



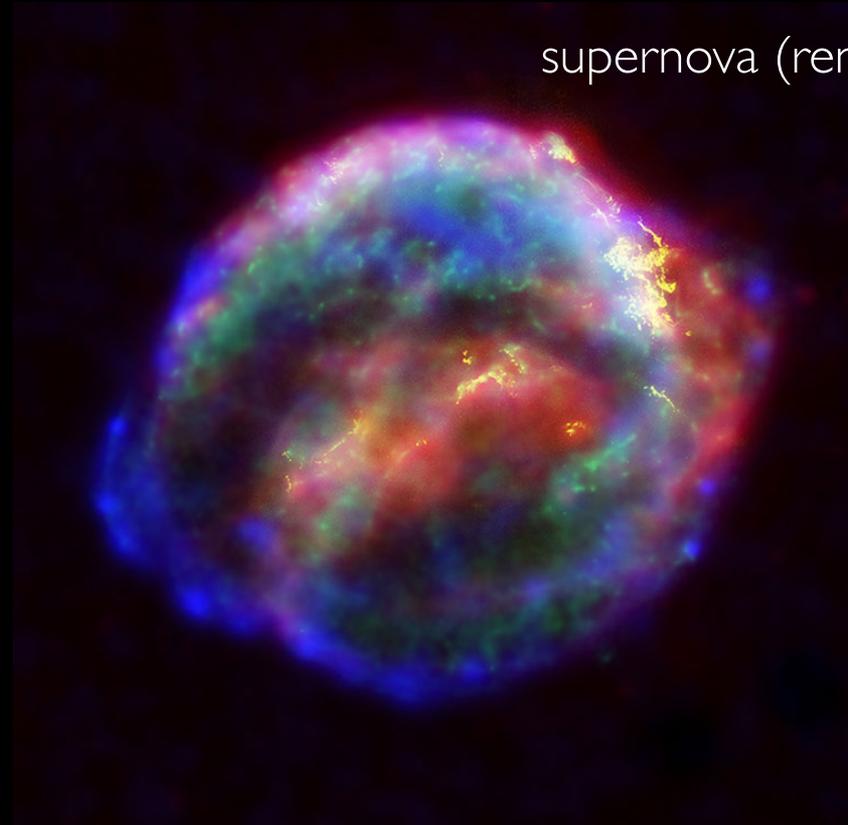
IceCube Detector Operations

...a brief look

Keep the Detector Running!



