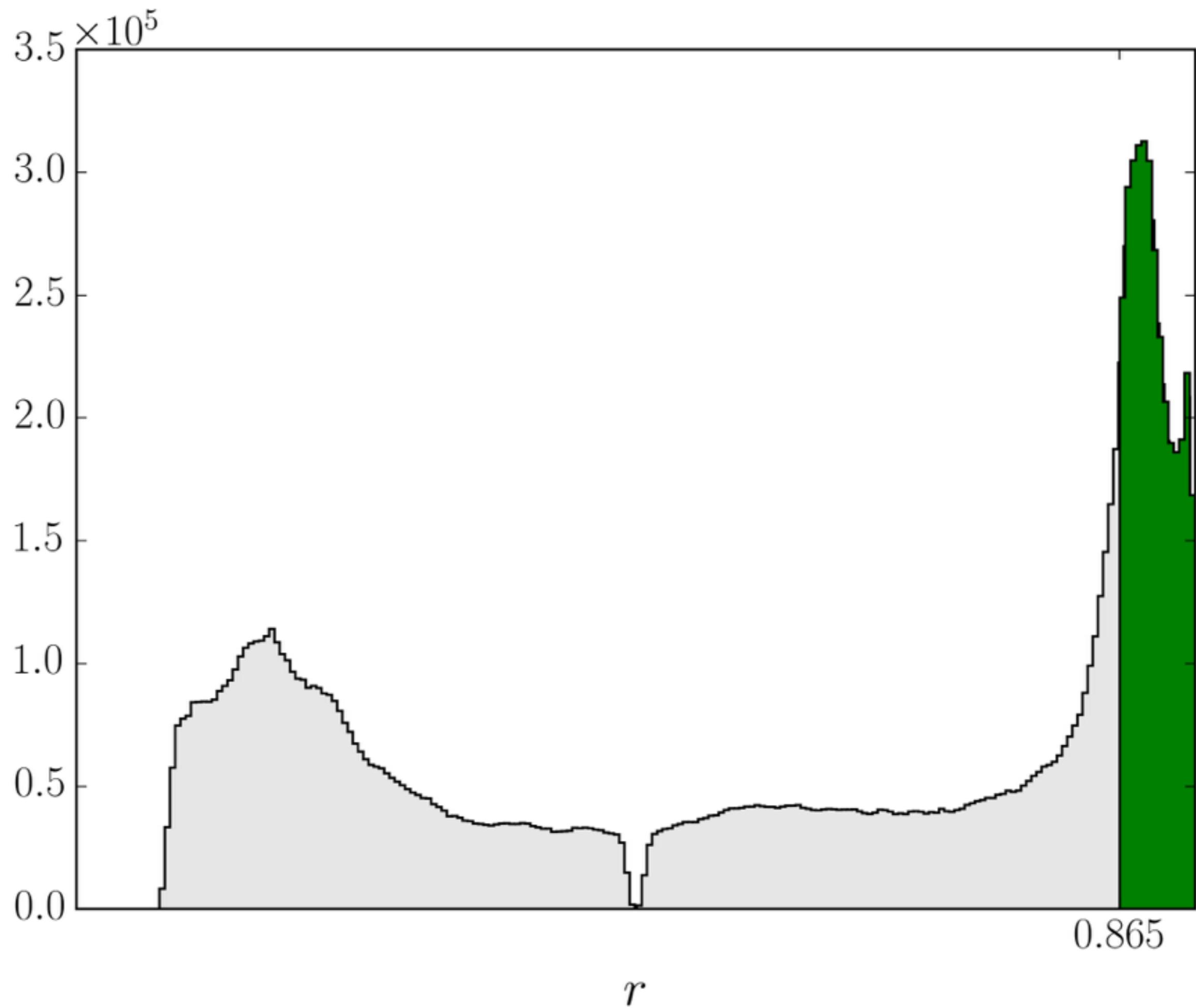
13 063 716 пар

5112 вершин

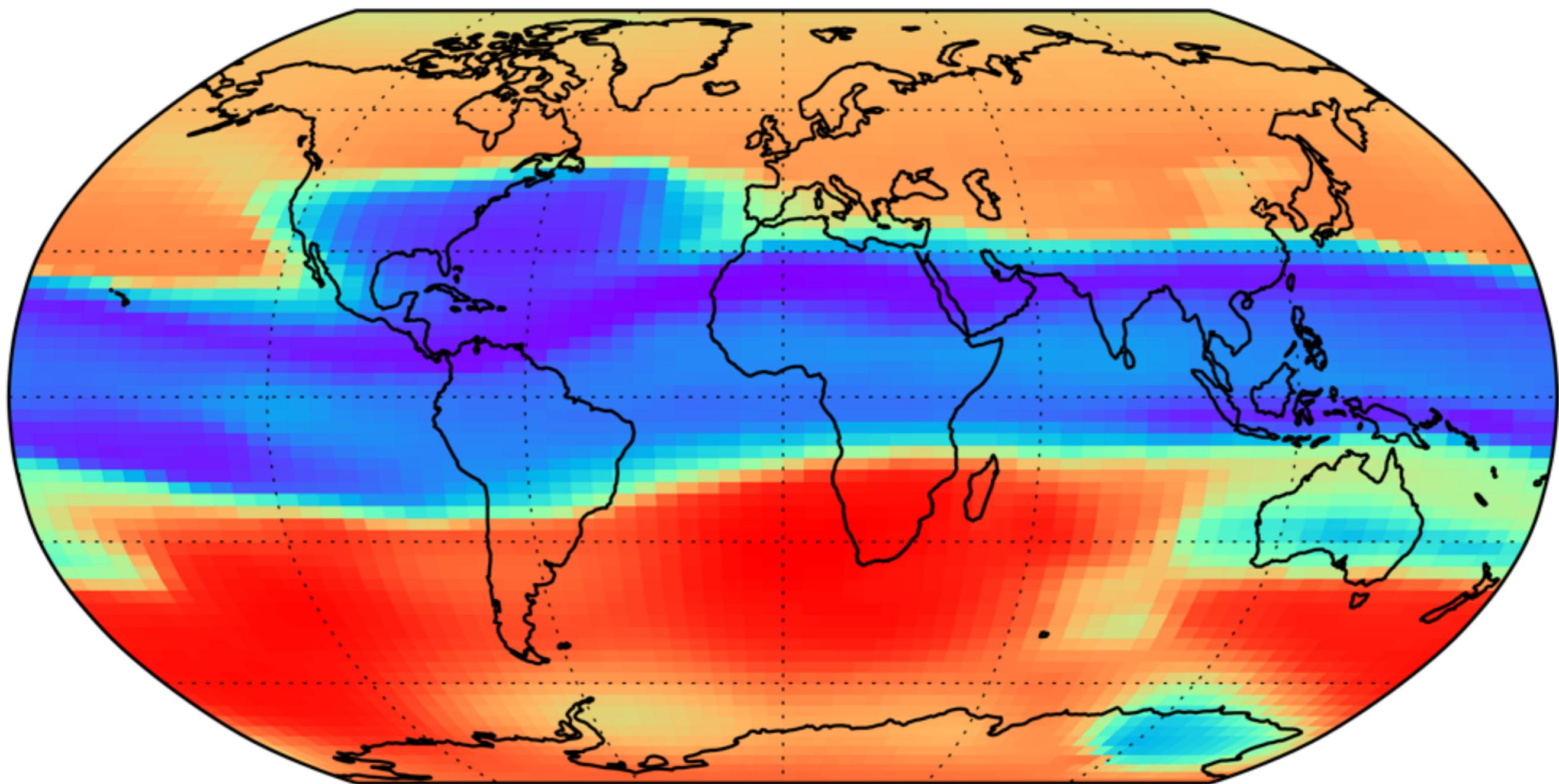








