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Present status of datacenter

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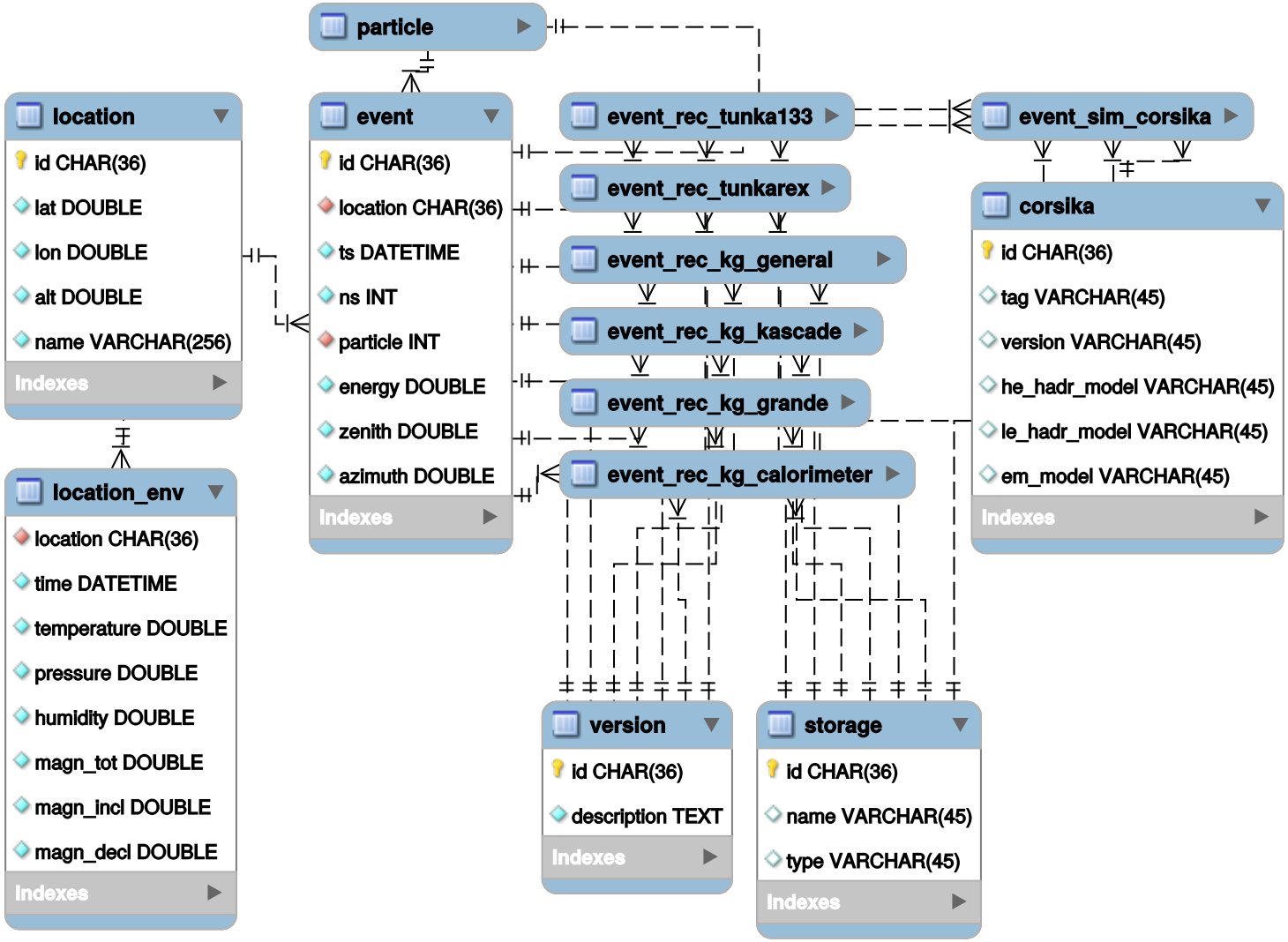
Status of KCDC installation