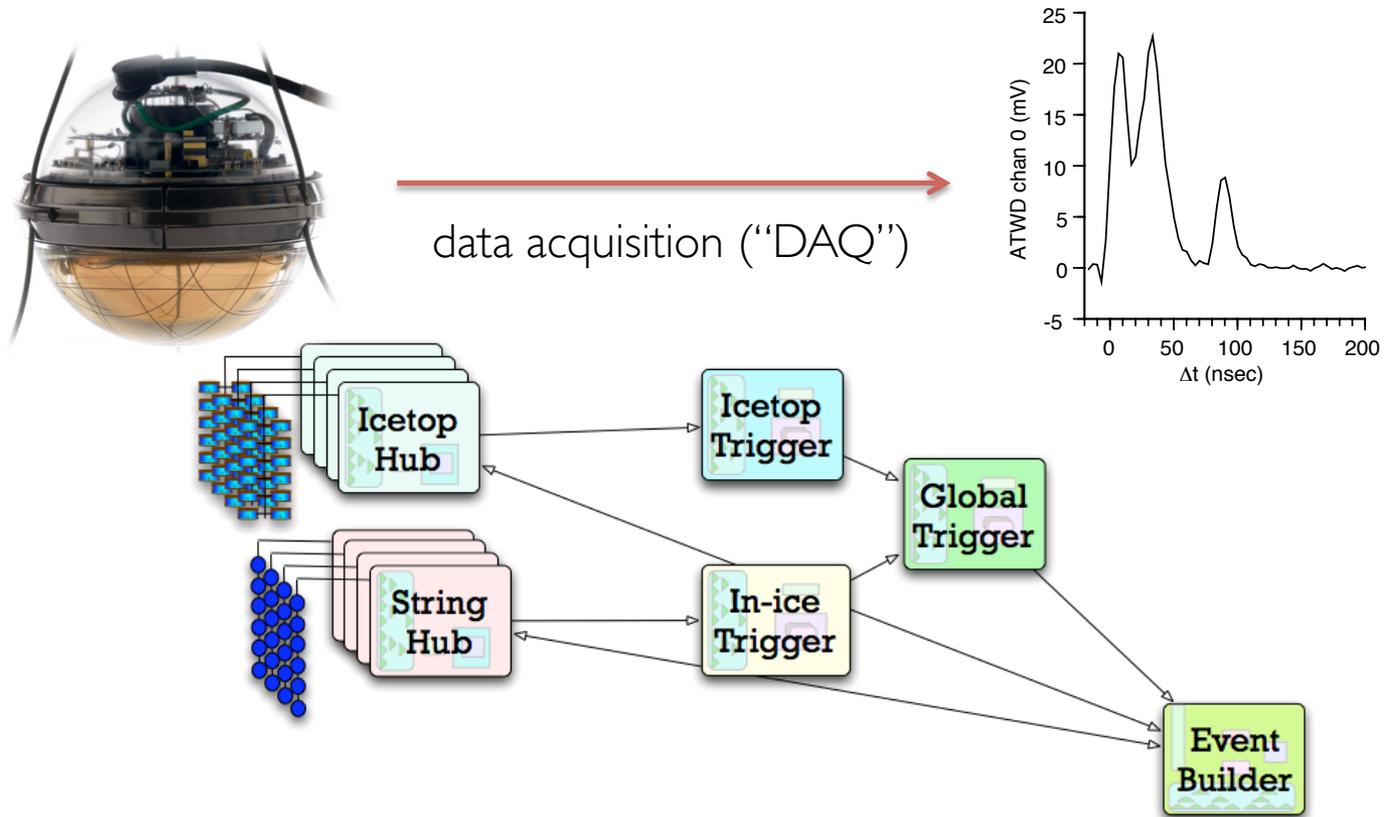
photo credit: S. Lidstrom



supernova (remnant)

winterover walking to IceCube Lab
to fix a problem

Detector Software



IceCube DAQ: Java, Python, C, C++
Form "triggers" from particle-like light patterns

Detector Control & Monitoring

SPS Status

Data Acquisition

Current run: 122346 (8h:12m:41s)
Run config: sps-IC86-adios-Skorpionen-again-V228
DAQ release: Capital_14431:103430M
Total events: 75480758
Active DOMs: 5406
Light mode: **dark** Change: **LID**

Control Details

pdaq RUNNING

Other Components

DB	RUNNING	stop
GammaFollowUp	UNKNOWN	waiting
I3DAQDispatch	RUNNING	stop
I3MoniDomMon	RUNNING	stop
I3MoniDomSn	RUNNING	stop
I3MoniDomTcal	RUNNING	stop
I3MoniMover	RUNNING	stop
I3MoniPhysA	RUNNING	stop
OpticalFollowUp	RUNNING	stop
PFFiltDispatch	RUNNING	stop
PFFiltWriter	RUNNING	stop
PFRawWriter	RUNNING	stop
PFServer1	RUNNING	stop
PFServer2	RUNNING	stop

Currently Watched Alerts

multirunfail	OK
runfail	OK
ICL overtemp max2	OK
/mnt/data/pdaqlo...n.tar file count	OK
Detector not taking data	OK
ICL overtemp max1	OK
ICL overtemp min2	OK
ICL temperature too high	OK
Lots of LBM overflows	OK
Max WXGoose 3 Temp	OK
Max WXGoose 3 Temp (pages)	OK
Max WXGoose 6 Temp	OK
Min WXGoose 1 Temp	OK
Minimum Active DOMs	OK
OFU latency too high	OK
PnF latency too high	OK
PnF rate too low	OK
SERIOUS SN alert triggered!	OK
Supernova DAQ state check	OK
Test Alert	OK
Time since SNAQA...in running state	OK
[/usr/local/pdaq....dat file count]	OK

