

LOFAR: the LOw Frequency ARray

Radio Observatory
ASTRON, Dwingeloo, The Netherlands

LOFAR data school 2014

LOFAR: Lots Of Flimsy Antenna Rigs

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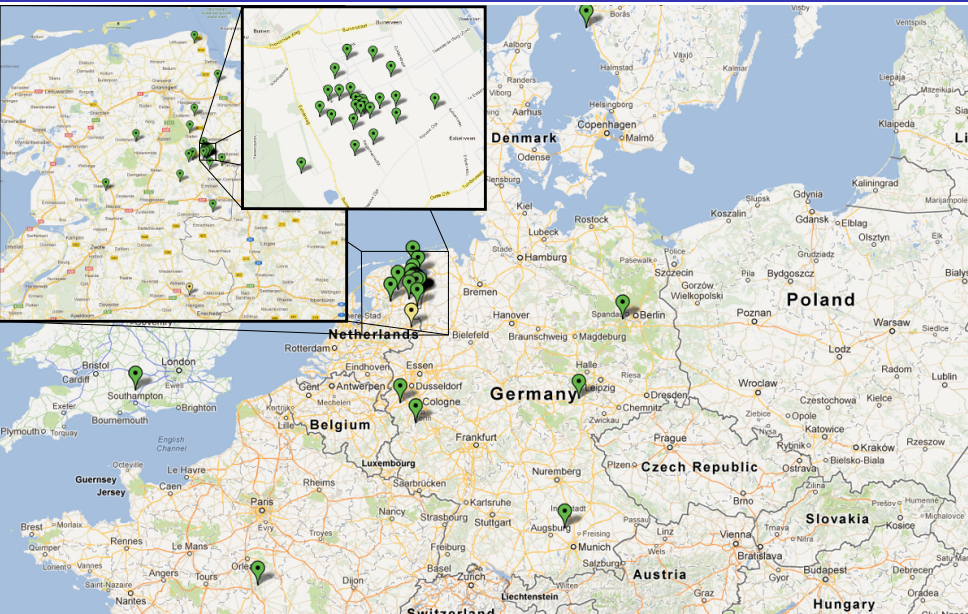
1 Architecture

2 Beams, beams, beams...

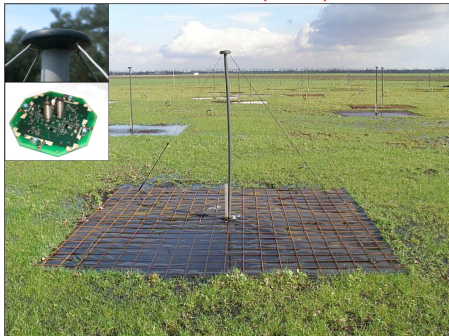
3 More beams...

4 If all goes well

A BIG radio telescope



Low Band Antenna (LBA)

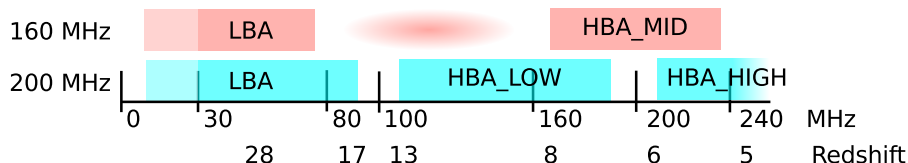


- 10–90 MHz
- All digital beam forming

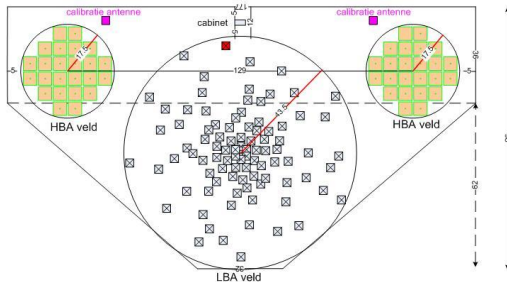
High Band Antenna (HBA)



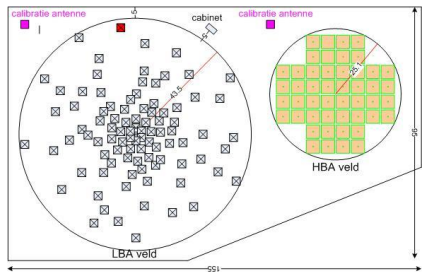
- 110–240 MHz
- 4x4 antennas per analogously beam formed tile
- Tiles beam formed digitally