3. Результат



250

500

750

1000

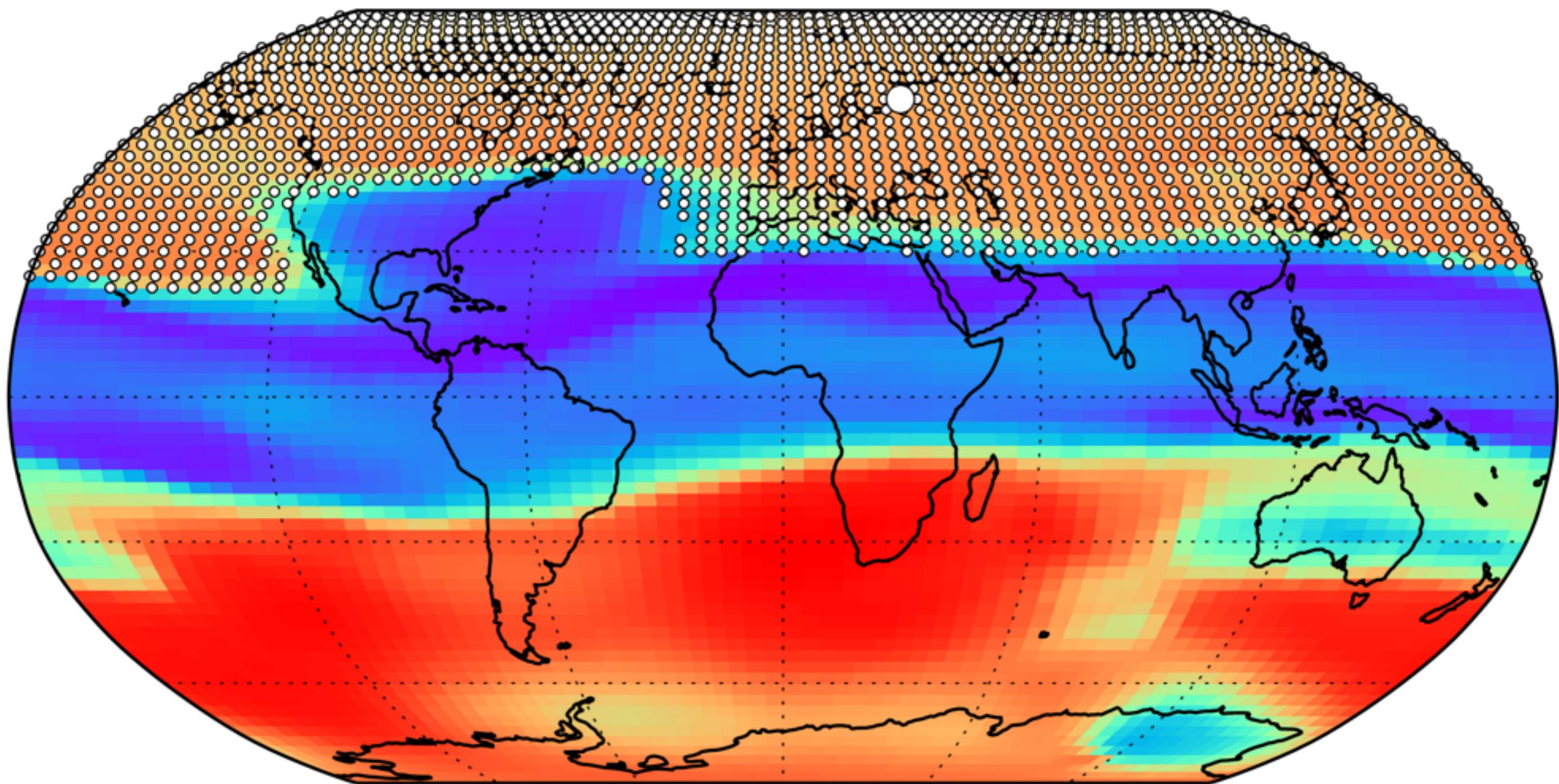
1250

1500

1750

2000

$deg(\nu)$



250

500

750

