Basic Figures
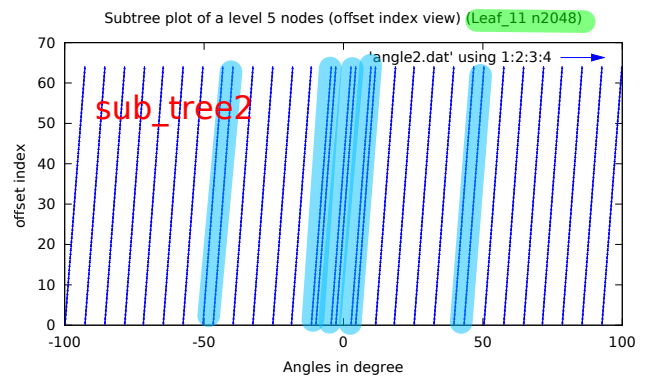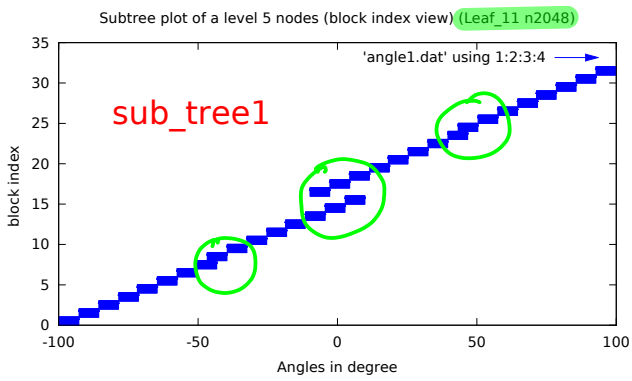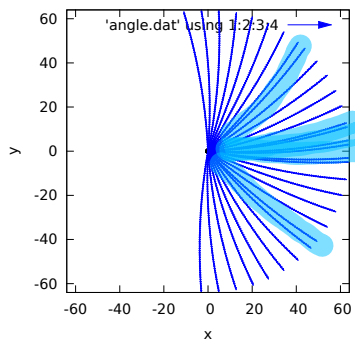June 14, 2014

egb1 . Leaf_11 . sub_tree1 . n2048 . eps
egb1 . Leaf_11 . sub_tree2 . n2048 . eps
egb2 . Leaf_11 . circle_ang . n2048 . eps
egb3 . Leaf_11 . line_ang . i0 . n2048 . eps
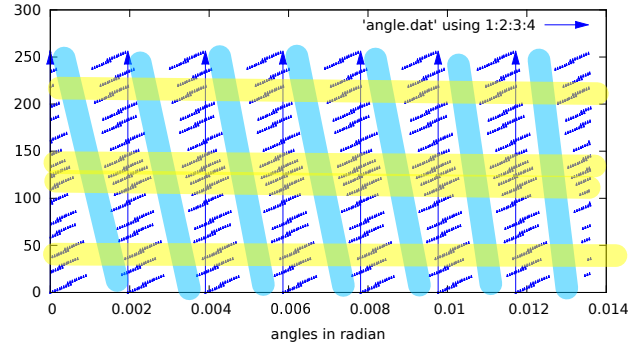egb4 . Leaf_11 . quantization . n2048 . eps

egb1 . All_11 . sub_tree1 . n4095 . eps
egb1 . All_11 . sub_tree2 . n4095 . eps
egb1 . All_11 . sub_tree3 . n4095 . eps
egb2 . All_11 . circle_ang . n4095 . eps
egb3 . All_11 . line_ang . i0 . n4095 . eps
egb4 . All_11 . quantization . n4095 . eps

Subtree plot of a level 5 nodes (block index view) (Leaf_11 n2048)