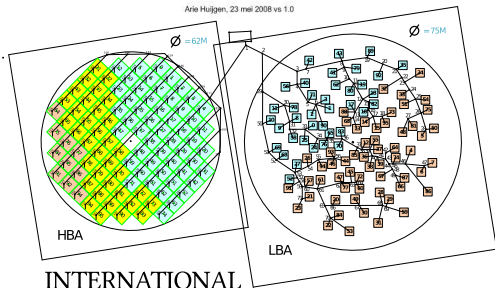
CORE



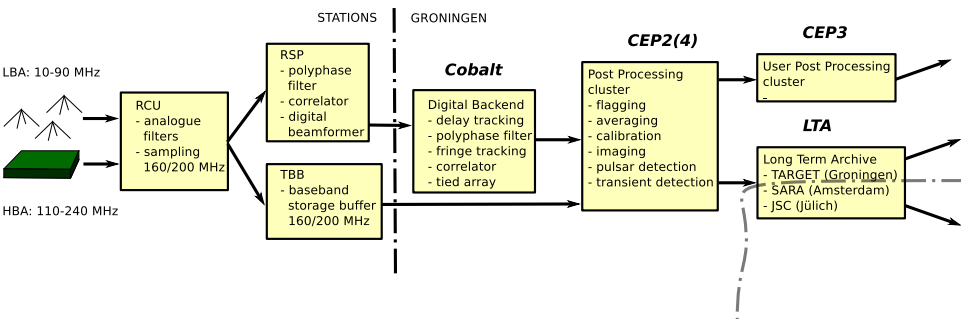
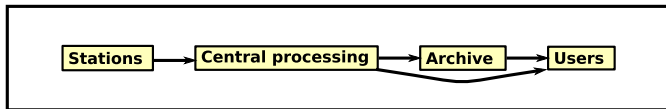
REMOTE