1000

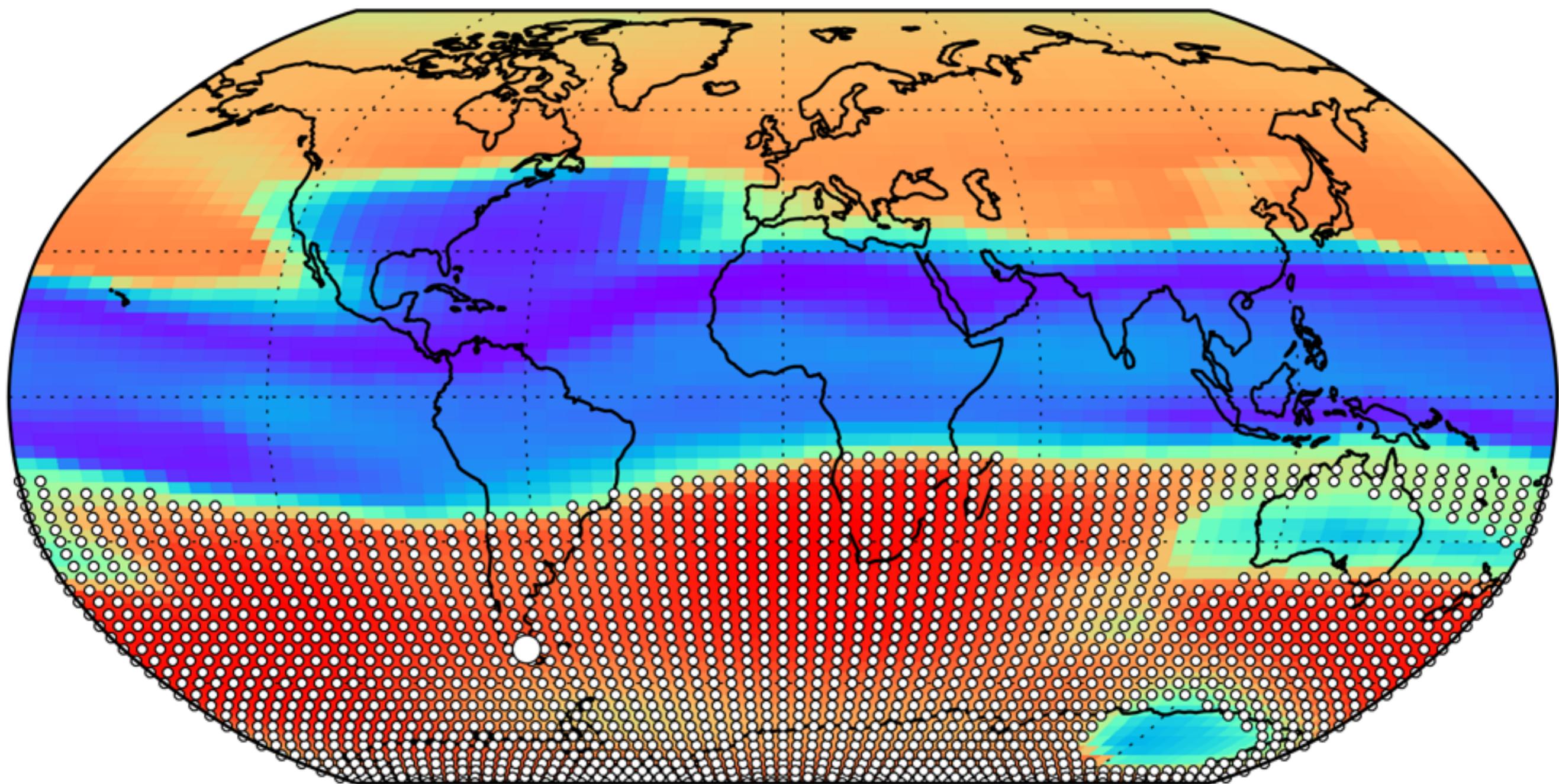
1250

1500

1750

2000

$deg(\nu)$



250

500

750

1000

