Compared analysis of payload failures

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&
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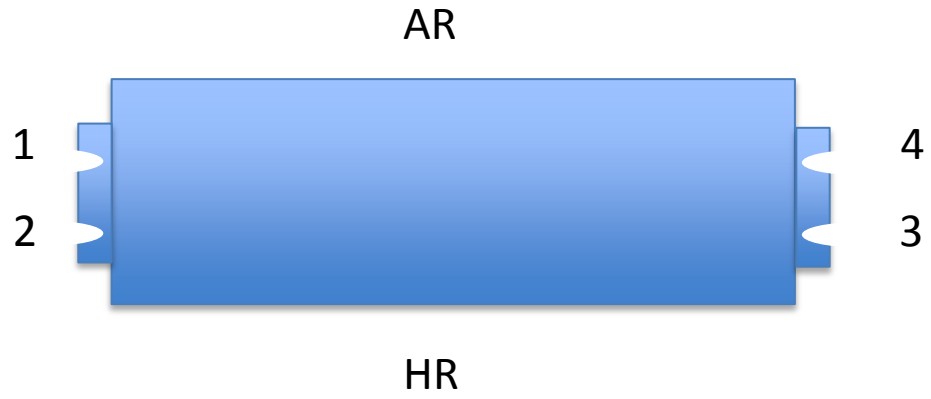
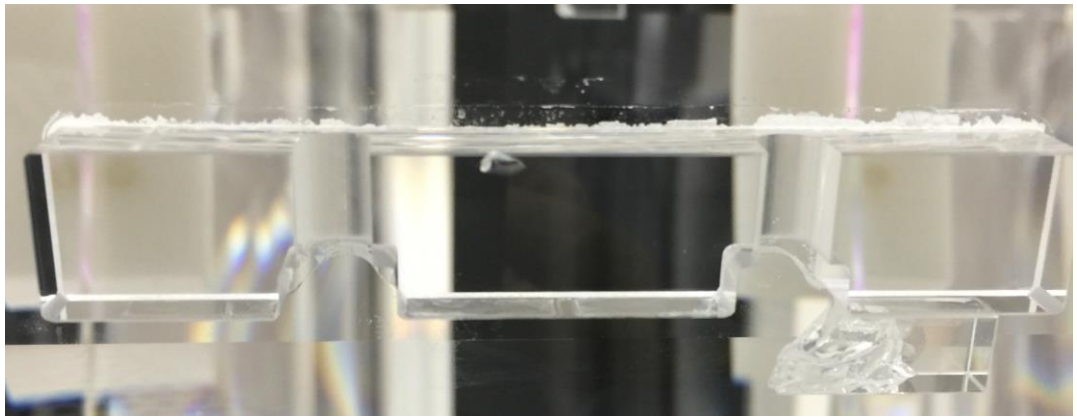
17/03/2016

Mirror refence system



View from the top

WI - Ears view after the crash



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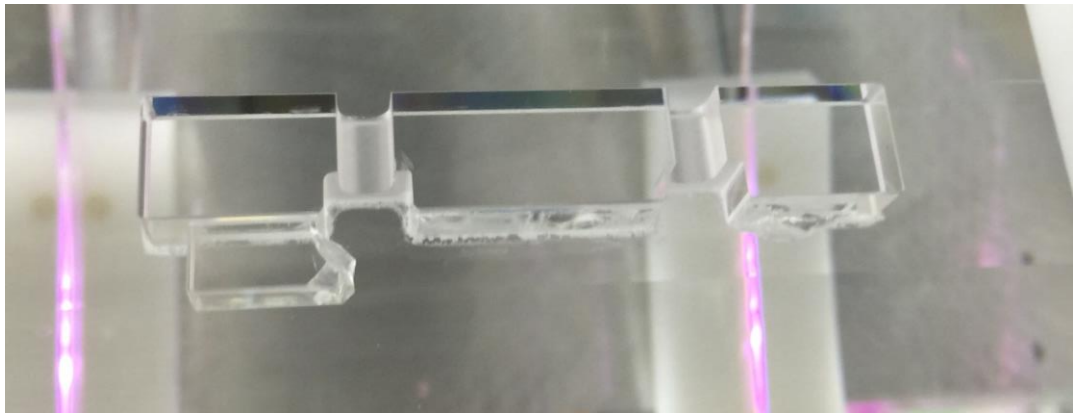

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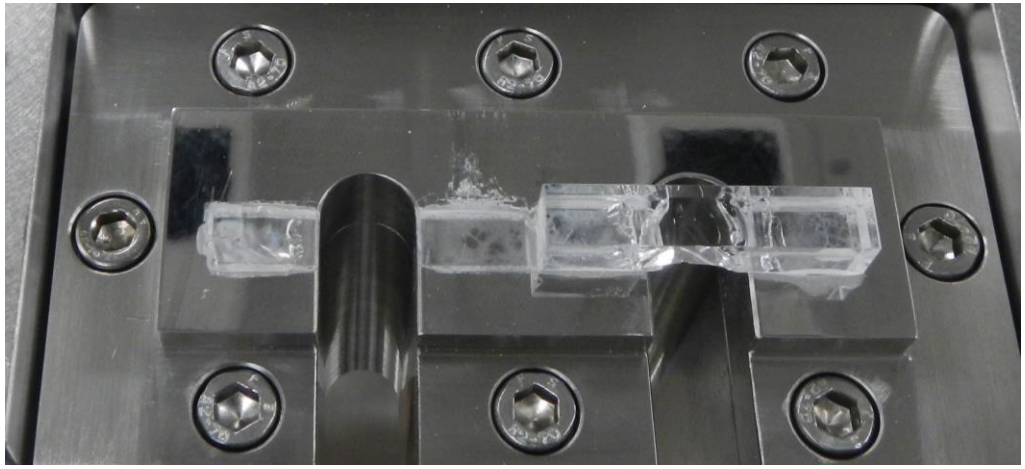
WI - Marionetta view after the crash



1

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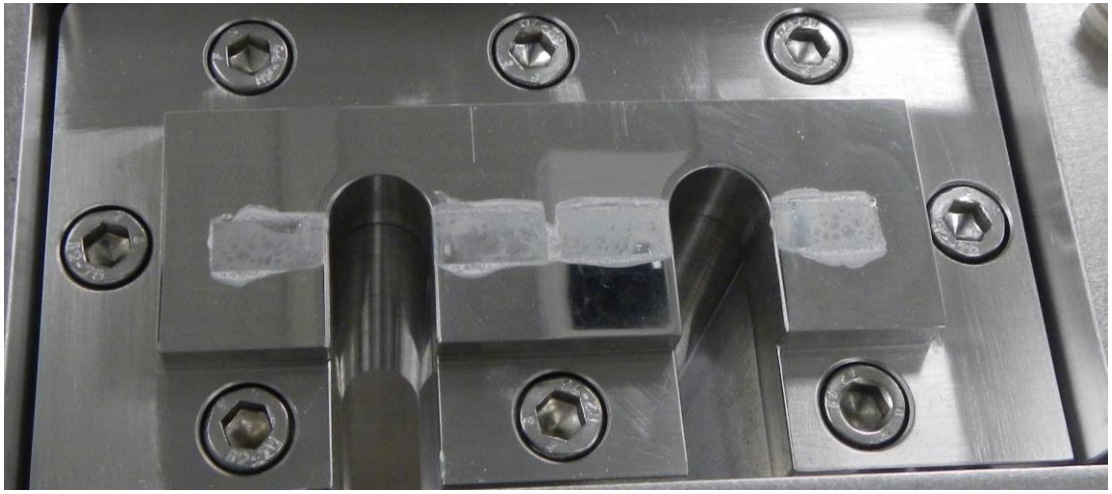