- KAOS is (some-how) installed on kcdc.icc.ru
  - admin access kaos:kaotic
  - It is possible to add small subset of KCDC data
  - Many things are hardcoded/hard to configure
  - Design?
  - What do we exactly want from the second copy of KCDC?
- Django-dependent (i.e. hard-binded with web-interface)
- Lack of documentation
- Fork of KAOS/KCDC software will not work for global datacenter
- Metadata!
- Independent service/application with CL + web interfaces
- Wrapper for KCDC mongoDB

Cosmic-ray metadata concept



Tunka-133/Tunka-Rex/SiMM-Rex events

Each physical event (UUID) is described with number of “virtual” events:

- Tunka-133 reconstruction (Tunka location + environment)
  - $\times$ different versions
- Tunka-Rex reconstruction (Tunka location + environment)
  - $\times$ different versions
- Tunka-Rex simulations (virtual environment)
  - $\times$ different versions
  - $\times$ different particles
  - $\times$ different environment
  - $\times$ Monte Carlo

$\Rightarrow$ each physical event is connected to a number of DB entries
stored in different places and in different formats
Suggested metadata helps to join and analyze them
The implementation can be done for dataset used in arXiv:1803.06862
and described in “Data” journal publication (suggested by A. Shigarov)

Incorporating KCDC to global datacenter

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Preparation

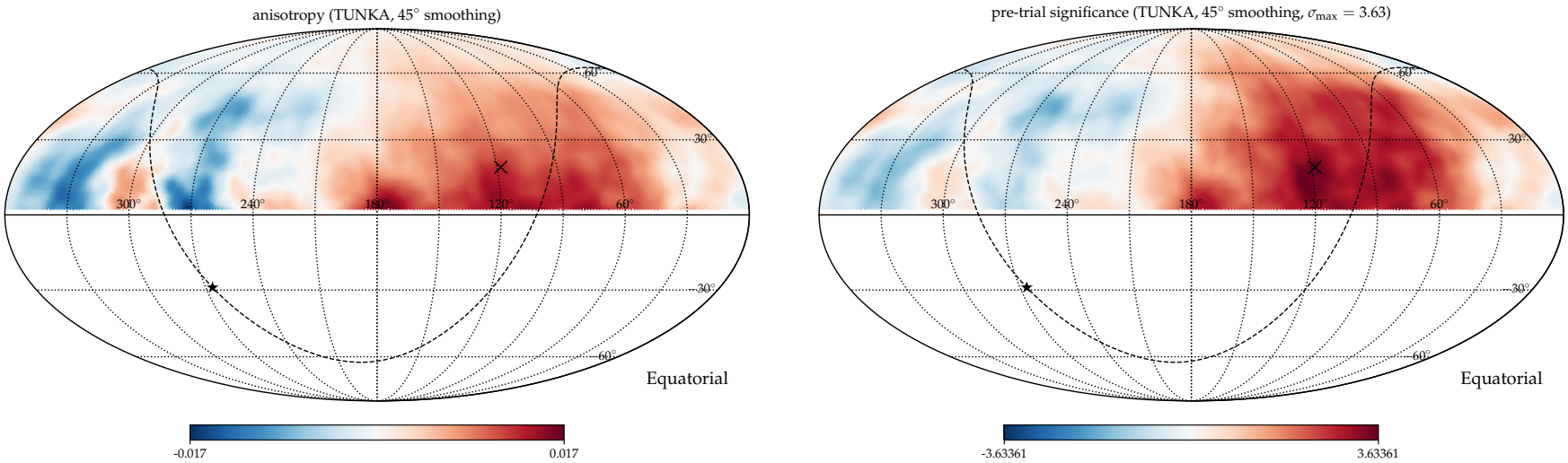
- Access to mongoDB
- Assigning UUID to each event (only +1 row to existing DB)
- Building metadata from mongoDB entries
- Interface between global datacenter and KCDC

Querying the data

- KG metadata consisting same fields as in datashop
- Making selection on the datacenter cite $\Rightarrow$ tuple of UUID as result
- Querying mongoDB by UUID

First steps in joint KG/Tunka analysis

Anisotropy study



Tunka-133 preliminary anisotropy by M. Ahlers and D. Kostunin

- Should trigger opening of Tunka-133 and HiSCORE data
- Increasing the statistics by merging of KG and Tunka data

First variant of logo