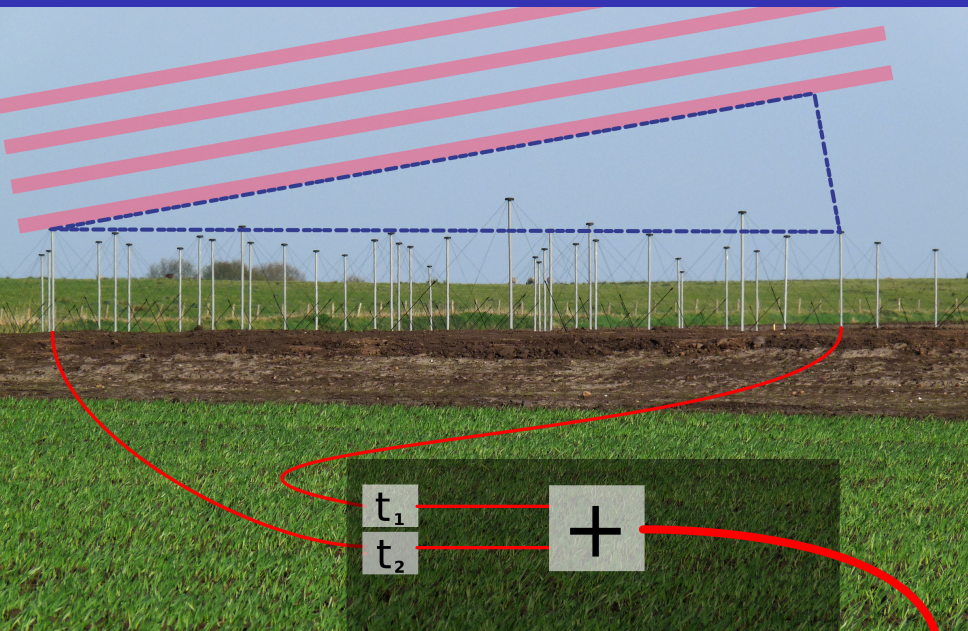
Arie Huijgen, 23 mei 2008 vs 1.0

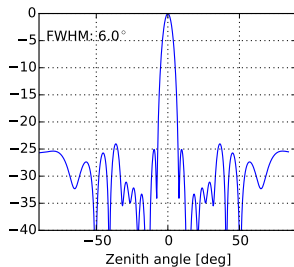
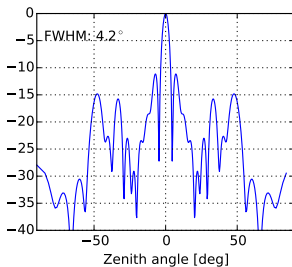
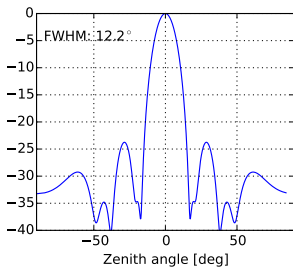
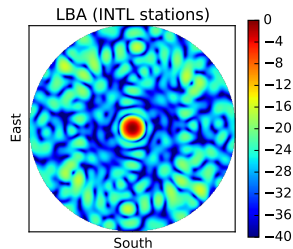
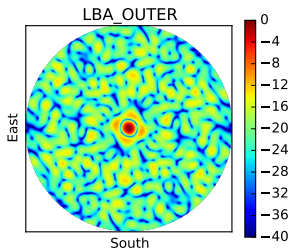
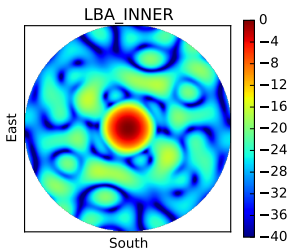