'angle1.dat' using 1:2:3:4

sub_tree1

Subtree plot of a level 5 nodes (offset index view) (Leaf_11 n2048)
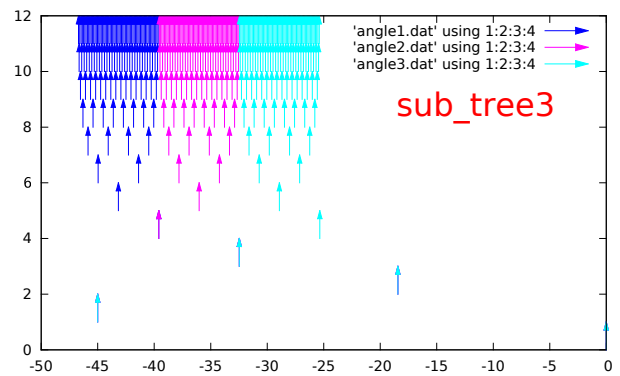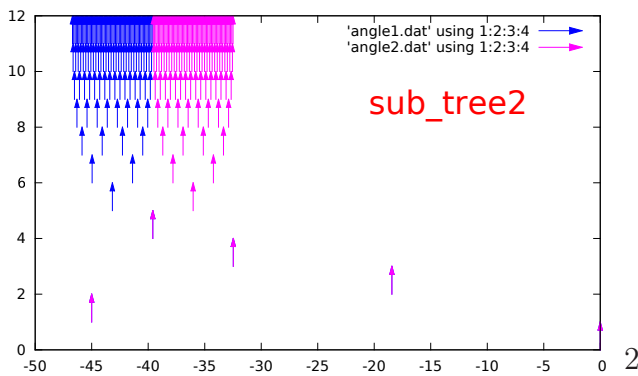
'angle2.dat' using 1:2:3:4

sub_tree2

Circular angle vectors by the offset in a block (Leaf_11 n2048)

'angle.dat' using 1:2:3:4

Linear angle vectors showing jitter (Leaf_11 n2048)

'angle.dat' using 1:2:3:4

Quantization Effect (Leaf_11 n2048)

'angle.dat' using 1:2
'angle.dat' using 1:3

'angle1.dat' using 1:2:3:4

sub_tree1

'angle1.dat' using 1:2:3:4
'angle2.dat' using 1:2:3:4

sub_tree2

'angle1.dat' using 1:2:3:4
'angle2.dat' using 1:2:3:4
'angle3.dat' using 1:2:3:4

sub_tree3

Circular angle vectors by the offset in a block (All_11 n4095)

'angle.dat' using 1:2:3:4

Linear angle vectors showing jitter (All_11 n4095)

'angle.dat' using 1:2:3:4

angles in radian

Quantization Effect (All_11 n4095)

