

6/26/19

1.8

[NEW STM SESSION AT ALS]

6/26/19

START w/ Pauls INP sample - from ^{RF08} A/C - hole 2, 2000 holes of
Last time did this but eV s \neq were off, didn't find much

This time, found one ~ 50 μm rock - but Paul says nothing
> 4 μm is real.

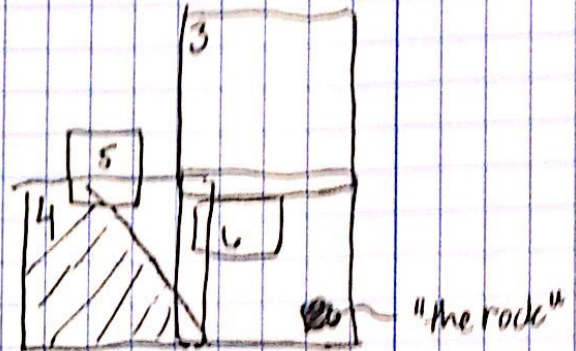
Sam

RF08 - K8 - hole 2 (INP)

Data Files

- 532_190626001
- 002
- 003
- 004
- 005
- 006
- 007
- 008
- 009
- 010
- 011
- 012
- 013
- 014
- 015
- 016
- 017
- 018

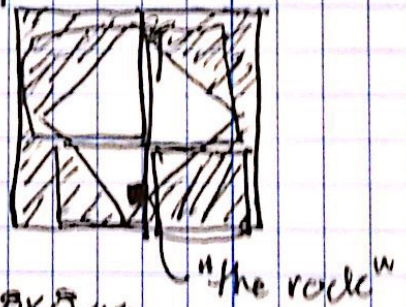
2mm overview with rock at bottom
700 μm quadrant - top left



after that did 2mm boxes on all four
corner-wedges

Then do smaller boxes in UL wedge -
found 2 potential particles - examined
th and found one.

027 - image of particle of interest - 8x8 μm



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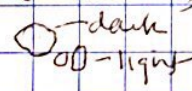
RFOS-INP continued

- 532 - 190626028 - focus scan
 029 - focus scan
 030 - "
 031 - tricolor scan - missed particle
 032 - larger window - found particle
 033 - zoom 10x10 interesting shape
 034 - focus scan
 035 - diff scan 3x3 (move to 1st energy point)
 036 - diff scan - better box around particle
 037 - repeat diff scan, lost particle
 038 - repeat diff scan, lost particle
 039 - zoom out to find particle
 040 - re-scanning particle
 041 - focus scan
 042 STACK - Aborted! due to error
 043 - re-scanning find particle again
 044
 045
 046 - STACK - not much C in diff so dust?
 047 looking for new particle from same corner
 048 re-scanning to find corner.
 049 Focus scan
 050
 051 Looking for particles
 052 Trying to scan - lotsa black & white spots -
 053 " beam still messed up.
 054 "
 055 "
 056 "
 057 "
 058 new 120x120 scan, beam looks better now
 059
 060 120x120 scan, no particle to lower right, just
 upper right
 061
 062
 063 200x200 μm UR quadrant, at base right

STACK 1

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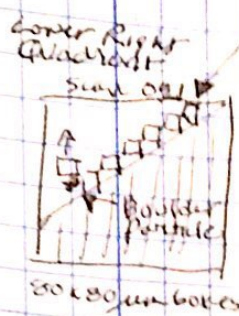
RPOB INP (cont)