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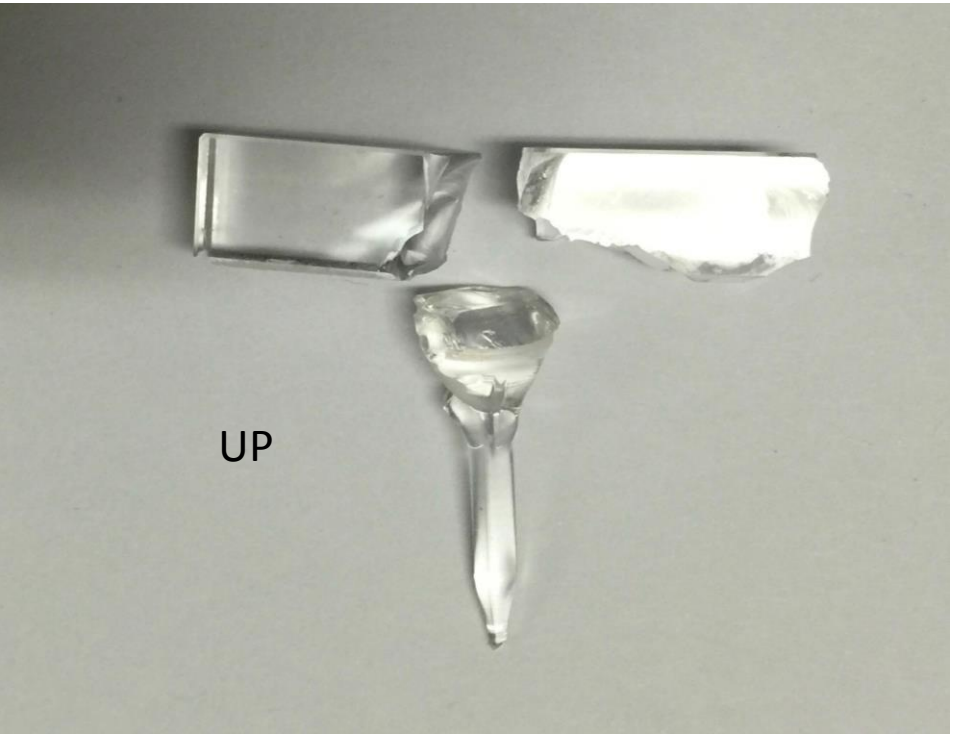
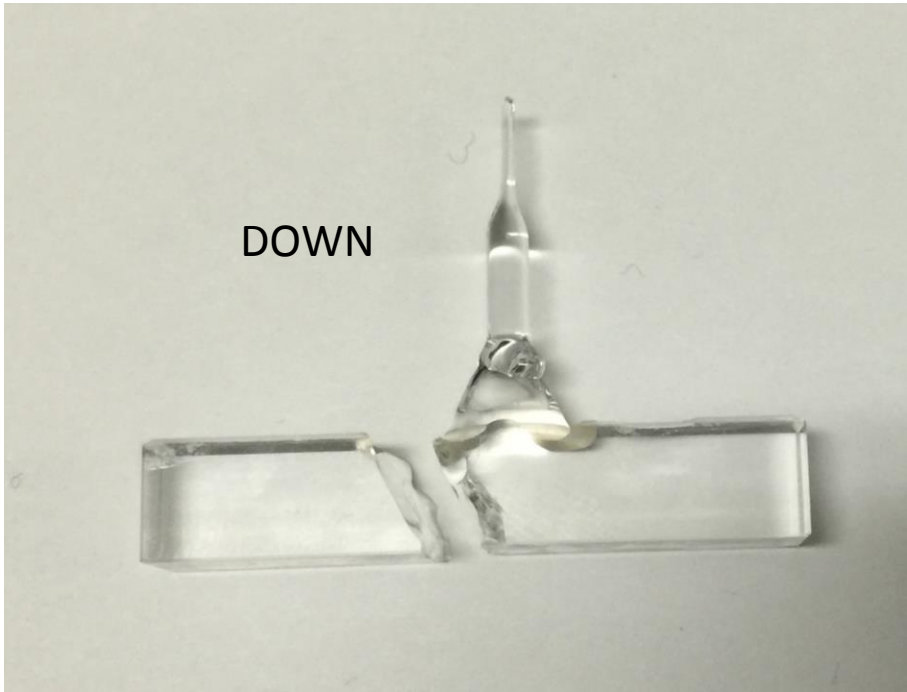
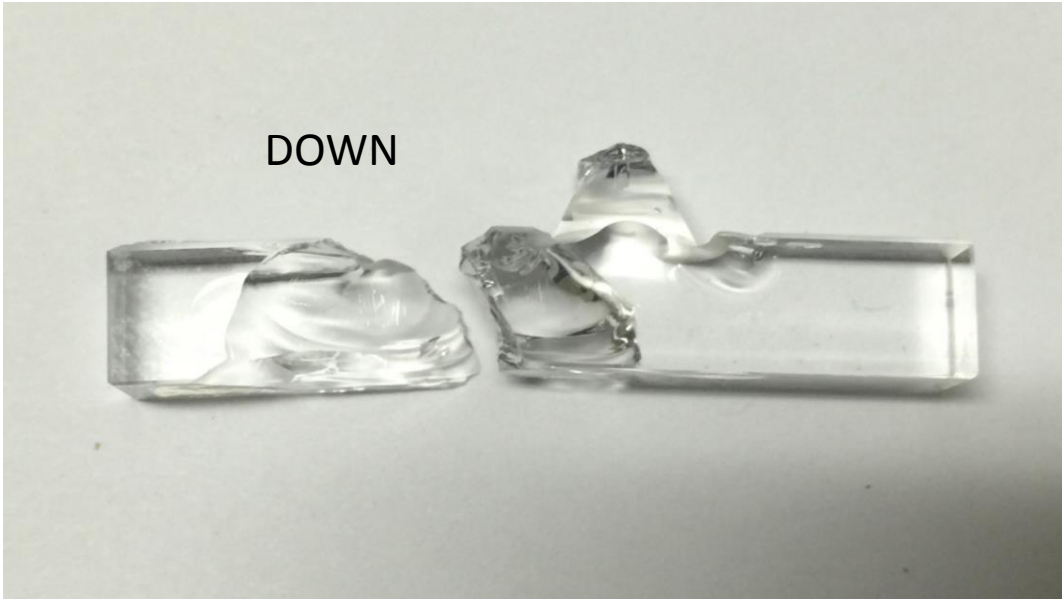
WI - Anchors n°1