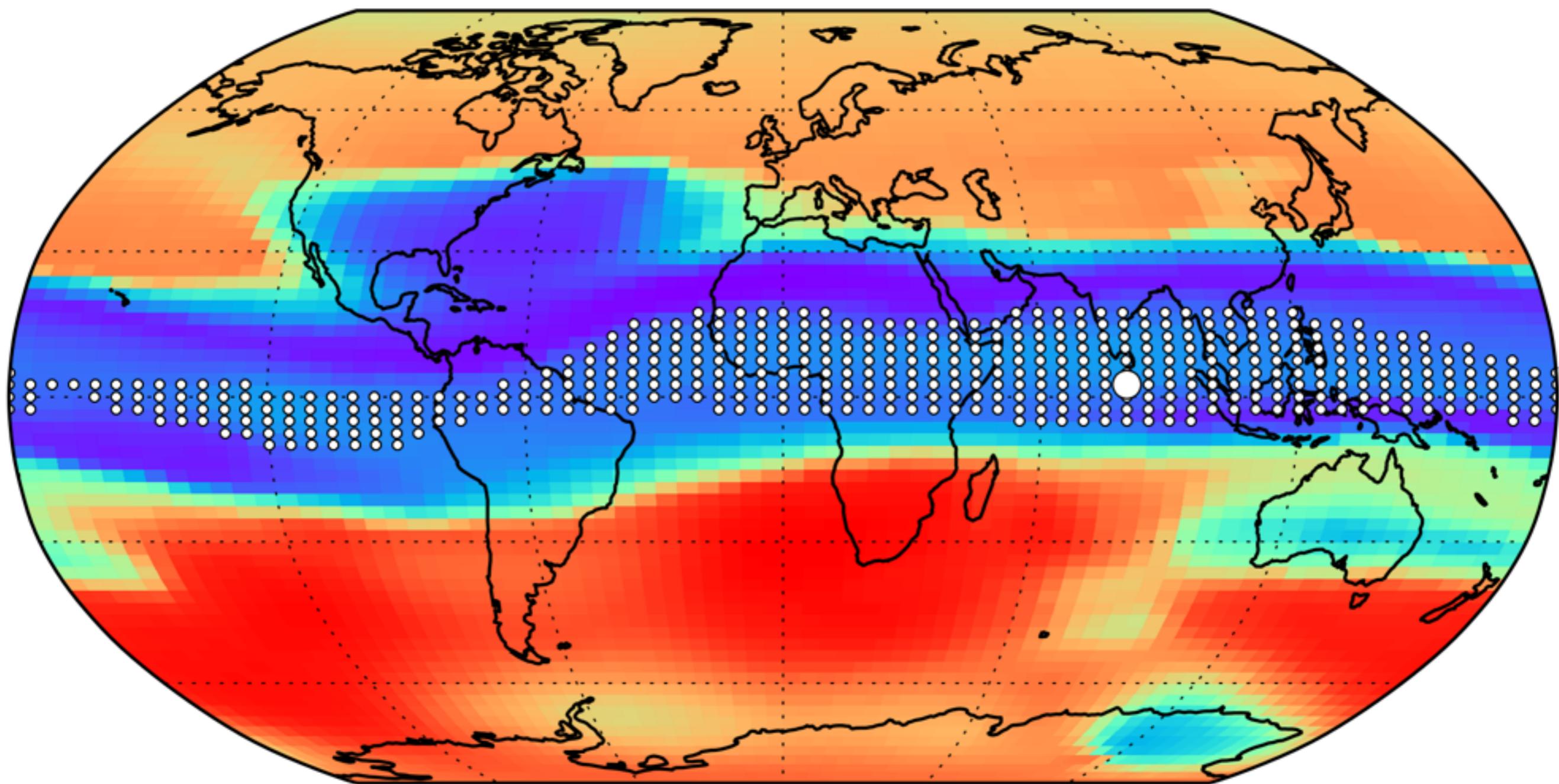
1250

1500

1750

2000

$deg(\nu)$



250

500

750

1000

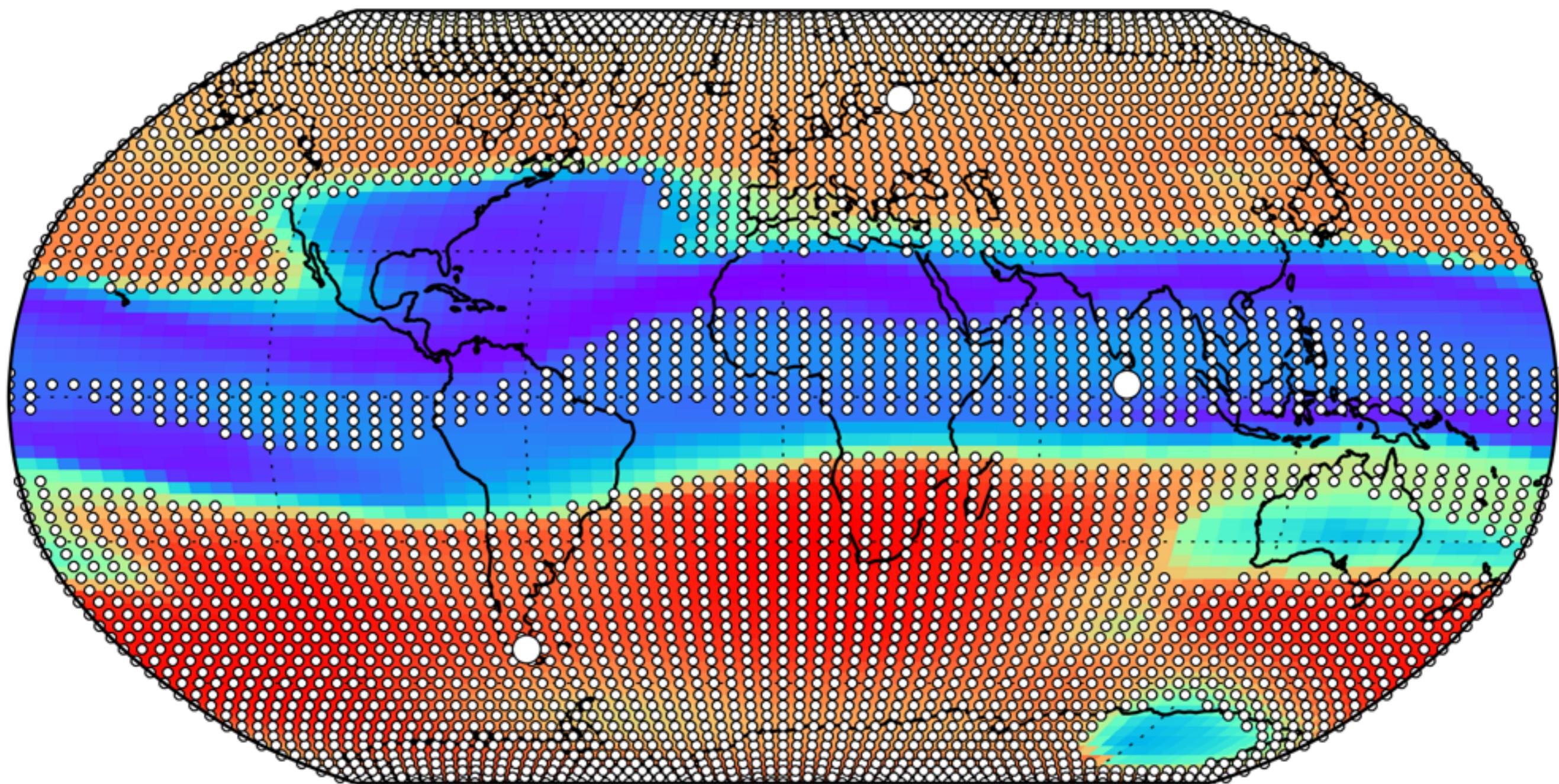