- 532 - 190626064 - zoom in on UR of that - possible particles - 120x120
- 065 - move up 120x120 further up edge.
- 066 - Further up edge 120x120. Still no particles
- 067 - Further up
- 068 - 120x120 scan. No particles. Didn't hit edge, so I had to red.
- 069 - 120x120 scan ~~farther~~ exp. No particles. (same place as 68)
- 070 - ?
- 071 - 120x120 further up
- 072 - 20x20 scan ~~in scan~~ starting w/ing 20 - look for snaker stuff.
- 073 - 10x10 on darker area, near bottom. - nothing
- 074 - 120x120 scan of lower right quadrant - near border which we don't count because shouldn't get thru pauls system.
- 075 50x50 box.
- 076 15x15 scan of particle - LR quad
- 077 - focus scan on edge near particle.
- 078 - zoom in of particle 5x5 - good image of liquid particle.
- 079 - diff scan 3x3 - shows light in axis of 294 et high -
- 080 - focus scan on particle (0.8um lens) before stack didn't show clear pattern - go ahead and stack
- 081 - rescan @ 5x5 - still there
- STACK 2.** 082 - STACK 1
- 083 - 80x80um LR quad, diagonally up from earlier 120x120
No vis particles
- 084 80x80 further up
- 085 30x30 possible particles?
- 086 10x10 poss particle - nothing
- 087 80x80 along edge
- 088 30x30 scan poss parts in 087
- 089 80x80 further up diagonal - none
- 090 - " " " " - a particle!
- 091 30x30 box around particle
- 092 10x10 box
- 093 focus scan on particle ~~~ 2um in size~~
- 094 5x5 scan of focussed particle - now ~ 1um
- 095 Diff scan of particle 
- STACK 3** 096 Stack of particle

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RFOB INP (cont)

532 - 190026097 - 80x80 scan, higher on diagonal of LR quadrant - many resolution



- 098 - repeat, higher res
- 099 - 80x80 further up end of edge in the quadrant
- 100 - 30x30 zoom on possible particles - didn't find, mark up to left
- 101 - 30x30 up left possible? zoom in
- 102 - 10x10 on particles
- 103 - 80x80 scan just above boulder, some good - will have of that direction
- 104 - 30x30 on poss particles - No
- 105 - 80x80 of from Boulder
- 106 - " " " " higher
- 107 - 30 um zoom of poss particles - go on!
- 108 - 3 um scan of particle
- 109 - focus scan
- 110 - 2x2 scan after focus - still a little fuzzy
- 111 - another focus scan - not much change to 670-672

* **STACK 4**
good particle



- 112 - diff scan - looks all carbonaceous? very light throughout
- 113 - stack, 1.3x1.3 box
- 114 - back to 80x80 scan, further up from Boulder
- 115 - 40x40, lower left of above - poss particles? - No
- 116 - 80x80, upper left corner of lower right quadrant
- 117 - 80x80, now moving over to the right, along top of this quadrant
- 118 - 30x30 box around possible particles
- 119 - 5x5 around particle
- 120 - 5.5x2 um - dark w/ pale ring
- 121 - focus scan
- 122 - rescan 3.5x2 - much better focus
- 123 - Diff scan on 2.6x2 um rectangle - interesting ground, main particle and in satellite particles



STACK 5

- 124 - stack on above particles in lower right quadrant
- 125 - 80x80 box to right along top
- 126 - 30x30 poss particle - no
- 127 - 80x80 to right -
- 128 - 40x40 - no particles
- 129 - 80x80 to right
- 130 - 30x30 - no joy
- 131 - 80x80
- 132 - 20x50 2 possible particles - one promising

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RFOB INP (cont)

532-190626095 - 8x8 scan

134 - 3x3 scans 135 - focus scan 

136 3x3 after focus

137 Diff scan, 3x3 - shows C in all areas

138 1um x 1um stack on main particle, 35um resolution,
120um since smaller.

139 - Abated stack on smaller particle to right, resolution too low

140 - 0.75x0.75 stack on largest of small particles in clump

see if ring around central particle is any different?

141 80x80 further to right along top edge of lower right quad

142 80x80 " " " "

143 30x30

144 10x10 - no particle

145 - 80x80 scan in lower left quadrant - but it's shifted from where
we thought it should be on
image 21 (old quadrant scan)

146 abated repeat scan

147 another 80x80 still shifted, so will do another overview scan
on three quadrants -

148 - 700x700 new overview - a little warped so redo

149 - redo " " " - still warped but only @ upper left so use

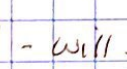
150 - 80x80 - still shifted but a little better than w/ old scan

151 - 80x80 of corner area

152 - 80x80 just above - didn't get border because of shift


153 - 30x30 of possible particle - yes

154 - 20x20

155 - 4x4 - weird  - will focus on double "donut"

156 focus scan - not great

157 - move arrow, try focus scan

158, 159 focus scan - used 159 & shift 676 to 666 - needed bigger
arrow across
whole donut 

160 - new 4x4 scan - much better focus.