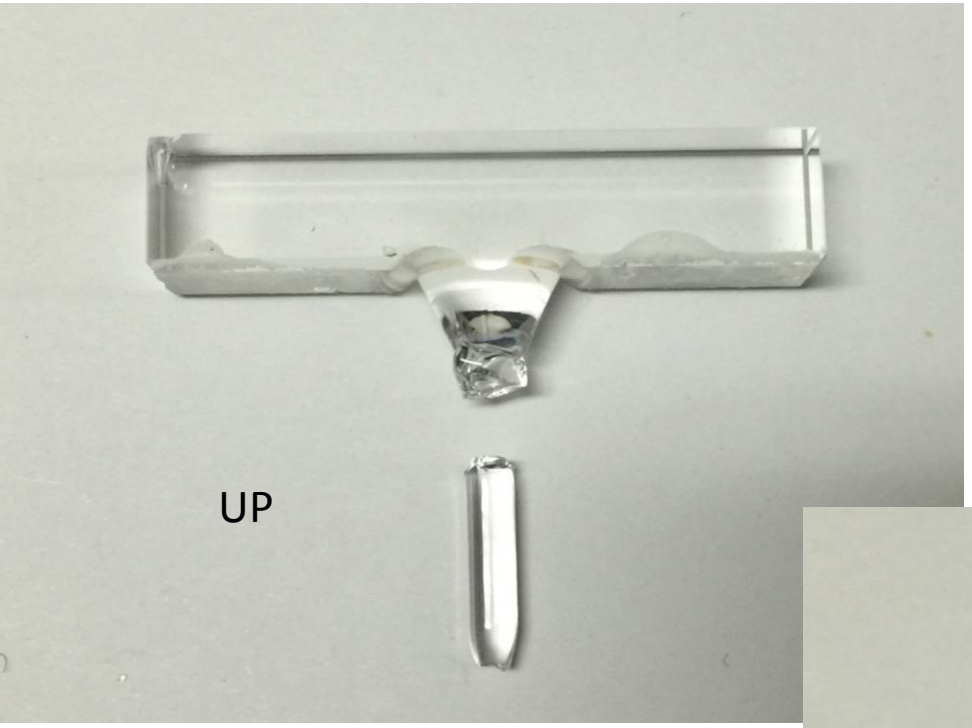




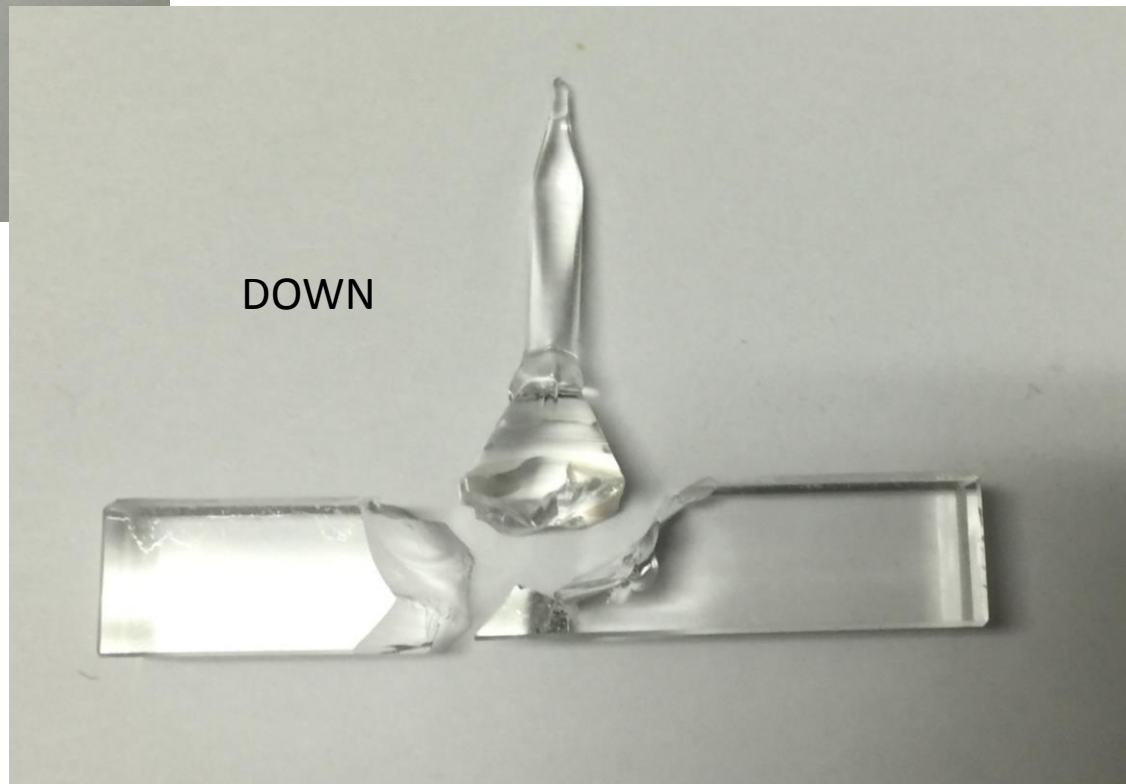
WI - Anchors n°2



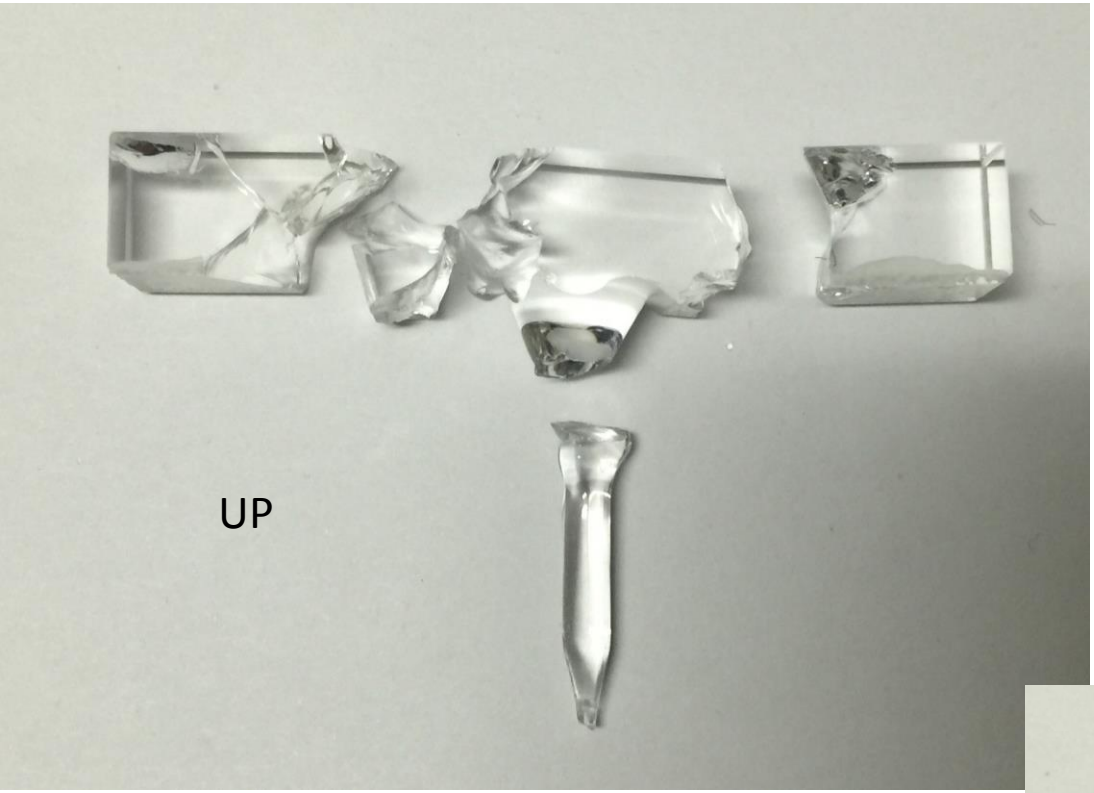
WI - Anchors n°3



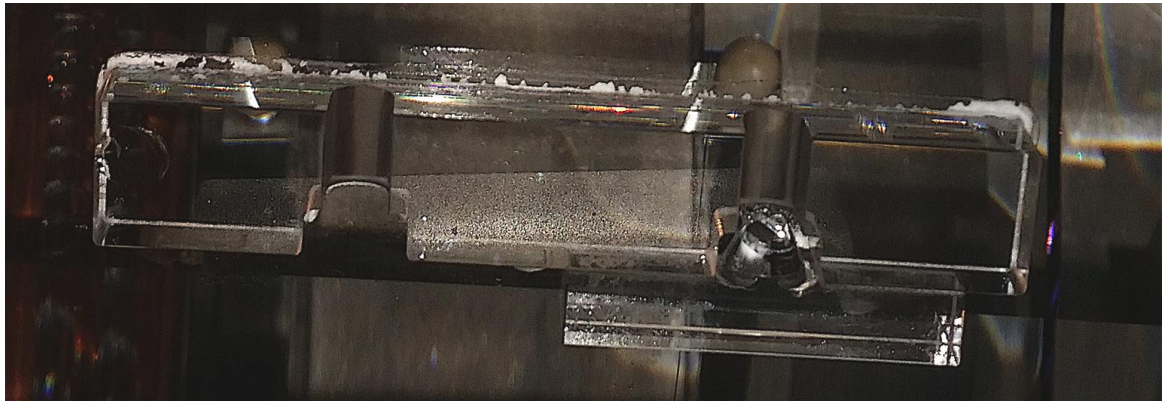
According to the data the crash begun from this fiber: it can be started from the lower cone (or at least from the upper welding…).



WI - Anchors n°4



NI - Ears view after the crash



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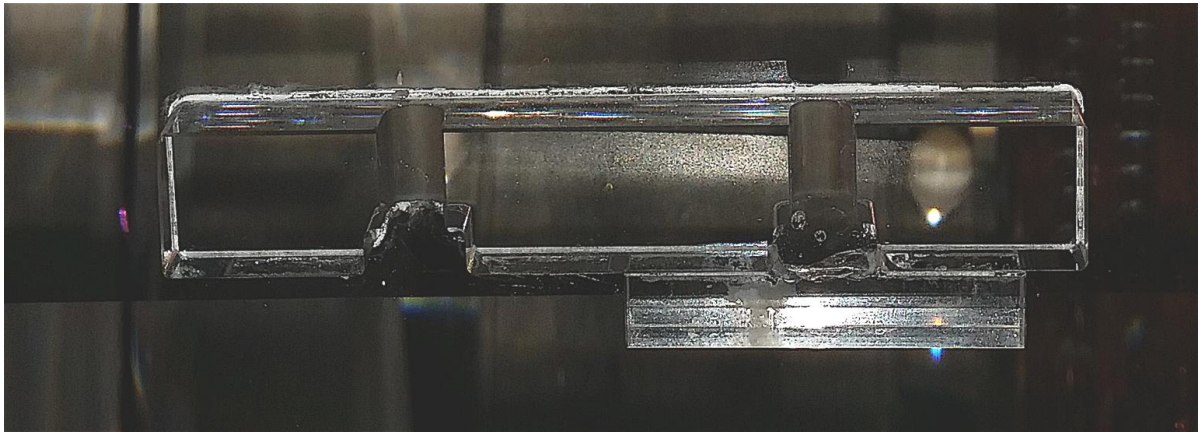

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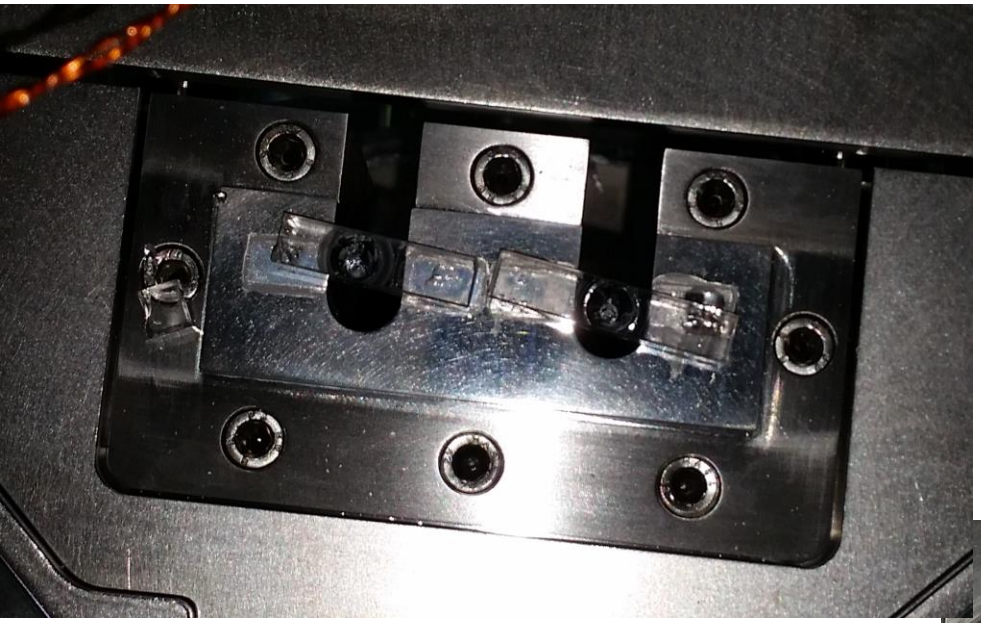
NI - Marionetta view after the crash