1250

1500

1750

2000

$deg(\nu)$



250

500

750

1000

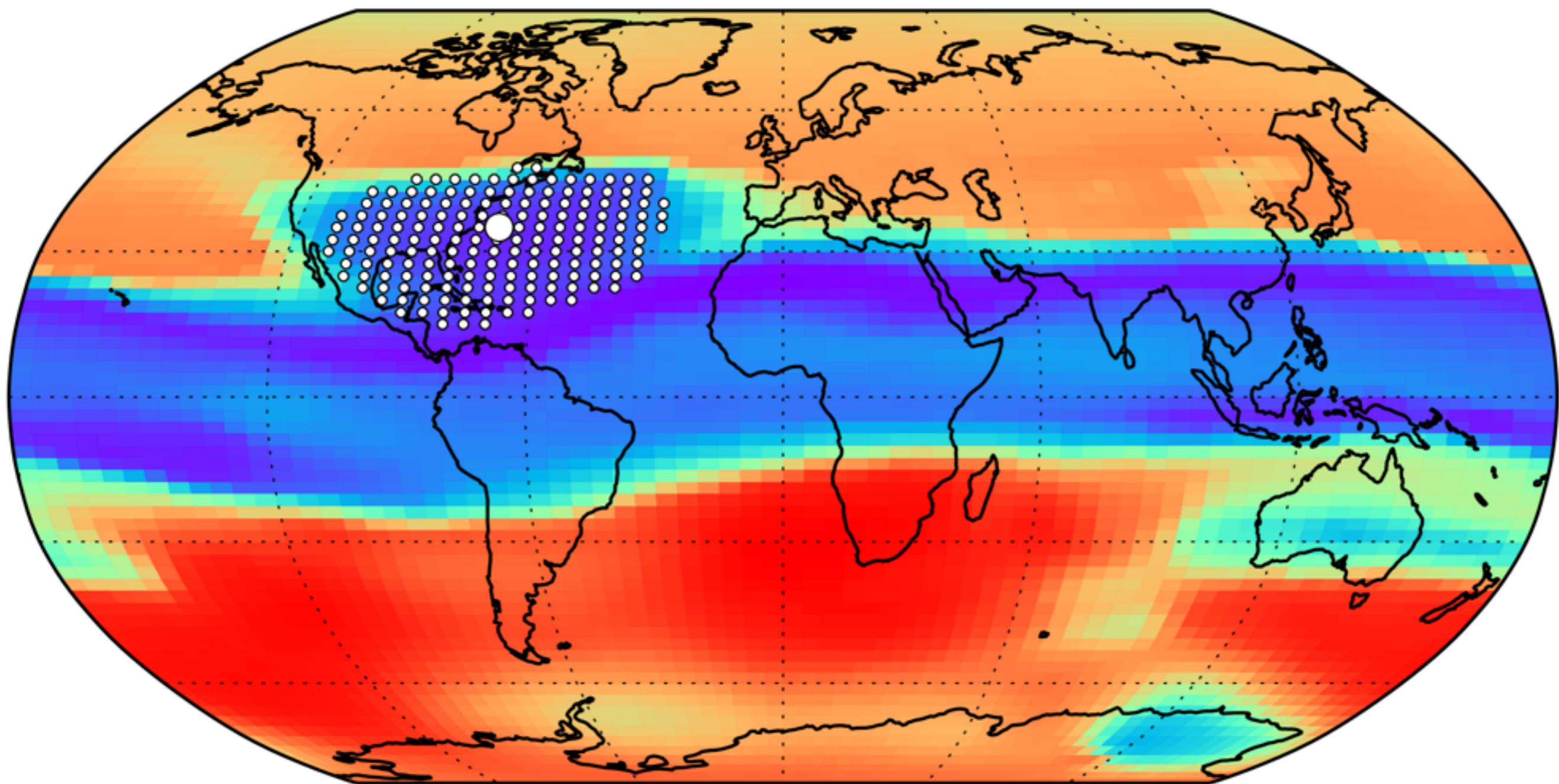
1250

1500

1750

2000