161 - Diff scan - cluster of 2 C particles, apparently

162 - stack on largest, which is ~ 0.6um

532-19062700 - 80x80 going up left diagonal on lower left quad -

001 - 40x40 scan zoomed

002 - focus scan on edge - only moved 0.5um 666-665.5

so prior focus was good

shifted to
right, just
gets center
of edge

STACK 6

STACK 7

both diff
parts of
zone
particle
group

Lower Left Quad

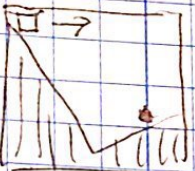


RF02 INP (cont)

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- 532-190527003 - rescans ^{10x10 um} ~~40x40~~ after focus near diagonal edge - nothing
- 004 - 80x80 moving up diagonal again
- 005 - 80x80
- 006 - 30x30 zoom
- 007 - 80x80 up diagonal
- 008 - 30x30
- 009 - 8x8 on possible particle
- 010 - 80x80 up diagonal
- 011 - 30x30 upper left - possible particles?
- 012 - 10x10 on poss particle
- 013 - 4 um - geo
- 014 - focus scan $\approx 666 \rightarrow 673$
- 015 - 1.5x1.5 μ Diff scan - ticks organic
- 016 - 1.2x1.2 STACK
- 017 - attempt to scan 80x80 on poss particle on right - had to abort & restart w/
- 018 - 100 by 100 scan - same area - no particle
- 019 - 120x120 scan - back on diagonal
- 020 - 30x30 in possible good region
- 021 - 10x10 - nothing
- 022 - 80x80 in upper corner
- 023 - now moving across top, 80x80.
- 024 - 20x20
- 025 - 5x5 - nothing
- 026 - 80x80 farther to right
- 027 - 30x30 - found particle on right (& possibly one on left?)
- 028 - 5x5 - \odot
- 029 - focus scan - pretty good $673 \rightarrow 677 \approx$
- 030 - 3x3 scan after focus - cool \odot
- 031 - Diff scan - interesting - big particle \odot has irreg structure w/ C increases and around.

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STACK 9, 032 - Stack on main particle

- 033 - zoom on smaller particle
- 034 - focus scan
- 035 - aborted stack - error
- 036
- 037 - Rescan to find particle

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RFOS INP

- 532-190627038 Lost particle, trying to find particle
 039
 040
 041 Repeating quadrant overice
 042 " " "
 043 New quadrant scan for orientation
 044
 045
 046
 047 Found different particle
 048
 049
 050
 051 Found particle
 052
 053 Started scan - but no particle @ 290eV; also tel
 054 Looking for particle
 055 Looking for particle.
 056 Crashed again.
 057
 058
 059
 060
 061 Looking for particles
 062 " "
 063 "
 064 Zoom in.

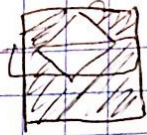
Switching to new sample

6/27/19

4:20am

SAMPLE: SHIP INP 1/26/18

532-190627065 2mm Survey to find slide



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focus scan

Partial re-scan to finer focus

200 um Survey near bottom left edge

80 um zoom near edge

Possible particle - not in focus?

Focus Scan - not successful

Looking for particles

" " "

Zoom on 3 particle

Zoom on top of 3

Focus

STACK #1

Zoom on middle particle

Focus on middle particle

STACK #2

Diff on bottom particle

STACK #3

Rescanning to find particle by edge

STACK #4

SAMPLE: SHIP IMP | 1/26/18

6/27/19

532-190627104 new survey for more particles

105

106

107

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111

112

Scan top half for overview - about

113

114

115

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119

120

Difference Scan on 2x4cm patch

121

122

123

(Small amount of possible C) abetter

124

STACK #6

125

126

127

128

129

Diff scan - v. little C on edges so skip

130

131

132

New search region.

133

134

135

No particles

136

137

Zoom on particle. - Same as stack #6 !!!