'angle.dat' using 1:2
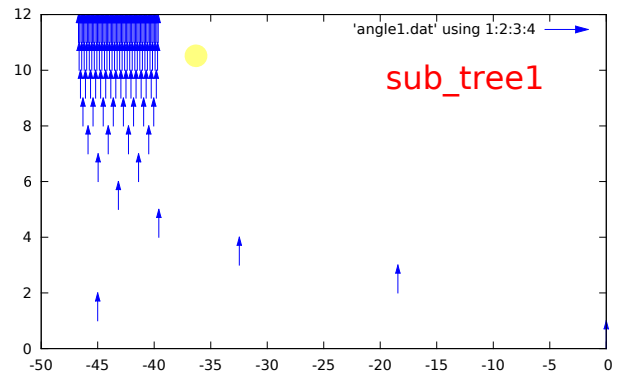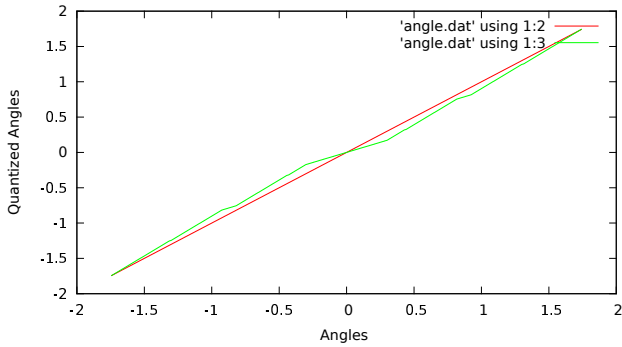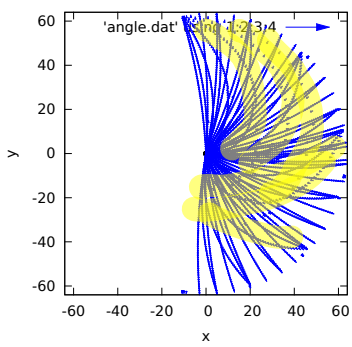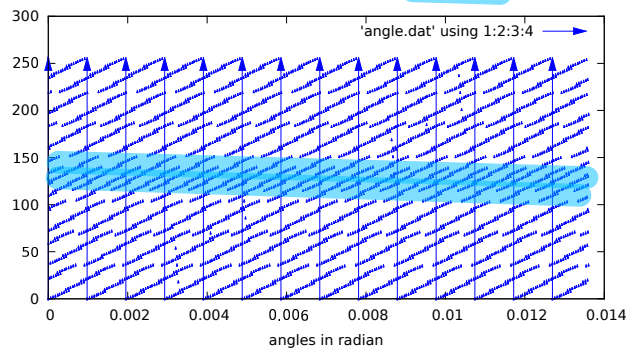'angle.dat' using 1:3
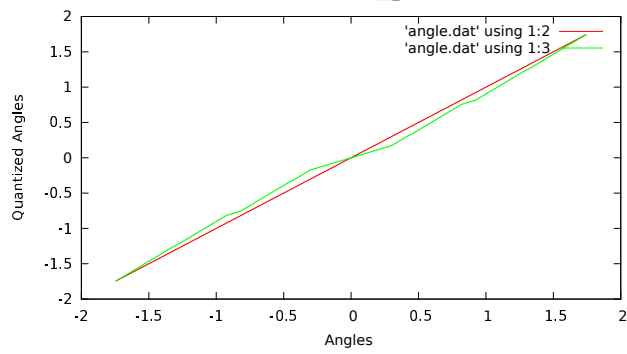
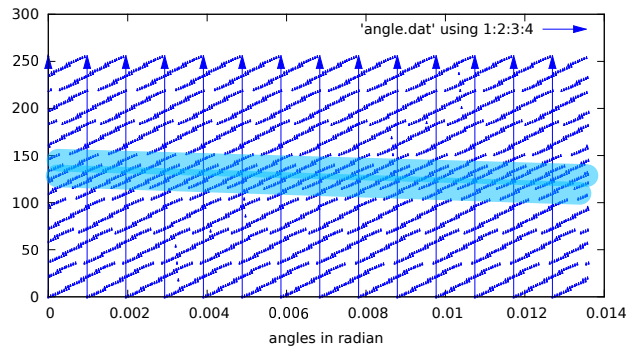Quantized Angles

Angles

3

Circular angle vectors by the offset in a block (All_11 n4095)