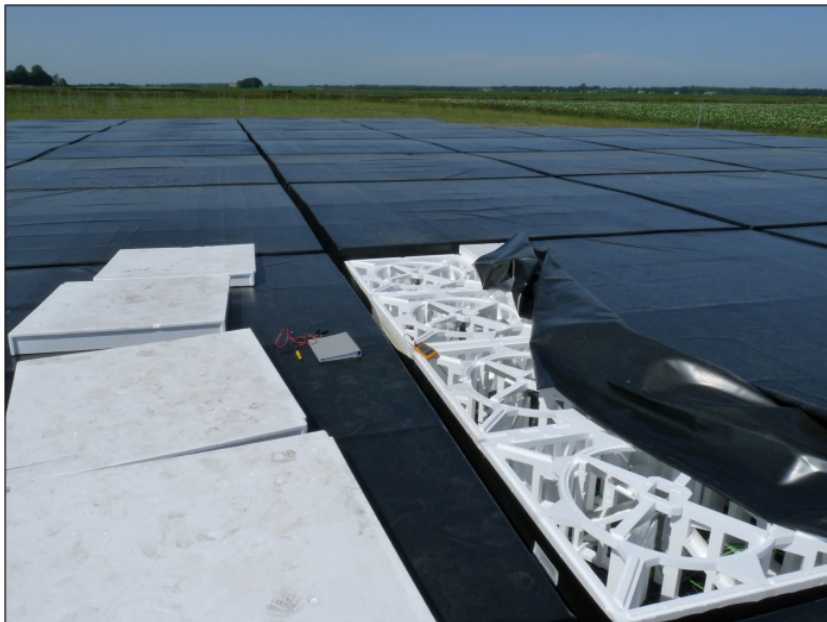
INTERNATIONAL

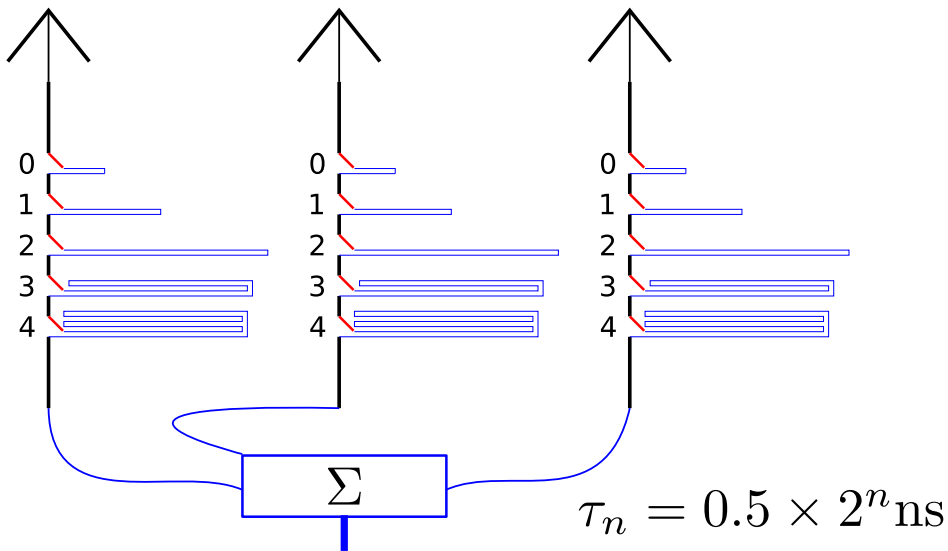


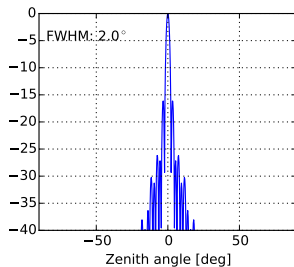
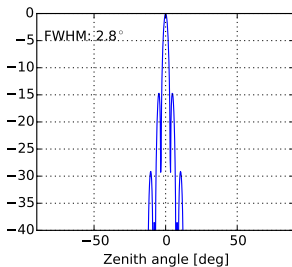
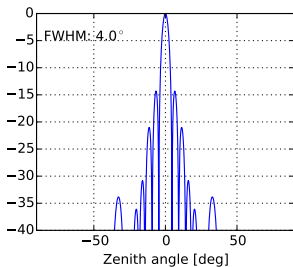
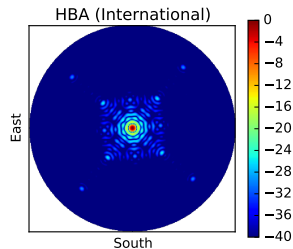
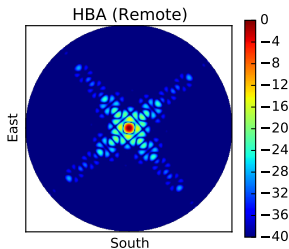
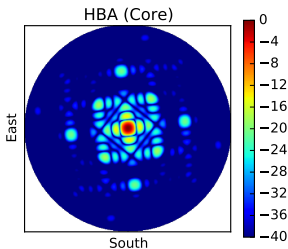
- 1 Architecture
- 2 Beams, beams, beams. . .
- 3 More beams. . .
- 4 If all goes well

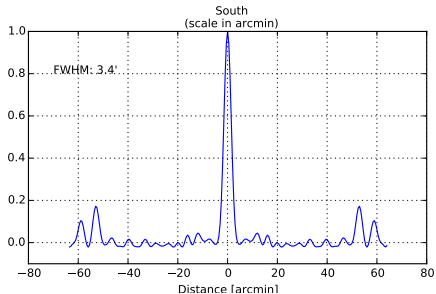
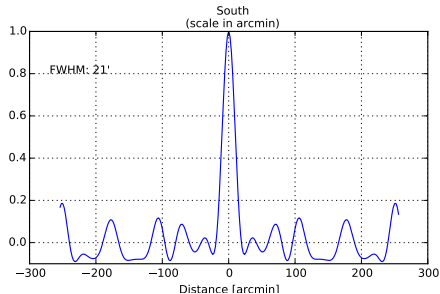
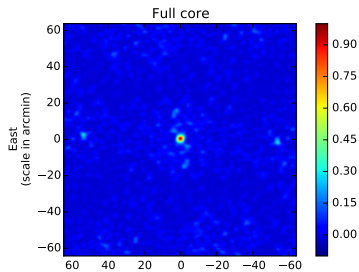
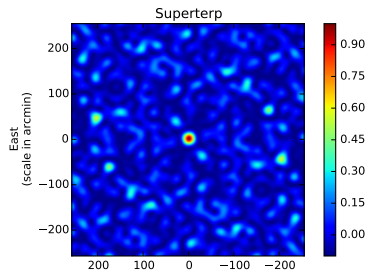






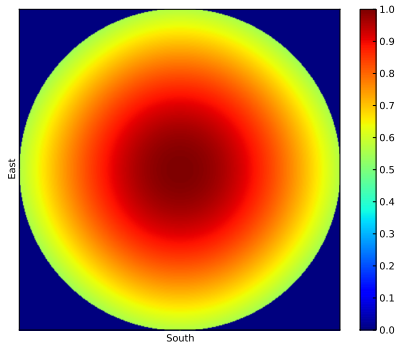
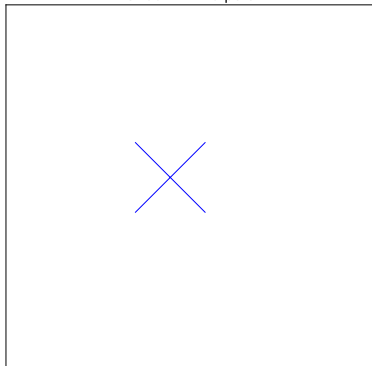