138

Focus scan

139

140

Possible Particle

141

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SAMPLE : [SHIP INP] 1/26/18

532-190627/42 1-2 um particle

143

144

Diff Scan

145

[STACK # 7]

146

Scanning new sub-region of 140

147

"

148

"

149

Possible particle

150

Zoom on particle

151

Focus Scan

152

Difference scan

153

[STACK # 8]

154

[STACK # 9]

155

156

Large overview scan - check for damage plus re-map for more

157

158

159

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161

162

[STACK # 10] weird boomerang particle

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Diff. Scan on another ringed particle

[STACK # 12]

SAMPLE: SHIP-IMP' 2/18/18 - Broken

2/27/19


532 - 190627178 2mm overview

- 179 - quick scan - nothing.
 180 - scan did not start 700x700
 181 - aborted to shorten time
 182 - 700x700 around lower left that still has film
 183 - tried focus on film - looked weird so will try ^{frame} focus.
 184 - focus scan on frame 749-709 z
 185 - some 700² area after focus - aborted due to noise
 186-186 - repeat - better
 187 - 200x200 - good survey
 188 - 80x80 on crack.
 189 - 50x30 on possible particle - but shifted a lot to left
 190 - 30x30 rehy shifted to left to compensate - didn't help much
 191 - back to 120x120 on #187 - see many particles - ~~bet~~
 192 - 40x40 on particle/crack - better.
 193 - 10x10
 194 3x3
 195 - focus scan - good z 709-704
 196 - rescan particle after focus.
 197 - Diff scan - looks like we lost the particle Maybe due to ^{reset} intere?
 198 - 2x2 scan - no particle (same as 196)
 199 - 5um scan to find particle - no.
 200 - 30x30 scan to find particle
 201 - 15x15 scan, shift to left.
 202 Rescan of particle, looks like sea salt/spray, 2x2
 203 Diff scan - looks like sea salt w/ some organic on edge
 204 - STACK, 2x2
 205 - 40x40 ~~on~~ different area
 206 - ~~10x10~~ 40x40
 207 - 10x10
 208 - 40x40
 209 - 10x10
 210 - ~~4x4~~ - particle is ~ 2x2
 211 - focus on particle - 705-707
 212 focused particle
 213 Diff scan - some c on edges and below - prob sea spray
 214 - Stack

STACK 1

STACK 2

2/21/17

- 3rd 2 1986 21 213 400nm dark in left of image 171
- 216 400nm square type that nothing
- 217 400nm follow to right creating a trail - too big
- 218 400nm NE of 700nm
- 219 400nm of particles above 700
- 220 400nm follow to right
- 221 400nm in previous particle
- 222 400nm
- 223 400nm - got a particle!
- 224 400nm scan
- 225 focus scan 701 767 2
- 226 focus scan about
- 227 400nm scan focused particle
- 228 400nm scan on a line - interesting structure
- 229 about
- 230 stuck looks like sea spray of organic 700 - 1000
got good stack of it
- 231 2x2 image of particle after stack - jelly fish shape
- 232 400nm in middle of image 171
- 233 photo around particle
- 234 2x2 2.5 around " - was out same out as above
- 235 focus scan 2 693 - 694
- 236 new scan 2 500 of p - Diff scan
- 237 Aborted got stuck
- 238 Aborted got stuck
- 239 Aborted got stuck in right place
- 240 bad scan (rotation)
- 241 scan no particle
- 242 scan no particle - but but it was same as 230 anyway
- 243 120x120 scan on 700 image - going to another view
- 244 400nm scan
- 245 15x15
- 246 focus scan 2 694 - 703
- 247 new scan of area - 3 good particles
- 248 diff scan all 3 - all show some carbon around edges -
- 249 beam into lower right & focus
- 250 focus scan 703 706
- 251 2x2 scan 1000 - interesting  salt w/ whitish frog
- 252 1 scan for stack

Stack 3

Stack 4

STHP INP 2/18/18 CONT

532 190627253 - 3x3 scan of particle UL in 247/248

254 - focus scan $z=706-703$

255 - 3x3 scan after focus.

256 - 2.5x2.5 Diff scan

257 - 0.5x0.5 stack of this box, trying to get organic goo only 1st, then will stack whole particle that also has carbon on lower edge

258 - stack on main part of same particle, that looks to have C at bottom edges as well as more diffuse. C at top that we did for stack 257

259 - image 15x15 on new particle from image 244

260 focus $z=703 \rightarrow 687$

261 5x5 scan of particle in 259

262 Diff scan (3x3 on 261)

263 - stack on particle (3x3)

264 - 20x20 on LL of img 244 - dark particle

265 - 5x5 on particle

266 - focus scan $z=697.5-699.5$

267 - 5x5 on focused particle

268 - Diff scan 3x3 - no stack because looks similar to all others so far

269 - 5x5 part UL of #244

270 - focus scan $z=699-687$

271 - 5x5 scan after focus

272 3x3 Diff scan

273 - stack 2.5x2.5

274 - focus on new block on 243 - 60x60

275 - 20x20 on cluster of particles

276 - 4x4 on interesting 'pacman' particle

277 - Focus on particle (?)