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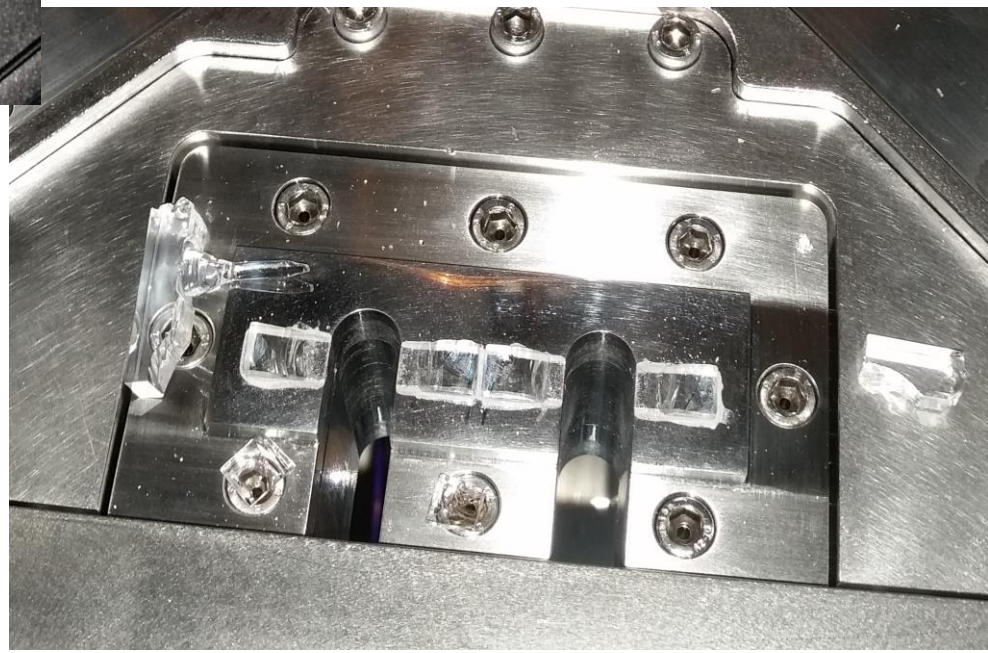

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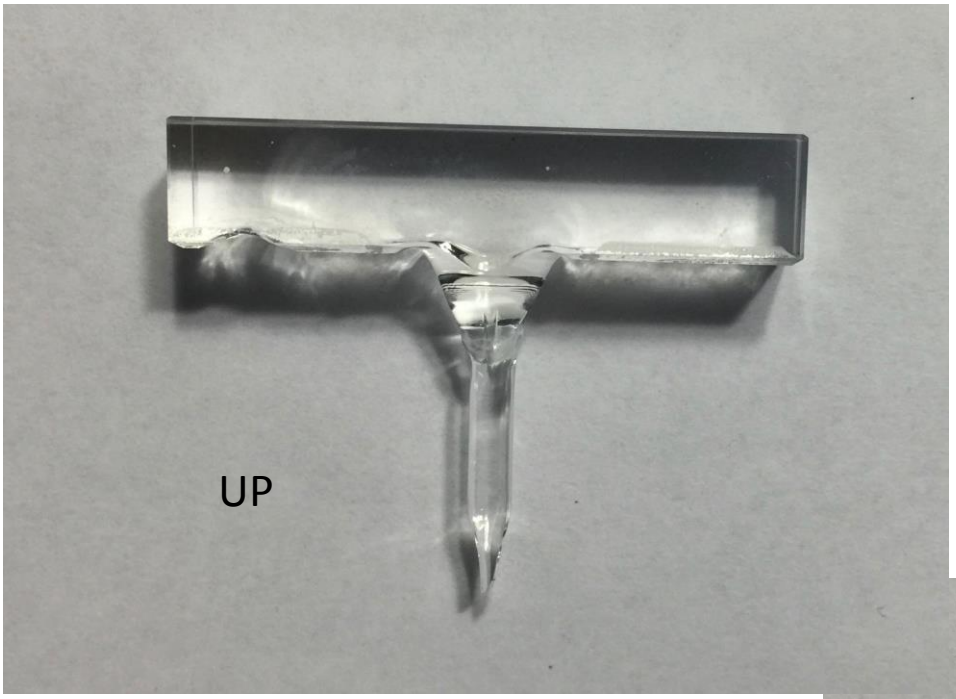
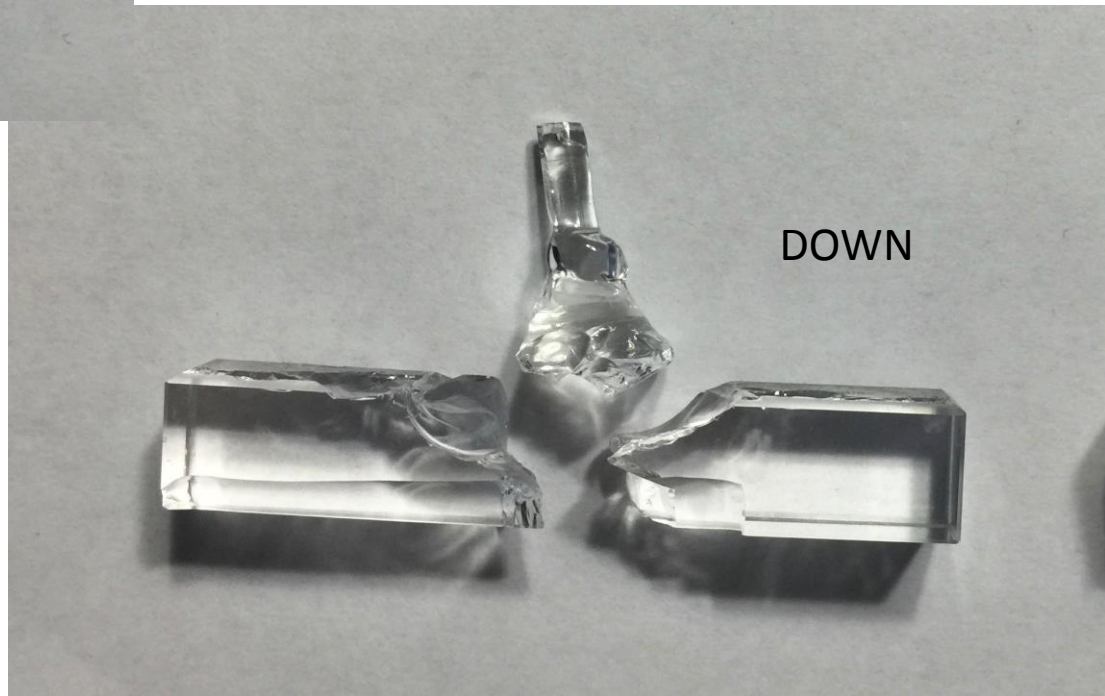
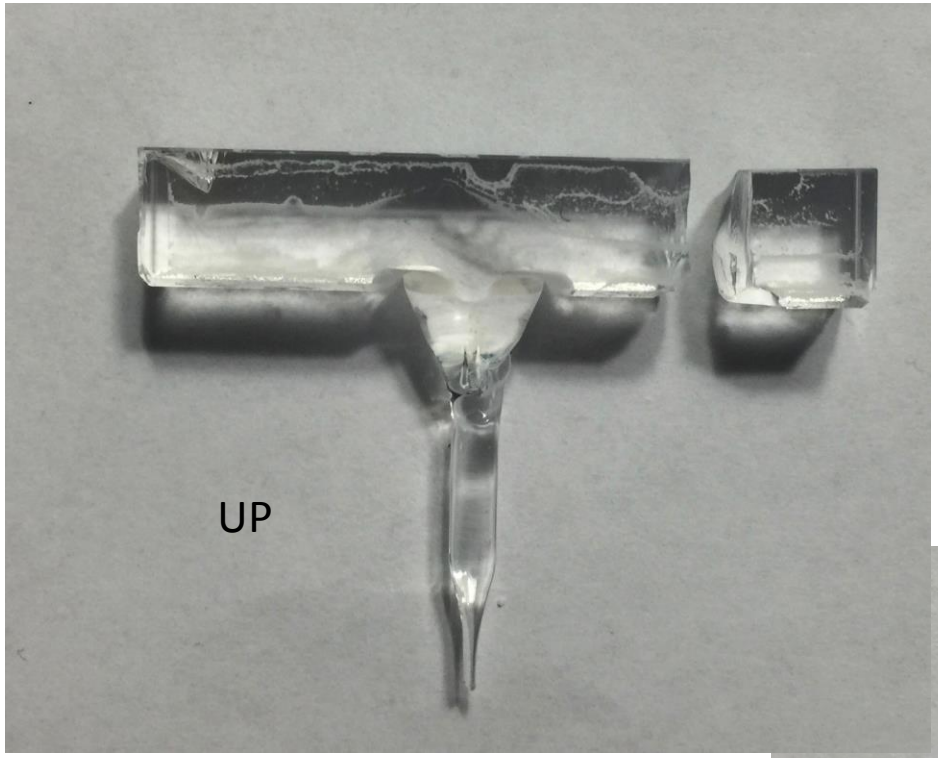
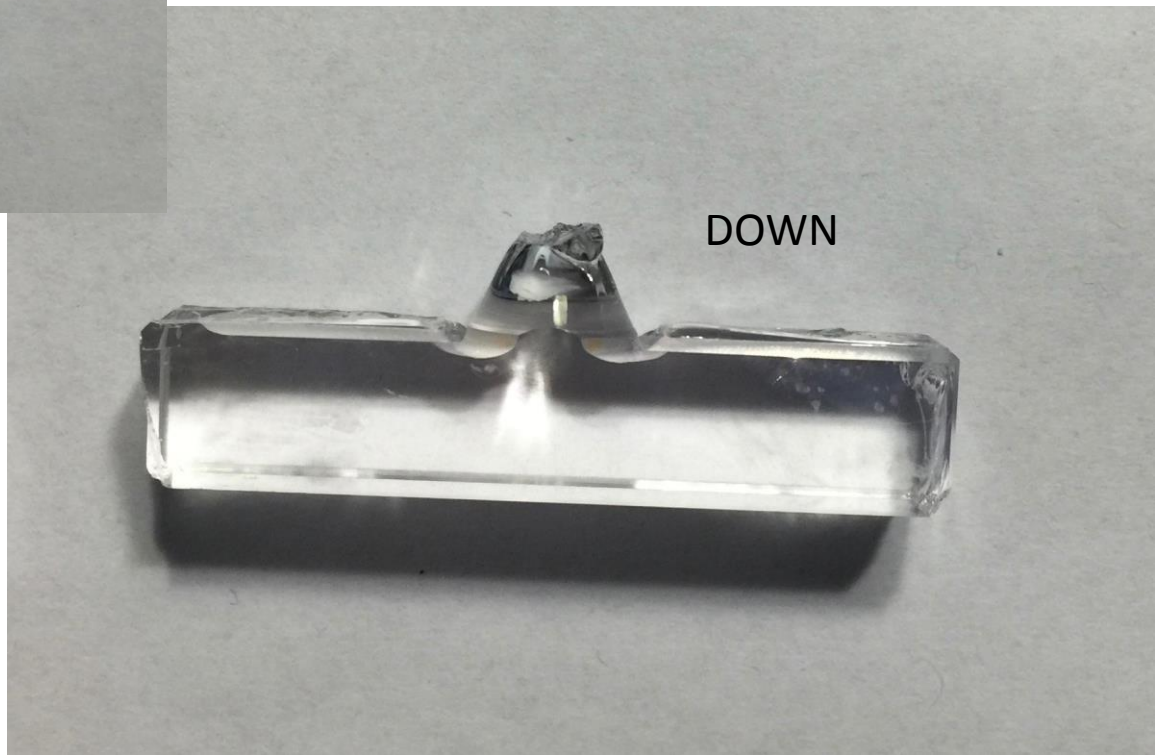
NI - Anchors n°1