$deg(\nu)$



250

500

750

1000

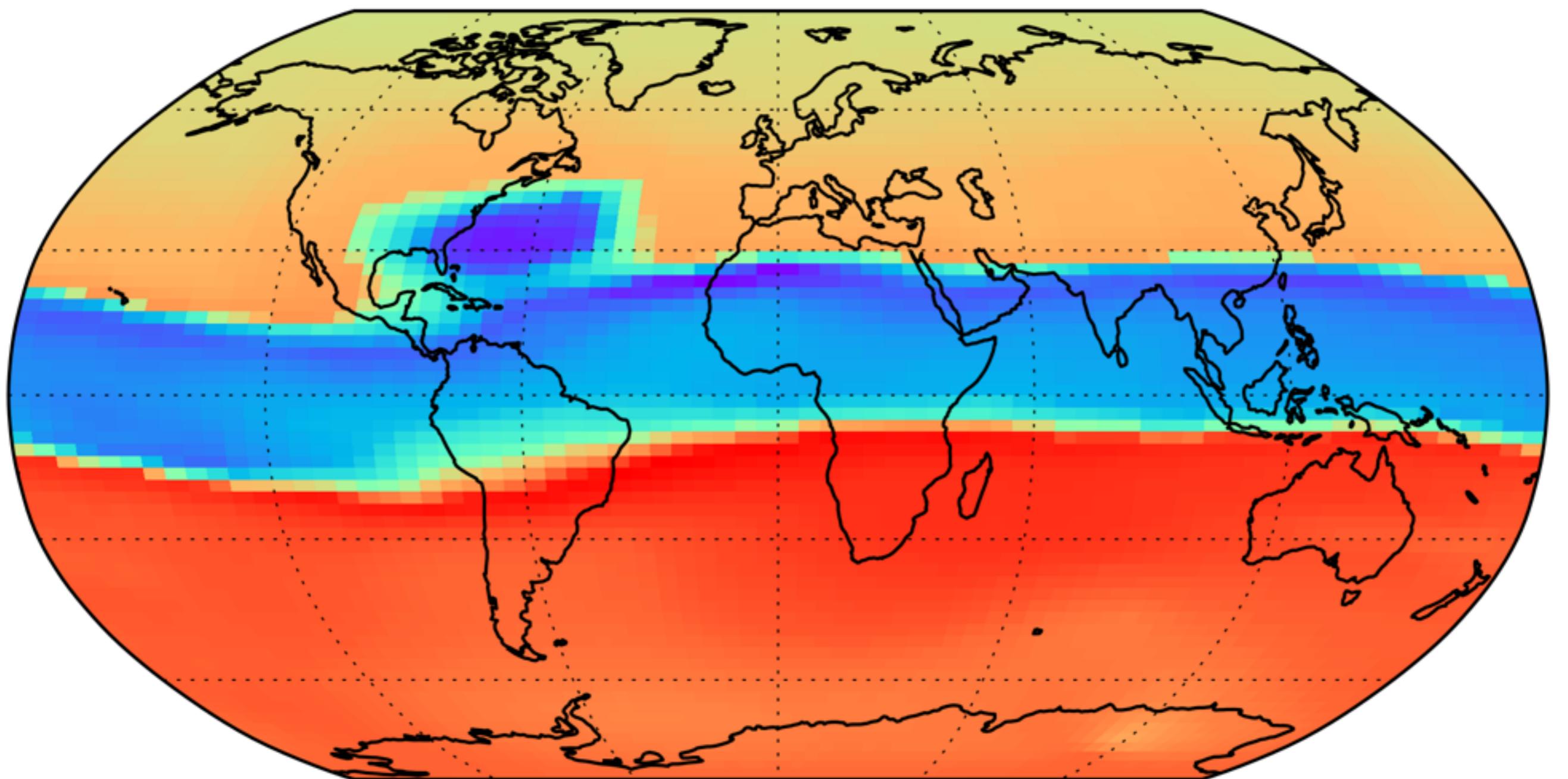
1250

1500

1750

2000

$deg(\nu)$



500

750