278 - ~~2.5x2.5~~ 2.5x2.5 on particle

279 - Diff scan - 2.5x2.5

280 - stack 2.5x2.5

281 - 4x4 on new particle on 275

282 - Focus on particle in 281 (? \rightarrow 678.5)

283 - 2x2 image of 281 on particle

284 - Diff image

285 - stack 1.7x1.7

STACKS

same particle
diff areas

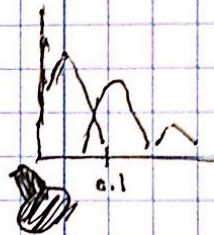
STACK 6

stack 7

STACK 8

stack 9

stack 10

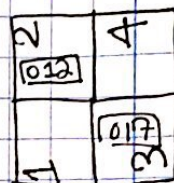


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190628000 20x20 scan on 274 - looking for a large 'gooey' particle
 001 7x7 scan
 002 FOCUS scan 678 → 674
 003 ~~8x8~~ 6x6 scan on particles
 004 Diff scan 6x6
 005 1x1.5 scan - looking at 'goo' to right of big salt crystal
 006 1x1.5 stack

Stack 11

007: 500x500 on 186 to go to coarse mode. Will move to Win 1
 Abort 008: 2 mm x 2 mm survey on window 1 (x=-7500, y=6000)
 Abort 009: " → Ex 1-7: unchecked gate Use Gate
 010: " " Forgot to reset interferometer.
 011: 700x700 um scan on window
 012: 250 um on UL corner (by #2)
 013: FOCUS scan 674 → 667
 014: 140x140 scan on 012
 015: " " had to reset interfer
 016: 80x80 - no particles
 Abort 017: 250x250 survey on LR corner (by #3)
 018: " " had to reset interfer
 019: 140x140 scan
 020: FOCUS scan 667 → X. didn't change
 021: 80x80 on 019



~~022~~
~~023~~
~~024~~
~~025~~
~~026~~
~~027~~

6/28/19

2:55am Unloaded holder

Loaded new holder → Holder D

(Move to 1st Hole of Holder D)

6/28/19

SAMPLE: RF120 In-Cld

532-190628022 2 mm overview to find slide

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Diff Scan on small particle

Aborted to center

STACK #1

Diff Scan - not much C.

Diff Survey

Diff on 2 particles

STACK #2

Scan from top of 1 to edge.

Diff zoom on particle

STACK #3

Diff scan

Zoom on particle

Focus

STACK #4

Focus

STACK #5

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SAMPLE: RF12C In-Cld

532-190628060

061

062

STACK # 6

063

064

065

066

STACK # 7

067

Focus

068

STACK # 8

069

070

Zoom on particles

071

Focus

072

Diff scan

073

STACK # 9

074

075

New overview to find more particles

076

077

~~Zoom~~ Diff scan

078

Zoom on 2 particles

079

080

081

082

STACK # 10

083

Diff scan

084

085

086

STACK # 11

087

088

089

~~STACK # 12~~

090

091

092

STACK # 12

093

094

095

096

097

STACK # 13 → on 096

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SAMPLE: RF12C In-Cld

532-190628098 Crashed after stack

099 Retry
100 Retry
101

102
103
104
105

106
107 STACK #14

108
109

110
111 STACK #15

112
113

114
115
116 STACK #16

117
118

119 STACK #17

Loading slide onto Holder E on Position #5
only one on bottom row
RF01-C



Switching STXM to new sample RF12D

6/28/19

SAMPLE: RF12D Blw Clq - Holder D Store #2

532-190628/120 2mm Overview of Slide

- 121 700nm survey
- 122 Scan Near #3
- 123 Focus Scan
- 124 100x100 overview scan.
- 125
- 126

127 Zoom on some particles

128 - C diff but bad - noise - redo.

129 - Redo 2.5x2.5

130 - ~~scan~~ scan on upper particle w/ some C & more interesting structure

STACK 1

131 - 2x2 stack probably sea spray w/ a little C on edge

132 - 4x4 zoom on middle right particle in 127

133 30x30 in new area on #3 corner

134 3x3 on small particle 752

135 - focus scan # 752 - ~~redo~~!