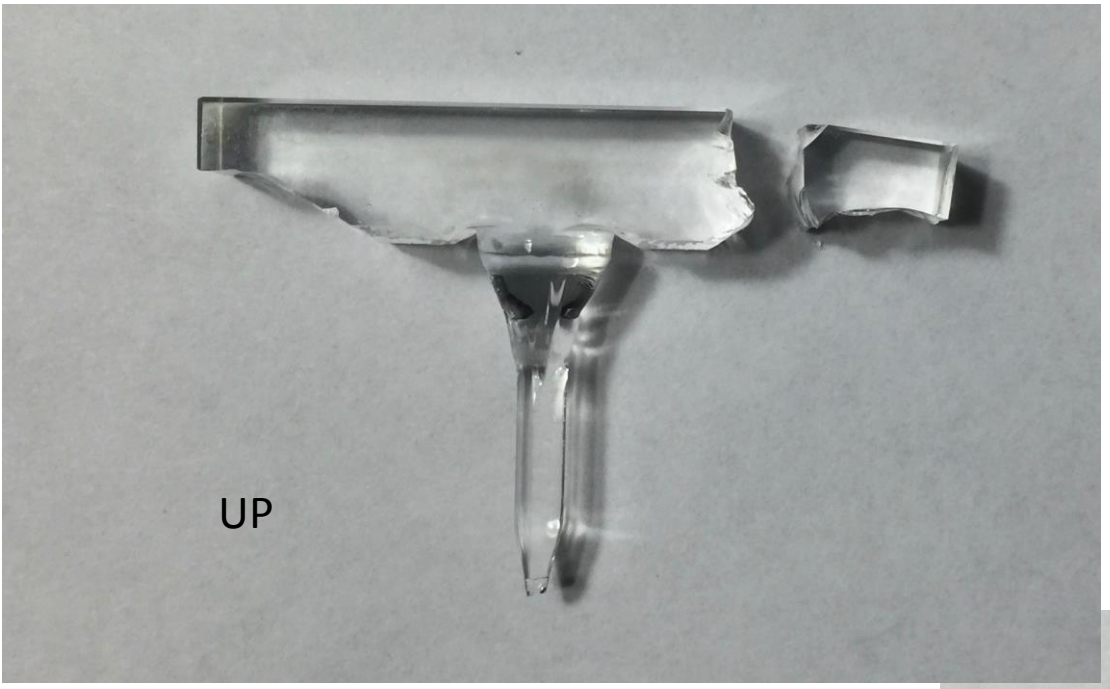


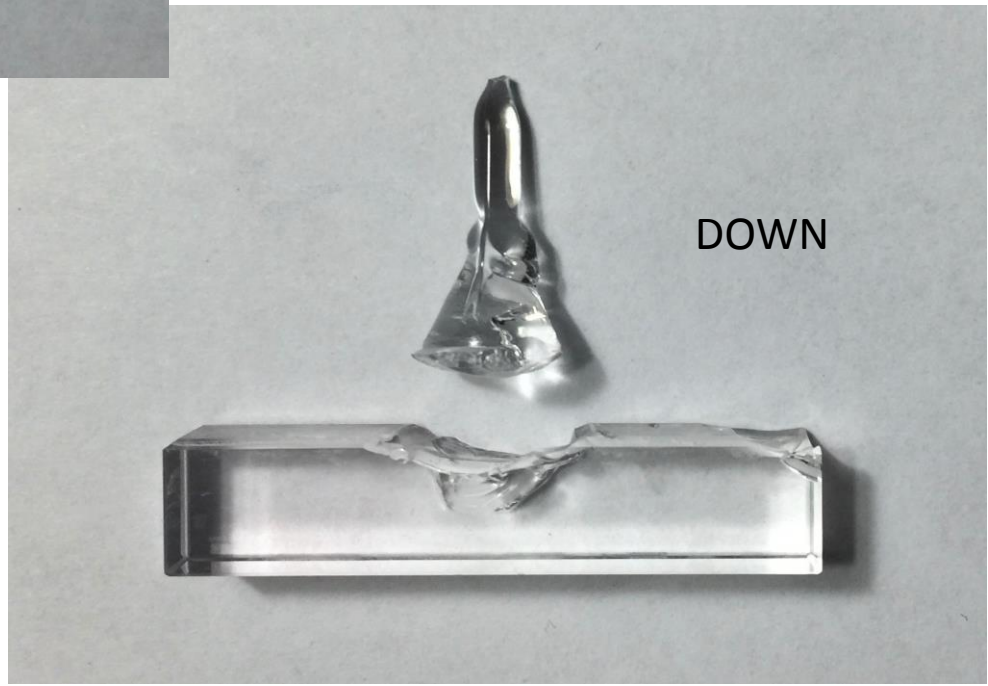
NI - Anchors n°2



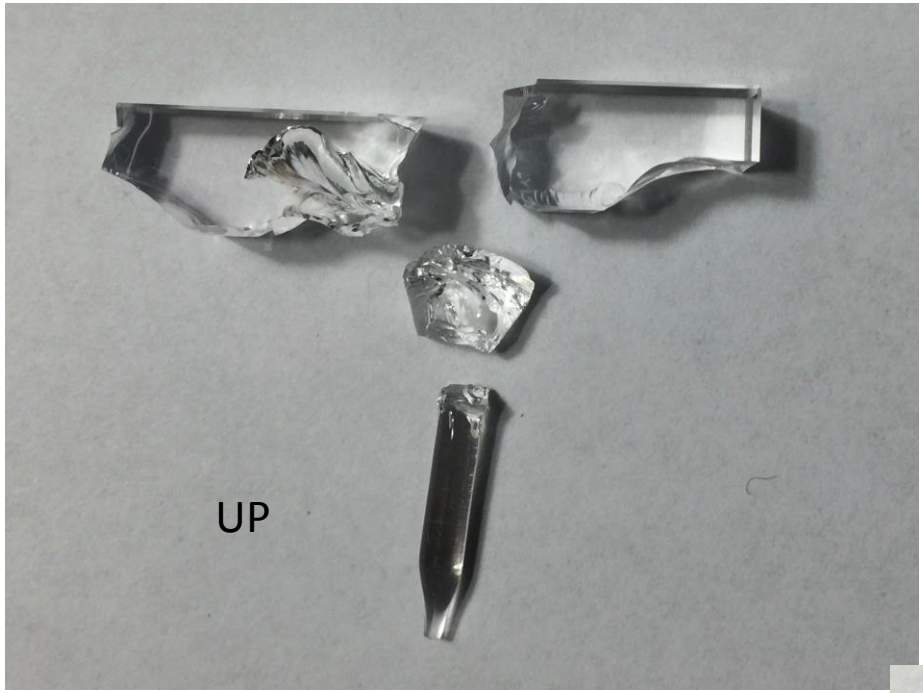


NI - Anchors n°3

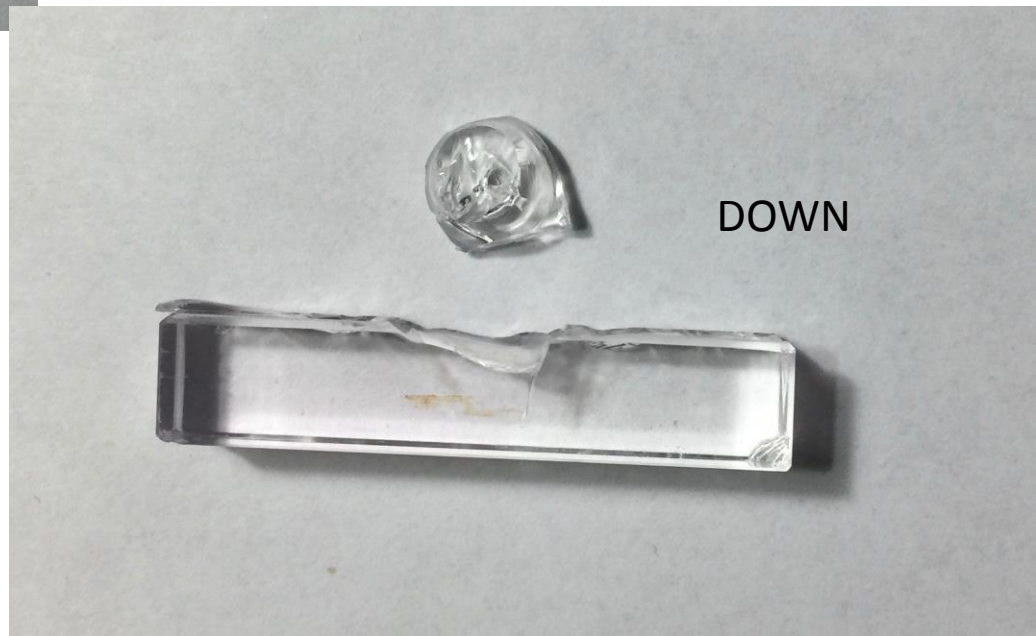




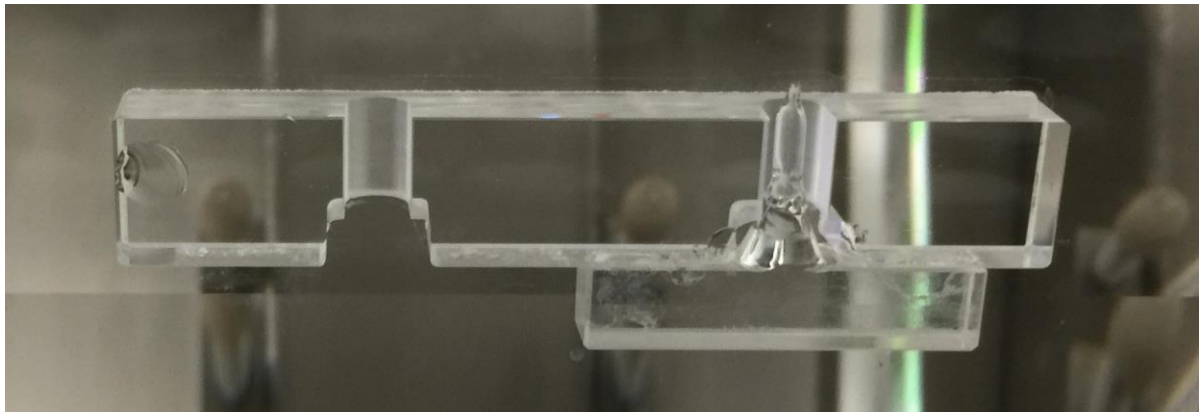
NI - Anchors n°4



According to the data the crash begun from this fiber: it seems to be started from the lower cone that appears to be opened