Linear angle vectors showing jitter (All_11 n4095)
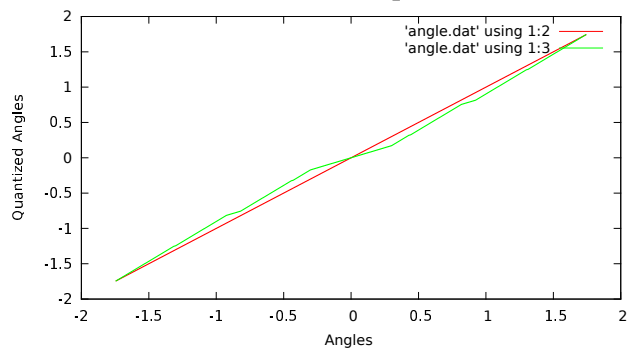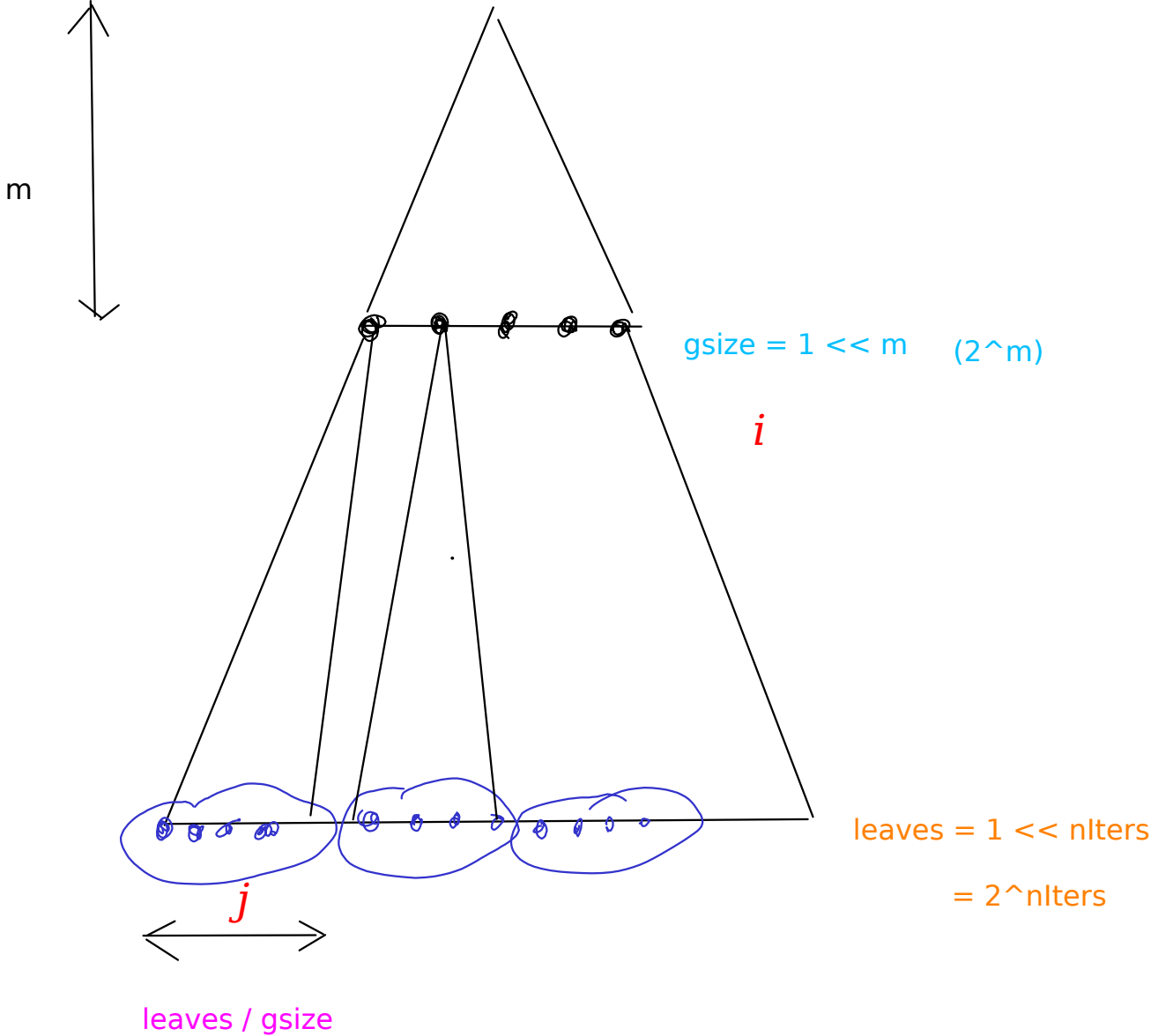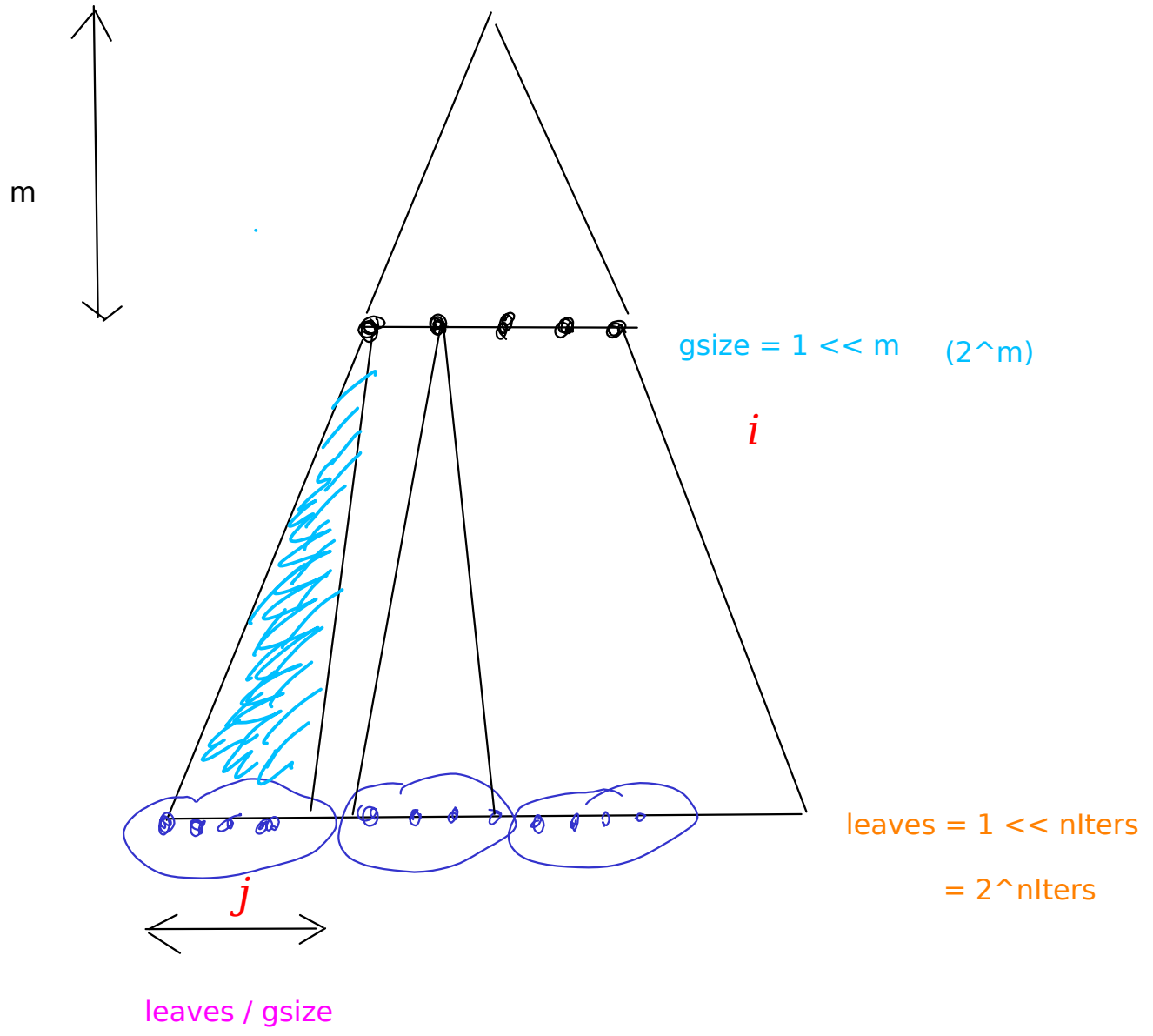