136 - 3x3 Diff scan image scan

137 - Diff scan 1x1

138 - 1x1 scan

STACK 2

139 - 1x1 stack

140 3x3 on small particle on lower branch of 3

141 Diff scan on this particle - 1.5x1.5 - some C on right

STACK 3

142 - stack on this particle

143 - rescan 120x120 but noisy

144 - 120x120 over #3 in focus

145 - 30x30 to right of 3

146 - 14.5x14.5 ~~Diff scan~~ w/ 5 particles

147 - focus 752 - 752 no change

148 - Diff scan. - one large on left & small in middle to do

149 - 3.5x3.5 scan of big crystal on left

STACK 4

150 - stack

151 - scan small particle - noisy - retry 1.5x1.5

152 - 2x2 scan - still grainy

153 2x2 - another particle

154 - 14.5 scan -

155 - troubleshooting

156 - troubleshooting

157 - 14.5x14.5 - shifted

shutter problems - bad cable near PMT - #9 is shutter OK now after Matthew wiggled

3

6/28/19

RFI 2D - Below Cld. Cont

- 532 190628158 - 120x120 scan - trying to find area of interest again
- 159 - 40x40 near RHS of 3, where we were before
- 160 - 2.5x2.5 on particle of interest in old diff scan, before things went awry
- 161 - 1.2x1.2 scan
- 162 focus scan 752-751
- 163 - 1.2x1.2 scan repeat
- 164 - stack (note this is central particle in ~~148~~ # 148 Diff Scan)

STACK 5

Moving to @ corner # 1 - not too heavily loaded.

- 165 - 120 um scan of corner
- 166 - 50 um zoom on 1, 2 to left - it shifted a bit
- 167 - 25x25 ~ 4 particles
- 168 focus scan 751-753.7
- 169 - Diff scan several particles.
- 170 - image of particle of interest 2.5x2.5
- 171 - stack of above particle

STACK 6

- 172 - 40x40 scan to right of # 1
- 173 - 10 um zoom on base of # 1
- 174 - Diff scan - don't look very interesting - no stack
- 175 - 40x40 top of # 1
- 176 - Diff Scan - 4 large interesting particles
- 177 - scan of large left particle w/ interesting tail on right,

6.5 um
178 - ~~diff scan~~ cool particle 6.5 um Diff Scan - organic tail(s).


STACK 7
same particle

179 - 6.5 x ? whole particle, then will stack piece on RHS

STACK 8

- 180 - 2x1.5 um. Tail of particle - very interesting
- 181 - 10 um - big particle w/ structure, under top of # 1
- 182 - Diff

STACK 9

- 183 - 1.5 box on small particle at top - more carbonaceous
- 184 - stack on it (1.8 um across)
- 185 - 2x2 on small particle - decided not to use
- 186 - " " " " to right, in corner of 1 
- 187 - rescan 1.5x1.5
- 188 - focus z 753.5 -> 754.8
- 189 - rescan, 190 Diff Scan

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RF12-D Below Cloud - cont.

- STACK 10** 190628191 - stack on particle near corner #1, 1.3x1.3
- 192 - 30x18.5" 50x50" below #1
- 193 - 30x18.5" Diff Scan - 6 particles - none w/ much C, prob sea salt
- 194 - 8x5 Scan on upper middle particle
- 195 - STACK 1.3x1.3 μ m

STACK 11

Hole 3 of Sample Holder D / RF13-G - Below Cloud (in rift in clouds) low winds, low RH SAS lots of particles

- 532 - 190628196 - 700x700 scan of ~~gate~~ window - found it right away
- 197 - 250x250 but had to reset & redo
- 198 - 250x250 in upper right quad - #4 corner
- 199 - focus scan 755 - 796 Z
- 200 - 250x250 after focus
- 201 - 250x250 on #3
- 202 - " " on #1
- 203 - 120 μ m zoom on #1
- 204 - 40 μ m zoom below (to right of) #1
- 205 - focus on #1 - Z 796 \rightarrow 787
- 206 - 40x40 rescan after focus
- 207 - Diff scan

rear info. \rightarrow still good locations

STACK #1

- 208 - image 1.2x1.2 of small particle near #1
- 209 ~~209~~ - ~~STACK~~ focus 787 \rightarrow 788
- 210 - rescan after focus - abort, 211 - rescan
- 212 - Stack, 1 μ m x 1 μ m
- 213 - 40x40 scan on #1, upper
- 214 - 32x32 Diff Scan on 213
- 215 - 3x3 scan on upper right particle
- 216 - Stack, 1.5x1.5

Stack #2

- 190629000 40x40 scan above #1
- 001 70x70 scan. ~~select~~
- 002 - 2x2 scan - super light particle - small also
- 003 - Focus scan Z = 788 \rightarrow 789
- 004 - 0.6x0.6 diff scan - looks off

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Stack #3 small!