by a traction from the top, while the upper anchor crash has been caused by a pressure from the bottom to the top as a reaction.

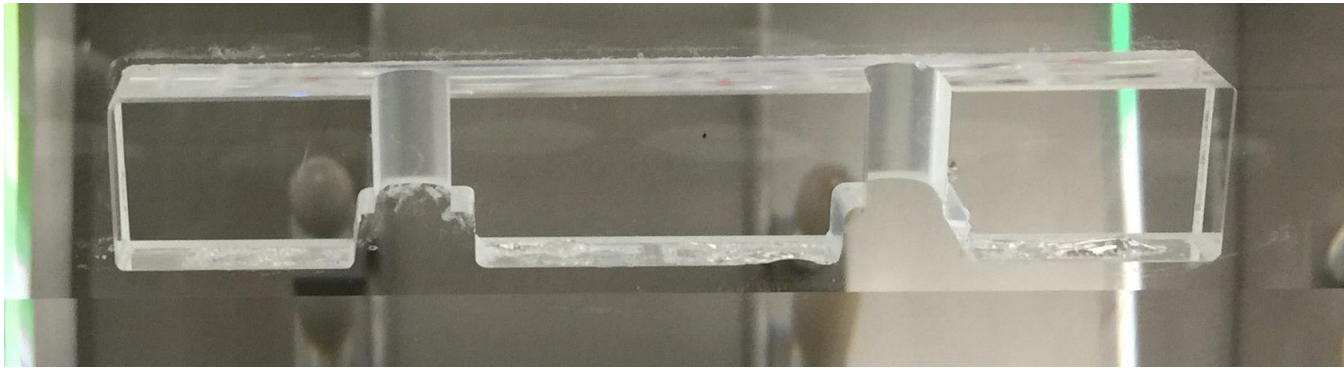


2° NI - Ears view after the crash



1

2



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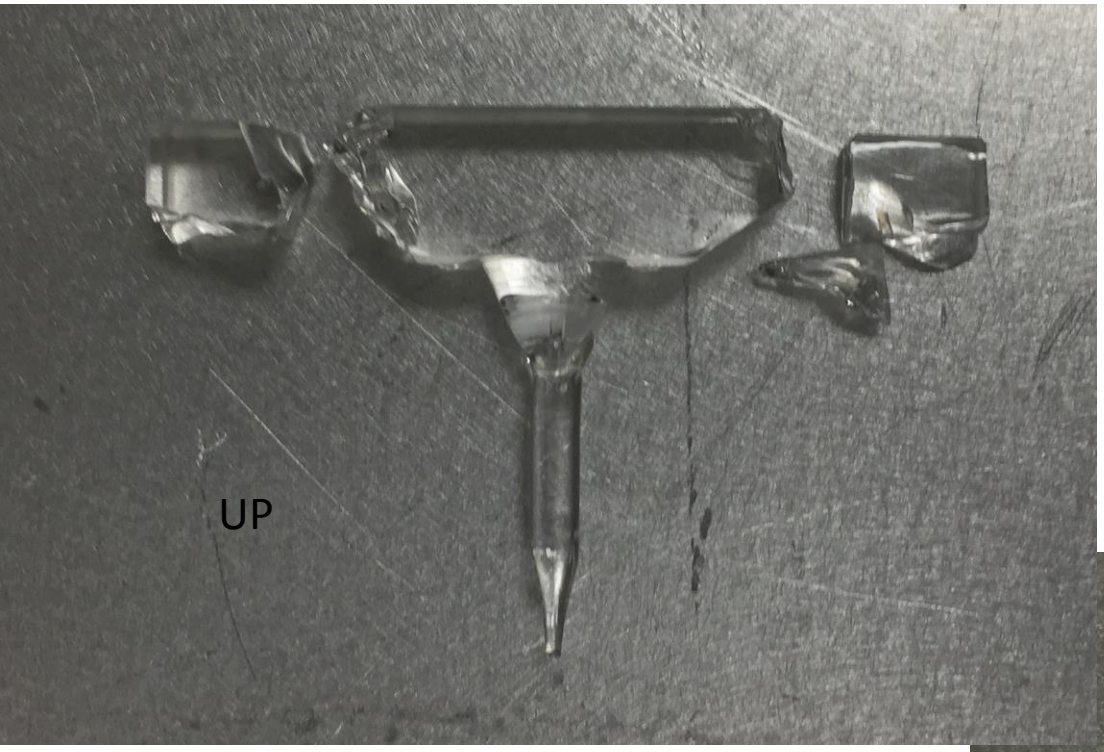
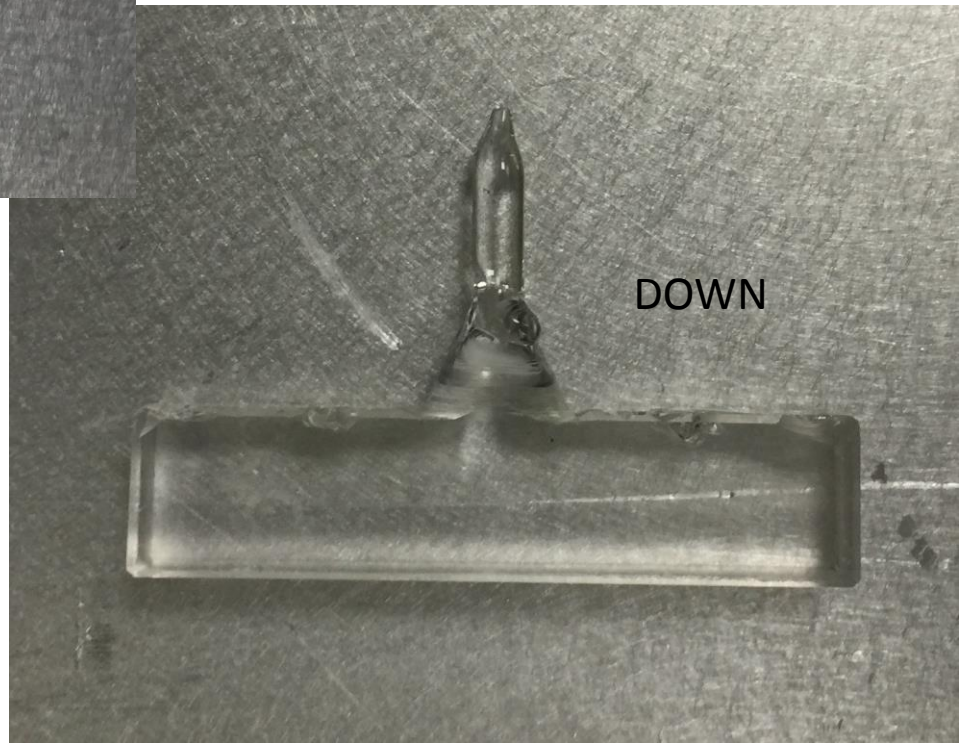
2° NI - Marionetta view after the crash