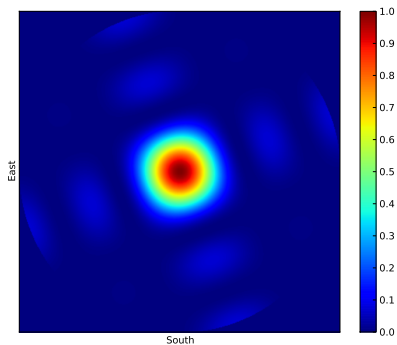
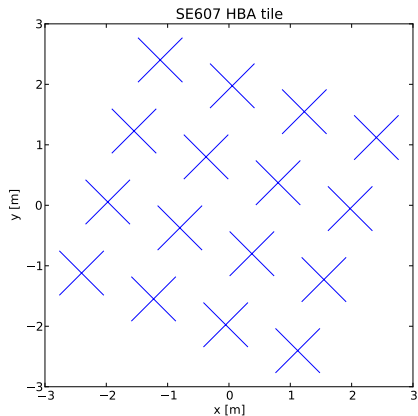


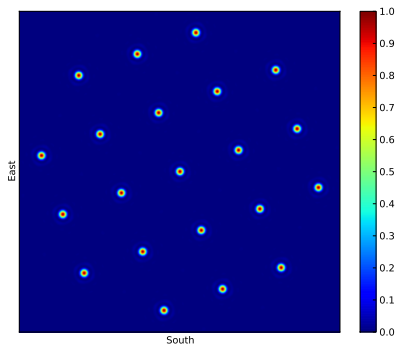
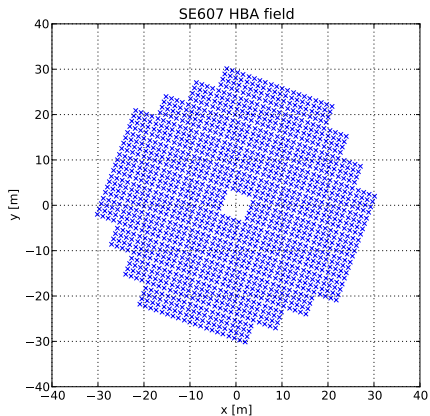


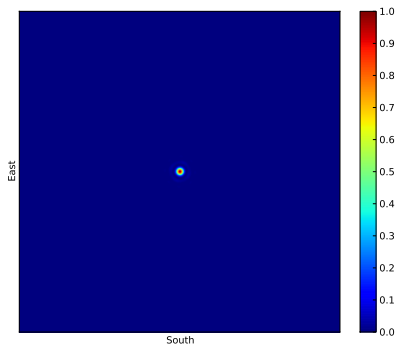
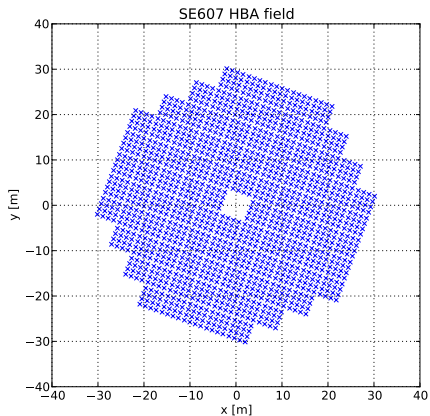
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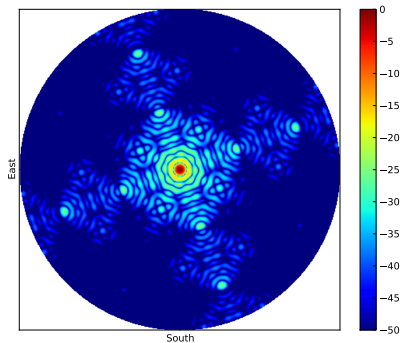
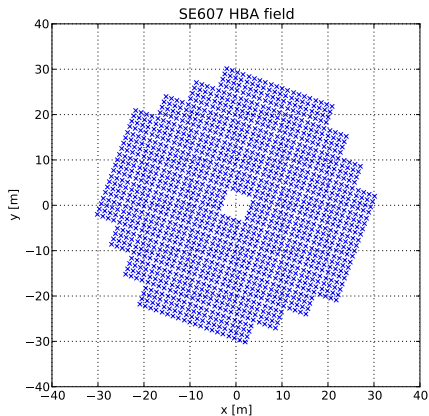
SE607 HBA dipole