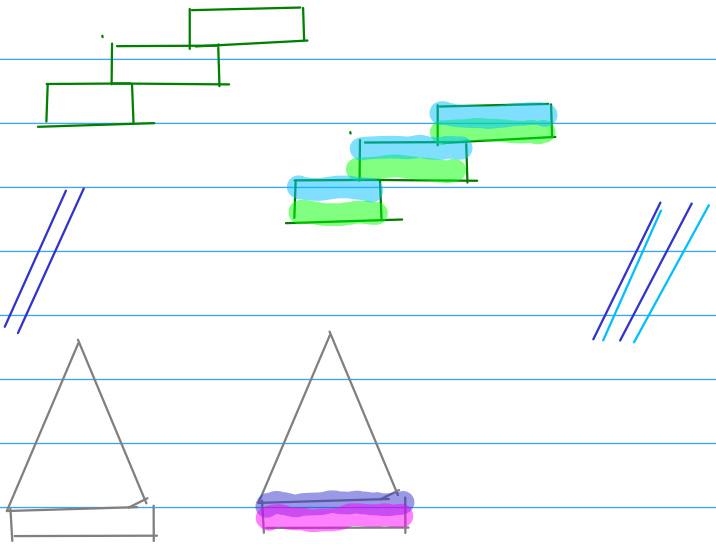Quantization Effect (All_11 n4095)