2 1

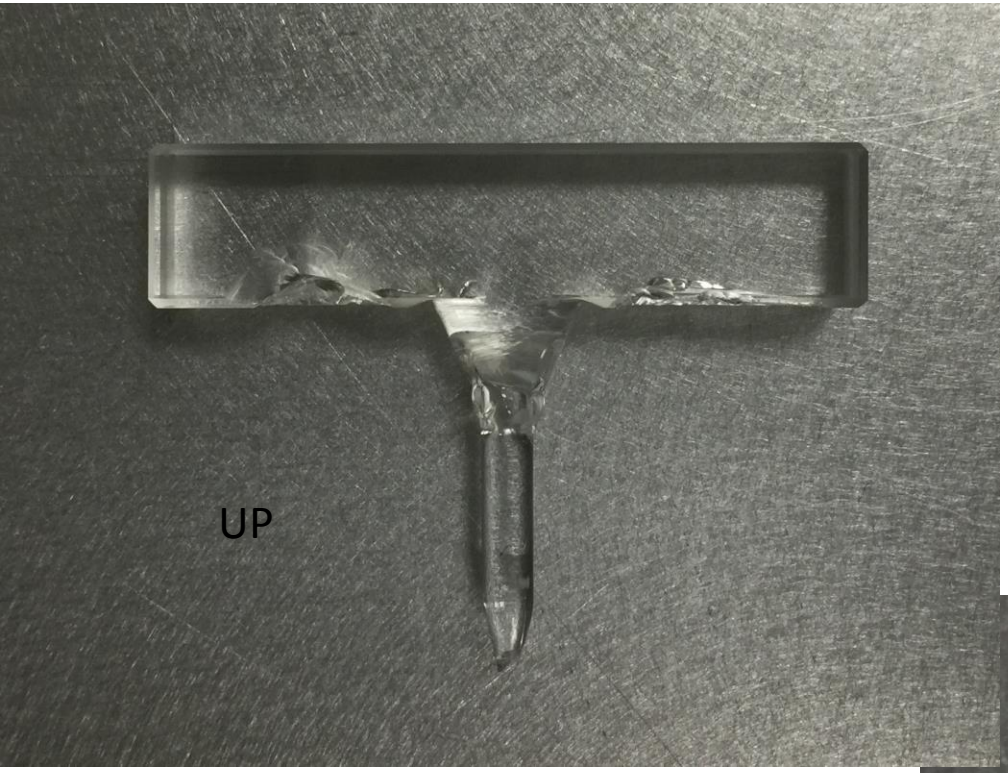
4 3

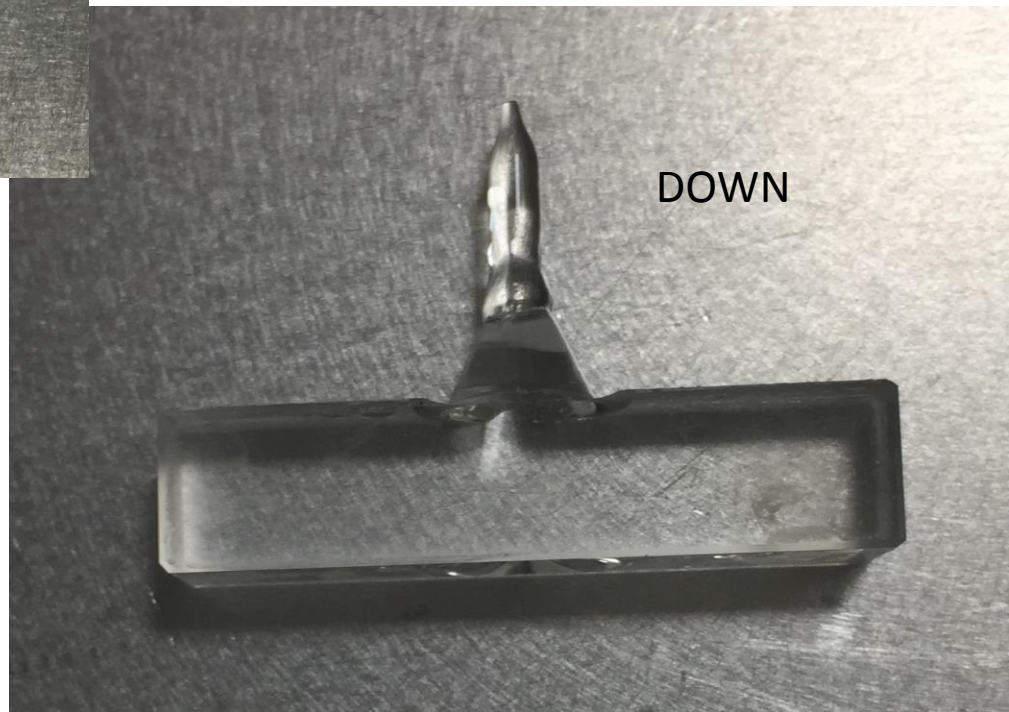
2° NI - Anchors n°1



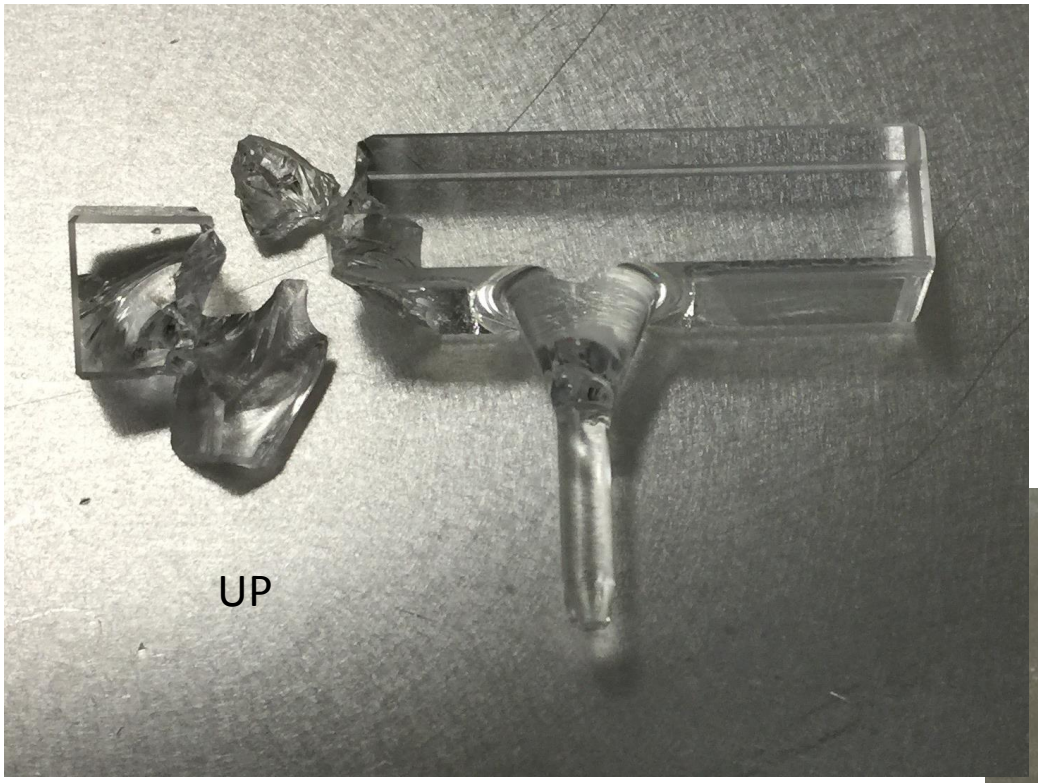


2° NI - Anchors n°2

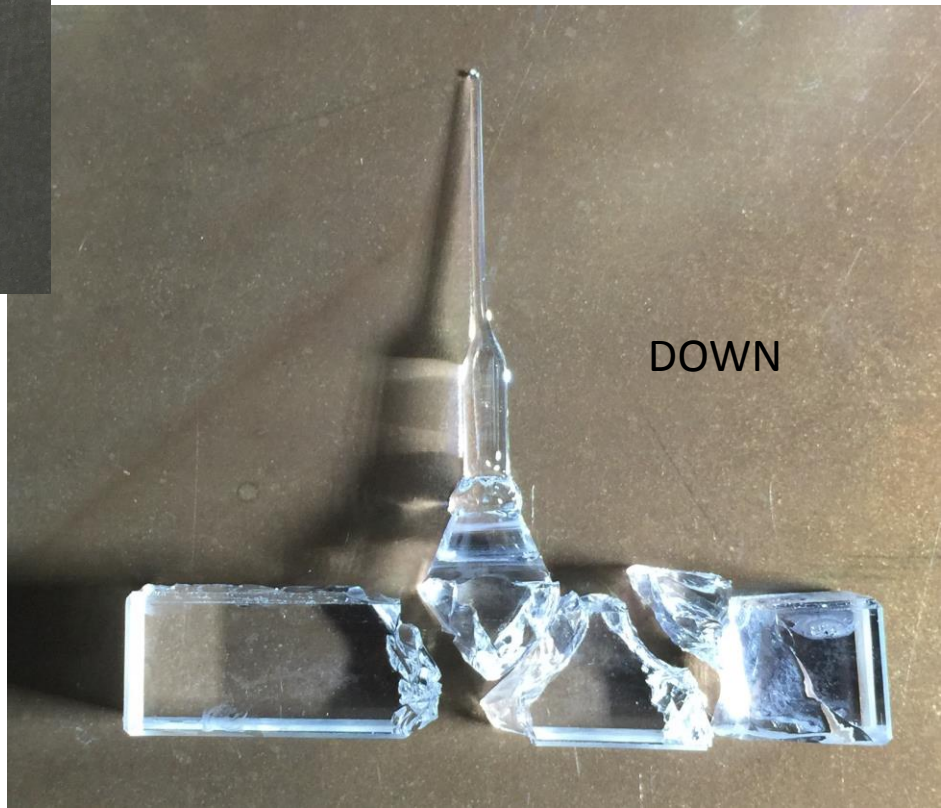




2° NI - Anchors n°3

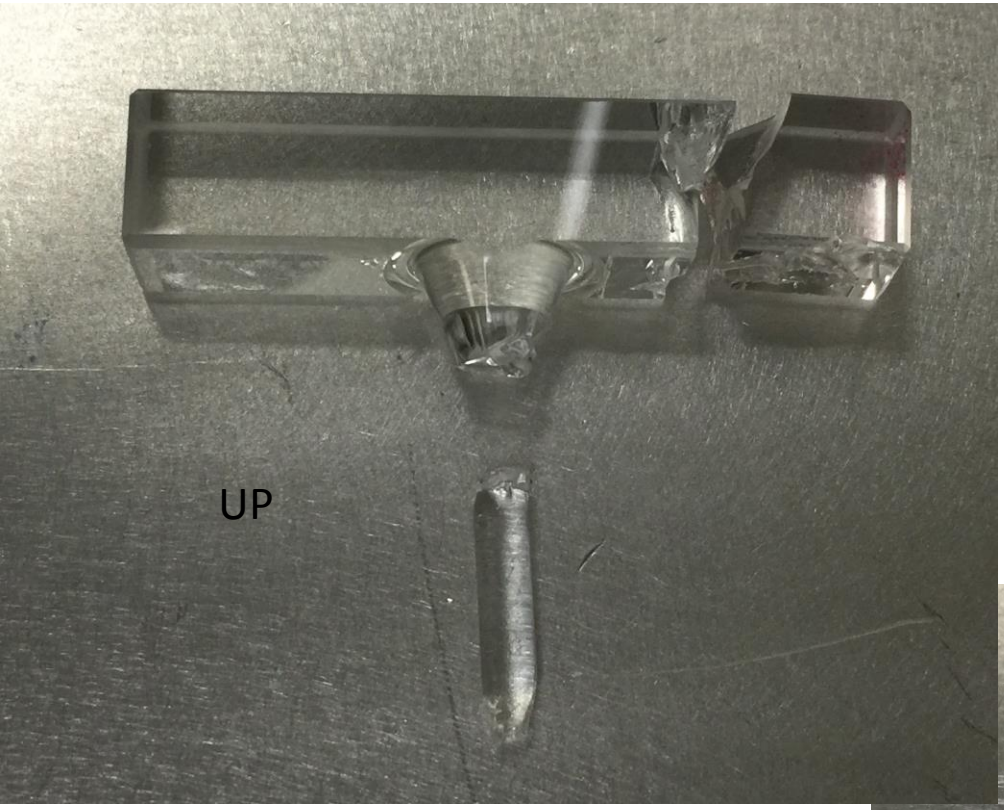


According to the position of the mirror after the crash, the