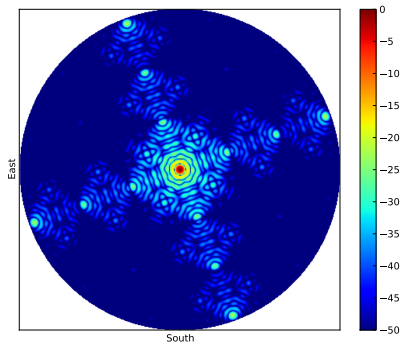
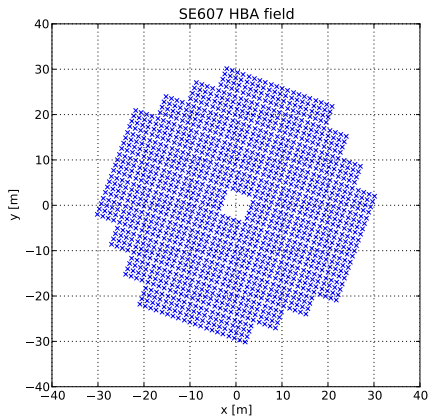


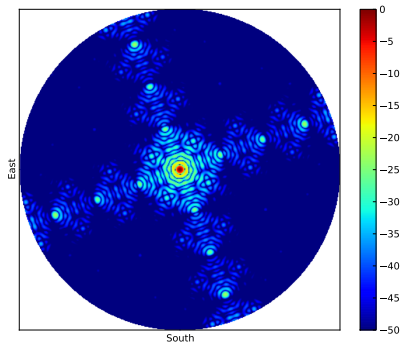
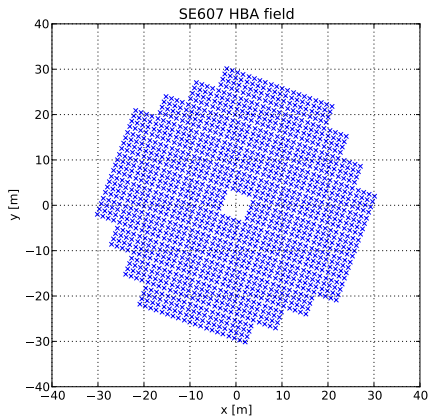


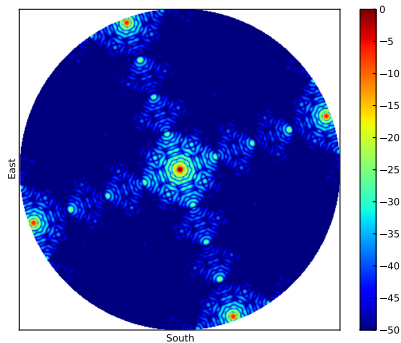
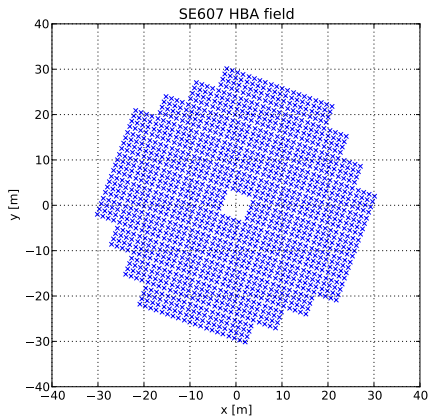


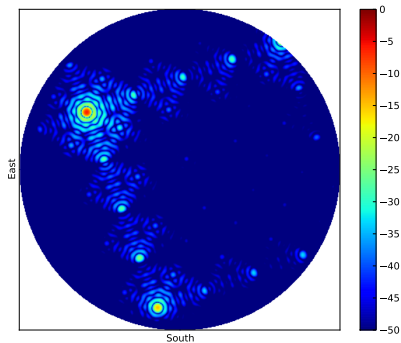
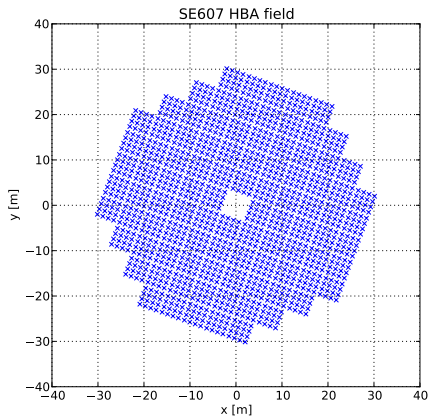