- 005 - Stack on 004. really small.
- 006 - 15x15 scan on 005

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SAMPLE: RE36 BlwCld

140000001 - 15x15 DIFF SCAN

STACK #4

008 - 1.5x1.5 scan on middle particle

009 - 1.2x1.2 STACK

010 - 10x10 scan on im062803 (1). Above and to the left of #1

011 - DIFF scan 10x10

STACK #5

012 - 2x2 scan on right particle of 011.

013 - 1.7x1.7 STACK - interesting shape and 'arms'.

014

015

016 - zoom in on #3

017 - Diff scan on 2 particles

018

019

020

021

Focus scan

022

023

024

STACK #6

025

026

027

028

029

STACK #7

030

031

032

Move to Region 4

033

034

035

Diff scan 2 particles

036

037

038

039

Focus scan

040

041

STACK #8

042

043

Diff scan on 2 particles

044

045

046

047

STACK #10

Load New Holder

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SAMPLE: RFOIC Sta 2

532-190629048 Overview 2mm of slide, unfocused

049

050

051

052

053

054 Aborted

055 Repeat slide overview

056

057

058

059 Focus scan

060

061

062

063

064

065

066

067

068

Stack 1

069

070

071 found 3 particles

072

073

074

Stack 2

075

076

077

078

Stack 3

079

080

Stack 4

081

082

083

084

085

086

~~Stack 5~~

Sample R.F01C stg 2 continued

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532_190629087

088

089

Stack 5

090

091

092

STACK #6

093

094

095

096

097

Stack #7

098

099

Diff scan

100

STACK #8

101

102

Searching for more patches

103

104

105

106

107

108

109

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118

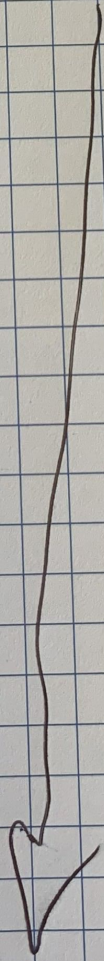
119

120

121

122

123



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SAMPLE: RFOIC Stg 2

532-190629/24

125

126

127

128

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130

131

132

133

134

135

136

137

138

139

Diff scan of possible particle - not great
STACK #9SAMPLE: RFAA ~~140~~ Above cloud

140 2mm survey

142 800 μm (or 700?) F143 700 μm 144 100 μm on #4144 20 μm on visible particle145 FOCUS: $z = 752 \rightarrow 736$ ~~146 redo of 144 20x20~~

146 Redo of 144 - 20x20

147 3x3 μm on particle

148 FOCUS - bad

149 FOCUS - bad didn't change

150 Diff scan - doesn't look like much

~~151~~ FOCUS - 736 \rightarrow 740

152 2.2 scan on particle - fuzzy - went back to

153 2.2x2.2

Stack #1 154 2.2x2.2

155 40x40 on #4 - nothing

156 40x40 no top right of #4

157 FOCUS 736.0 \rightarrow 736.32158 ~~40x40~~ 20x20 - nothing

159 40x40

160 10x10 on particle

Sample RF12A Above cloud

532-190629161 - Diff scan 3.2×3.2

Stack #2

162 - 3.2 image scan163 - Stack of 162 (3.2×3.2)164 - 700×900 survey to go to new # ~~23~~165 - 200×200 on #3166 - ~~80~~ scan

167 - 30 scan - nothing

168 - 10 zoom on 166

169 - 2 zoom

170 - FOCUS \rightarrow ~~736~~ not a good gradient171 - focus \rightarrow 736 \rightarrow 737172 - Rescan of 169 - 2×2 173 - Diff scan 2×2