Active Users

jkelly now

Graphs

(Detailed rates page)
pDAQ Event Rate (Hz)

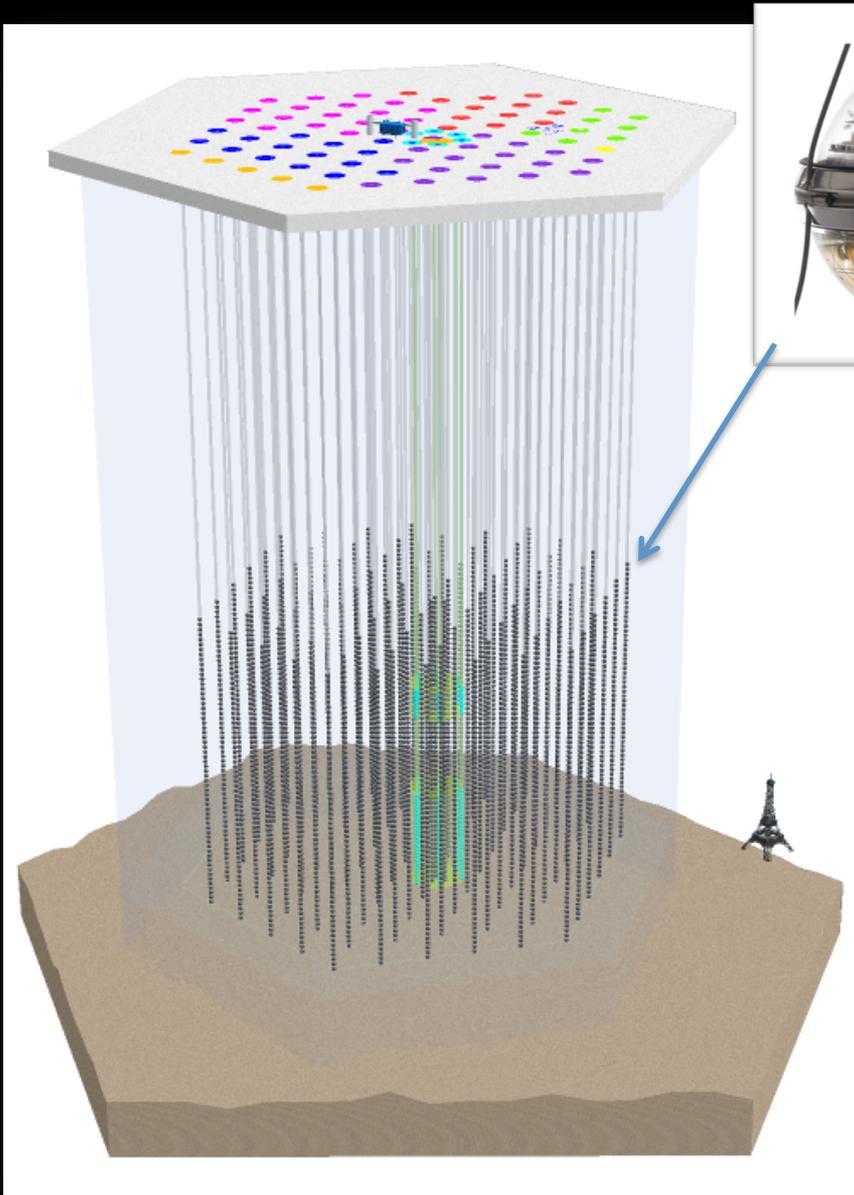
Active DOMs

PnF Latency (sec)

SNAQA Processing Latency (sec)

I3Live: Python, JavaScript
real-time updates via Iridium satellites

Keeping Track of Detector Issues



5,404 DOMs currently in operation

- 39-61 “Hydrogen”: PMT imploded
- 07-36 “Cookie_Monster”: dead
- 10-60 “Boerenkaas”: bad ATWD chip
- 40-36 “Sheep”: slightly unstable baseline voltage
etc.!

Detector Upgrades at South Pole



Recreation