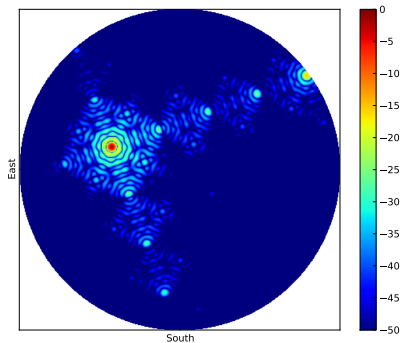
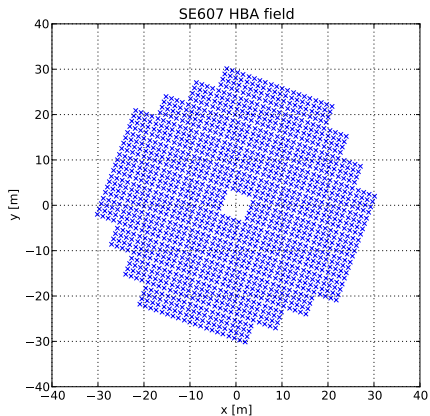


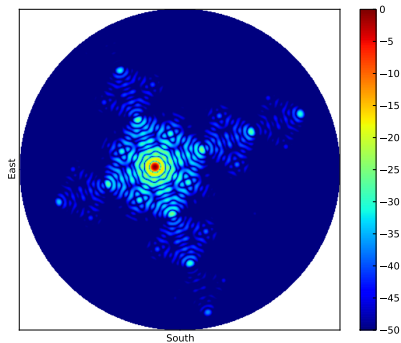
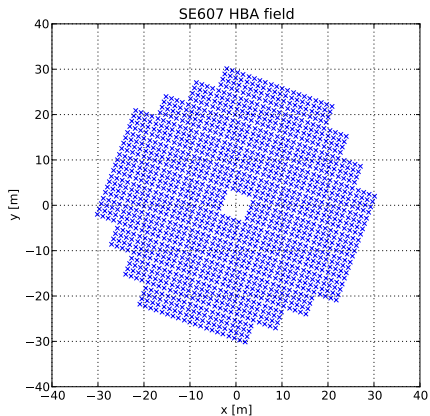


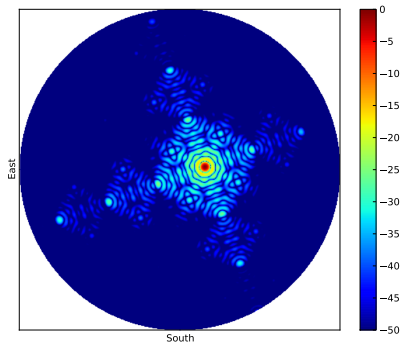
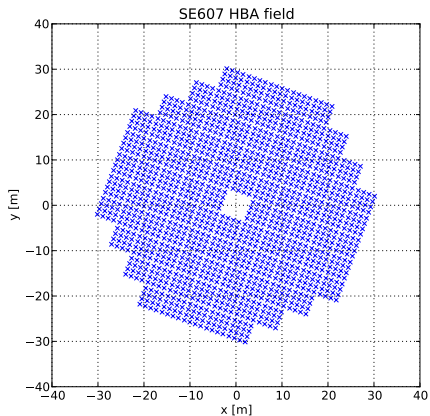


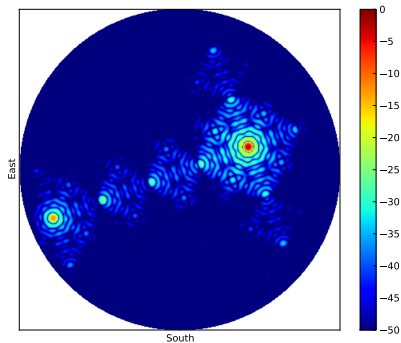
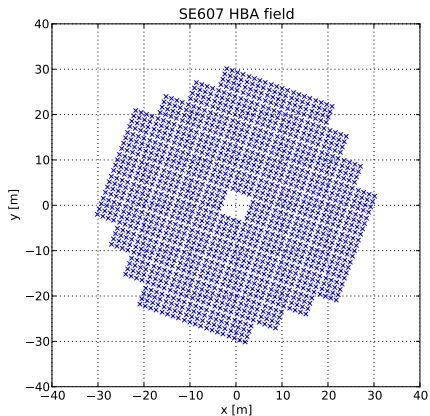


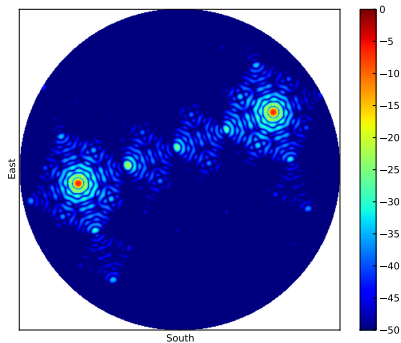
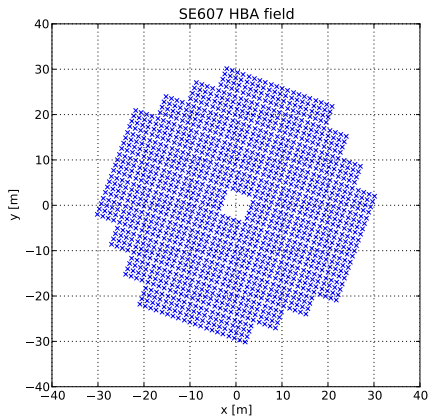