3

Leaf case

m

gsize = 1 << m   (2^m)

i

leaves = 1 << nIters

= 2^nIters

j

leaves / gsize

m

gsize = 1 << m   (2^m)

i

leaves = 1 << nIters
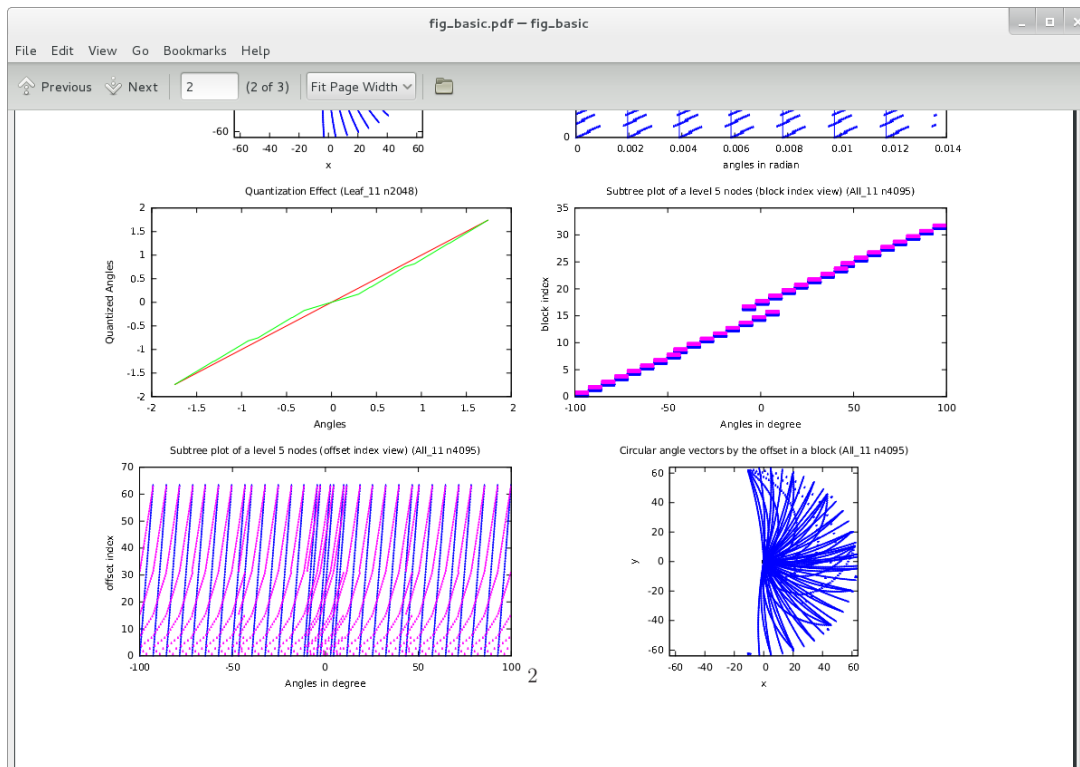
= 2^nIters

j

leaves / gsize

block_view - leaf
block_view - all
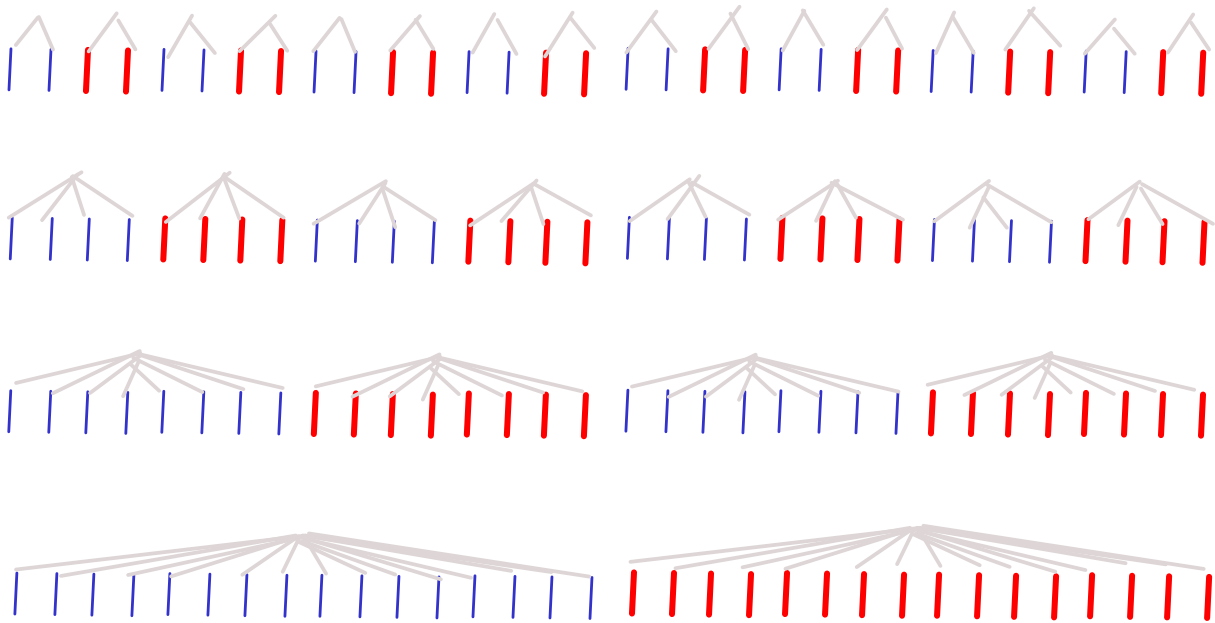
offset_view - leaf
offset_view - all

ang_tree - leaf
ang_tree - all

all angles in the interval
not just the descendant and
ancestor related angles

plot_subtree

Leaf Node Plot

common ancestor
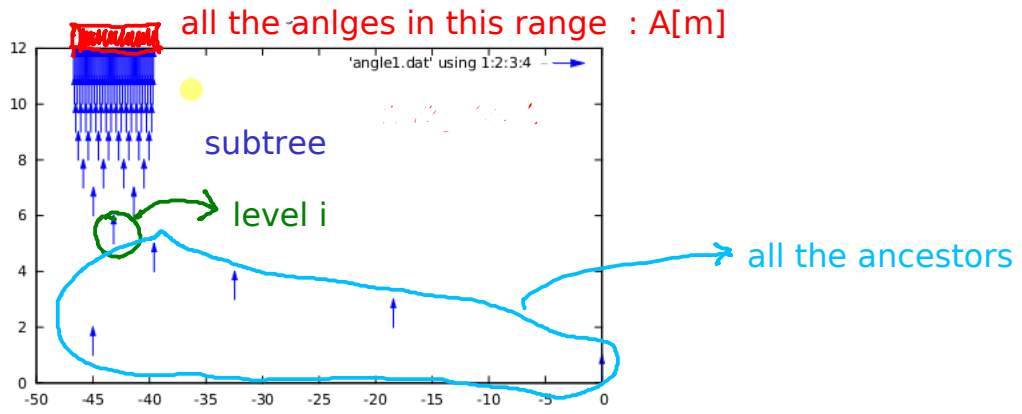
Leaf : array A contains only leaf nodes

plot_ancestors : leaf nodes

ang_tree

all the anlges in this range : A[m]

subtree

level i

'angle1.dat' using 1:2:3:4

all the ancestors

plot_ancestors : all nodes

plot_angle_tree

plot_subtree
plot_ancestors

Subtree plot of a level 5 nodes (block index view) (Leaf_11 n2048)

Ancestor plot of a level 5 nodes (Leaf_11 n2048)

Ancestor plot of a level 5 nodes (Leaf_11 n2048)