1000

1250

1500

1750

2000

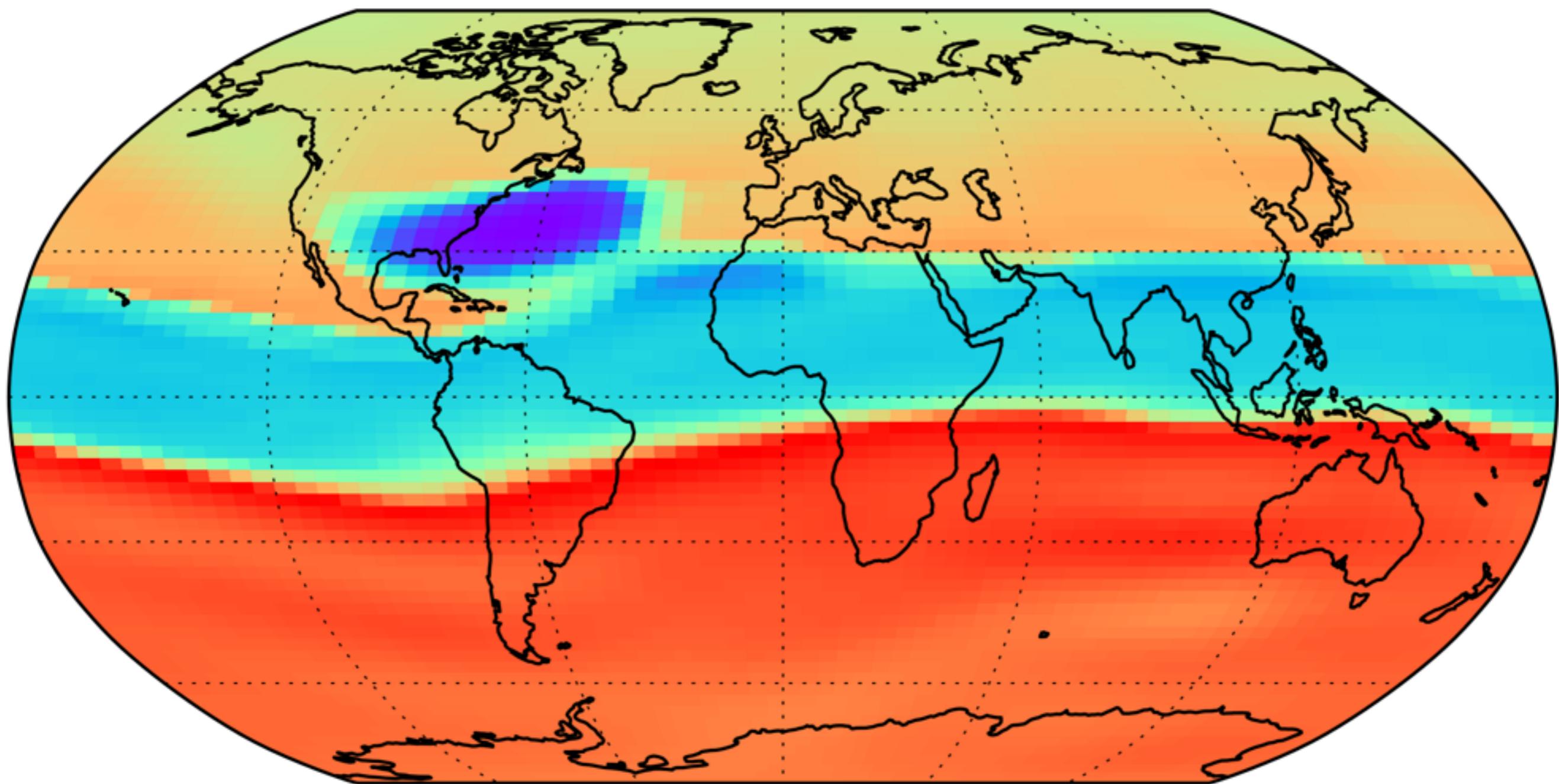
2250

2500

$deg(v)$

4. Интерпретация

Артефакт?