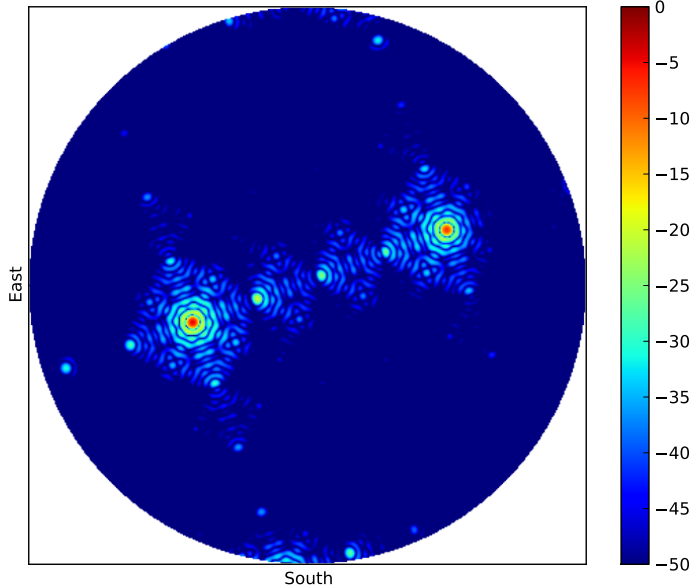


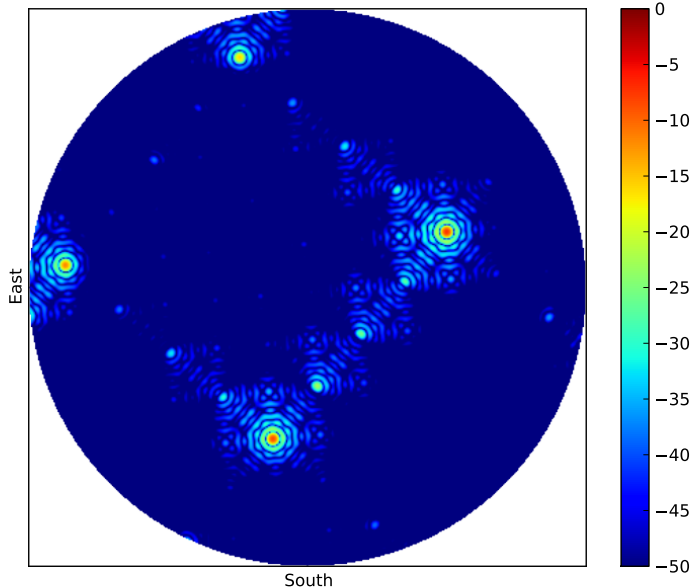


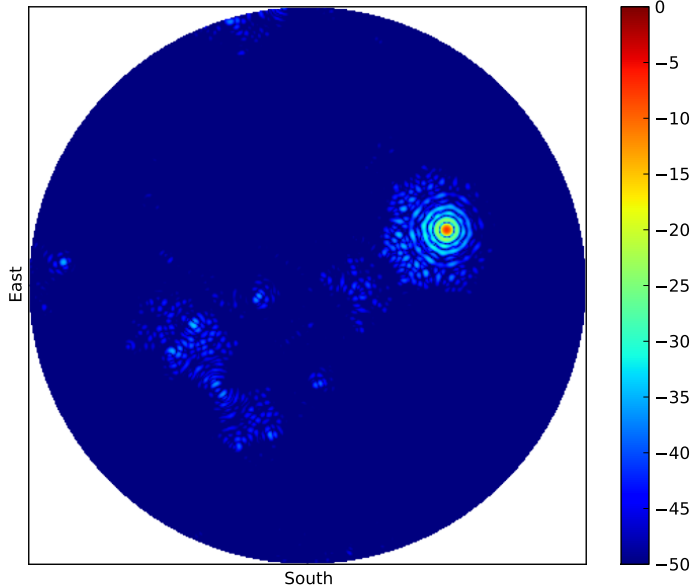












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