

## Cascade events in the South Sky

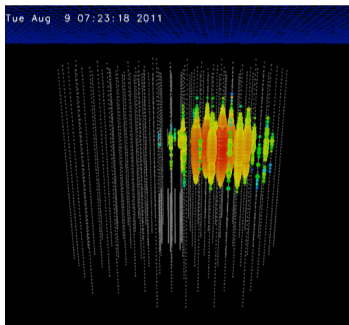


Figure: Cascade

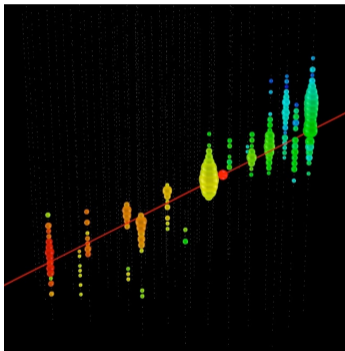


Figure: Track

- Why use Cascades?
- Background of Misconstructed Muons Largely Avoided
- New challenges of Directional Reconstructions

IceCube Preliminary

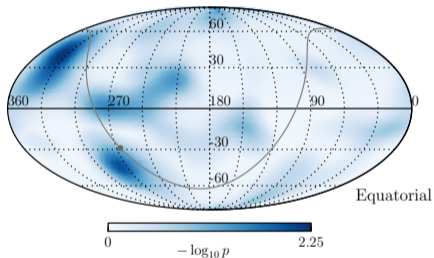


Figure: skymap

- Better Reconstructions (DNN)
- Incorporate Time Dependence in Likelihood
- Better dataset to followup interesting events in the South Sky