300

600

900

1200

1500

1800

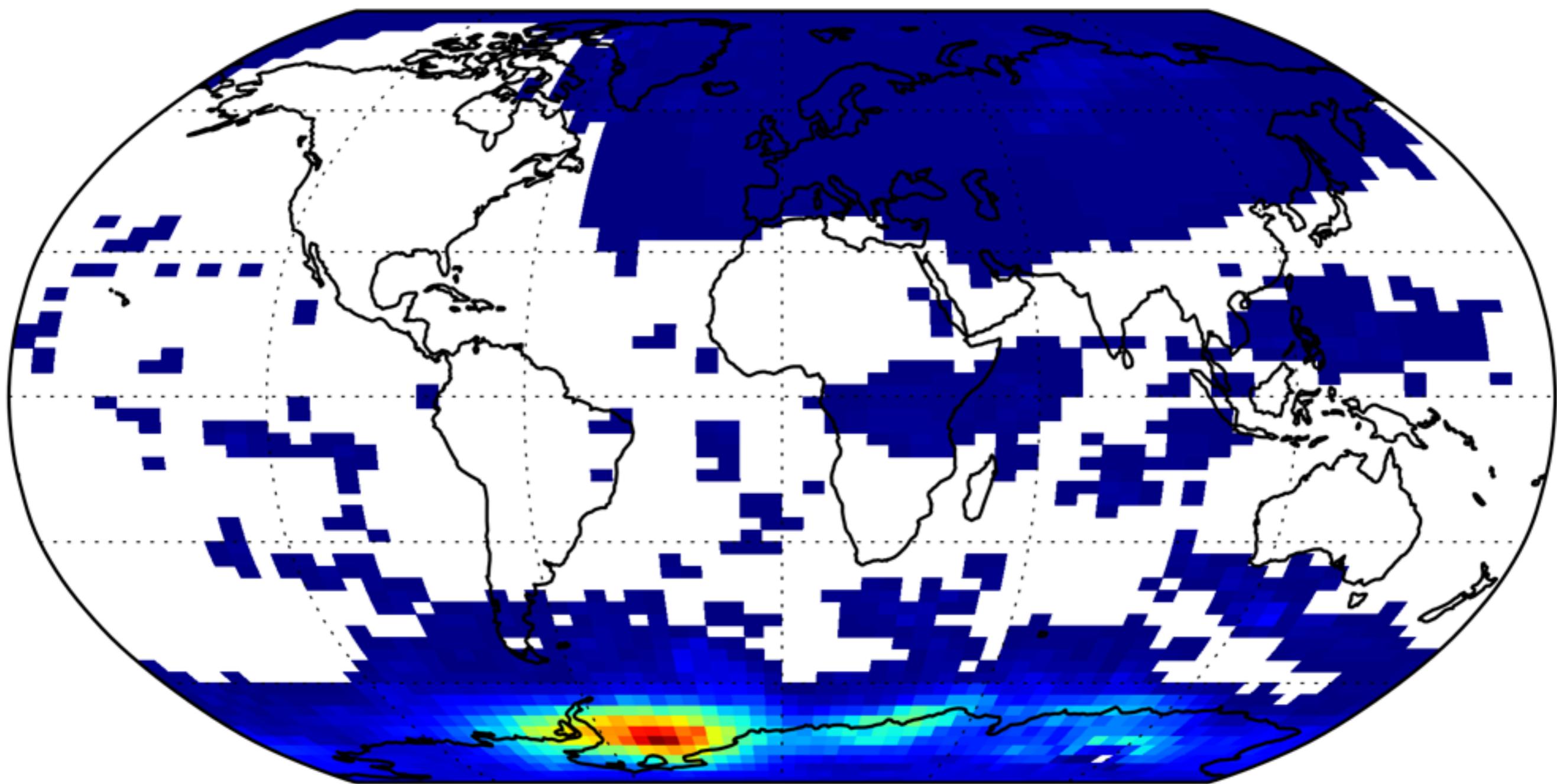
2100

2400

$deg(\nu)$

0

Отсутствующие значения



15

30

45

60

75

90

105

120

$0, n$

Естественный
характер?

Конфигурация МП?

Эффекты магнитных бурь?

Wang W. et al. DOI:10.1029/2009JA014461

1. GIM
2. Сетевой подход
3. Ионосферная сеть
4. Аномалия?

Спасибо