Stack #3

174 - Stack on 2×2 175 - 30×30 in #3 (middle)176 - 10×10 - weird smudge177 - FOCUS \rightarrow 737 \rightarrow 737178 - 3×3 zoom on ~~weird~~ smudge

179 - Diff scan - definitely interesting

Stack #4

180 - Stack - 2.6×2.3 um

181 - 30 scan on lower portion of 3

182 - 10×10 scan183 - 5×5.5 scan - another smudge - or is it the same?184 - 1×1 scan - cancelled to make higher resolution185 - 1×1 scan186 - 0.75×0.75 Diff - 0.75×0.75 187 - FOCUS - 737 \rightarrow 738188 - 0.75×0.75 scan

189 - Diff scan to see if it has a halo or just pixels

190 - Stack - aborted

Stack #5

191 - 0.4×0.4 stack192 - 200×200 um scan on #1

193 - 80 scan

194 - 30 - upper right of #1

195 - 5×5 on particle196 - focus 738 \rightarrow 746!197 - 2.5×2.5 um scan - ~~2.5~~

198 - Abort

199 - Diff scan 2.5

Sample RF-12A Above cloud

- 532-190629 200 - Stack #6 2.5x2.5
 201 - 2.5 scan - nothing (on 194)
 202 - 30x30 scan on upper left of 1 - nothing
 203 - 30x30 scan on lower right of 1
 204 - 100x100 New area to the right of #1 (Side 25)
 205 - 30x10 scan on 2 particles
 206 - Diff scan on both particles
 207 - ~~4x4~~ Diff scan on larger particle
 208 - 4x4 image

Stack #7

- 209 - stack
 210 - 3x3 Diff image on small particle from 205
 211 - 3x3 image of

Stack #8

- 212 - 2x2 stack
 213 - 200x200 scan on #2 - reset interfer
 214 - "
 215 - 80x80 on top half of 2
 216 - 10x10 scan on visible particle - not there
 217 - 30x30 scan - nothing
 218 - 50x50
 219 - 10x10 scan on particle inside the #2
 220 - FOCUS SCAN 746 → 744
 221 - 3x3 scan on particle
 222 - Diff scan 3x3

Stack #9

- 223 - Stack - 2.5x2.0 - interesting tail
 224 - 30x30 on large particle from 214
 225 - 5x5 scan
 226 - Diff scan - 5x5 - lots of differences!

Stack #10

- 227 - Stack!
 228 -

Sample RF10-14 Below cloud

- 532-190630 000 - 700x700 overview
 001 - Redo with slight shift to the left
 002 - 200x200 scan
 003 - 80
 004 - 30
 005 - FOCUS 745 - 744
 006 - 5
 007 - 2.5

Sample RF10-H Below cloud

532190630008 - Diff check 25

Stack #1

009 - Stack - 25

010 - 30x30 on 003

011 - 15 - nothing

012 - 30x30 on 003

013 - 200x200 on #4

014 - 80x80 on #4

015 - 10x10

016 - Focus 744 → 736

017 - 5

018 - 2

019 - ~~Diff~~ Focus

020 - Diff

021 - 100x100 survey

022 - 25 zoom

023 - 5x5 zoom

024 - Focus 736 → 738

025 - 4x3.5 - cool

026 - Diff scan - cool structure. Leng Stack

Stack #2

027 - High res 3 hr stack

028

029

030

031

Stack #3

032 Stack

033

034

035

036

Stack #4

037 Stack

038

039

040

041

042

043

044

045

046

Sample RF10-# Below cld

53219 0630 047

048

049

050

051

052

053

054

055

Stack # 056 stack

057

058

059

060

Stack # 061 stack

062

063

064

065

066

067

068

Stack # 069 stack

070

071

Stack # 072 stack

073

074

075

076

077

078

079

Stack # 080 stack

081

082

083

Stack # 10 084

085

532190630086

087

088

089

090

091

092

Stack #11 093

094

095

Stack #12 096

097

098

099

Stack #13 100

101

102

103

104

105

106

Stack #14 107

↳ 108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

190630125

Stack #15

126

127

128

start

129

RFOFG →

130

(incl'd)

131

132

133

134

135

136

Stack #1 137

Stack #2 138

139

140

141

142

143

144

145

146

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148

149

150

151

152

153

154

Stack #3 156

157

Stack #4 158

159

Stack #5 160

Stop 7:40 PM