break of the FS suspension begun from this fiber: the two anchor crashes have been caused by a compression force so from a release of energy started from the fiber.



In this suspension the anchors performed as expected.

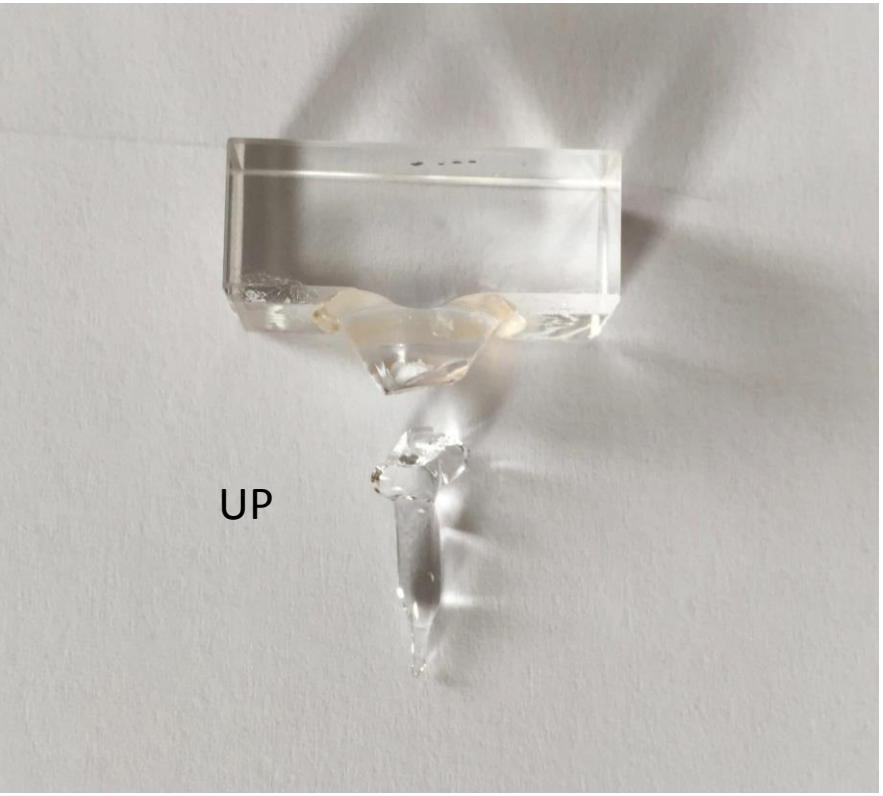
2° NI - Anchors n°4

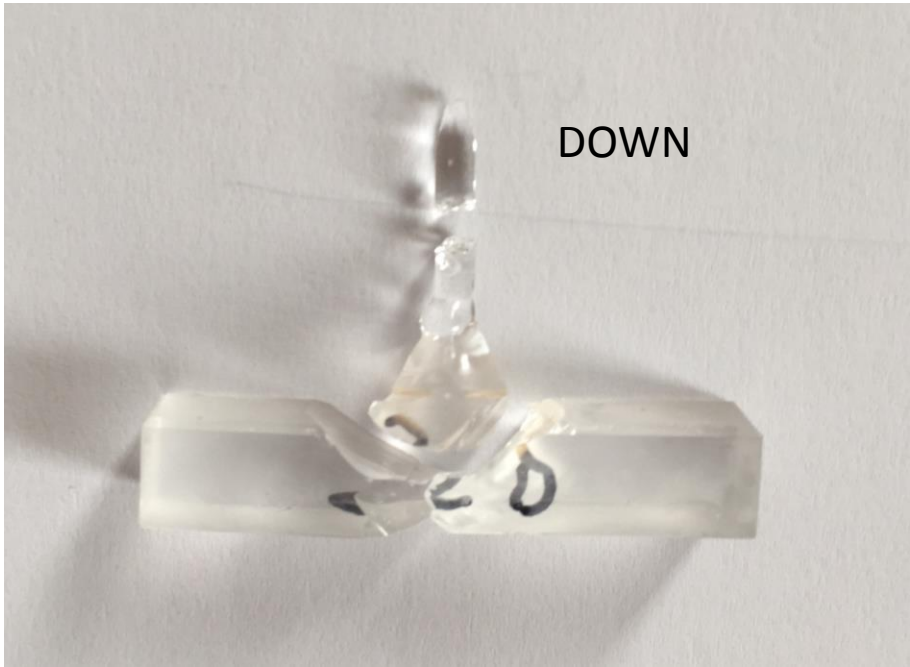


WI - DUMMY

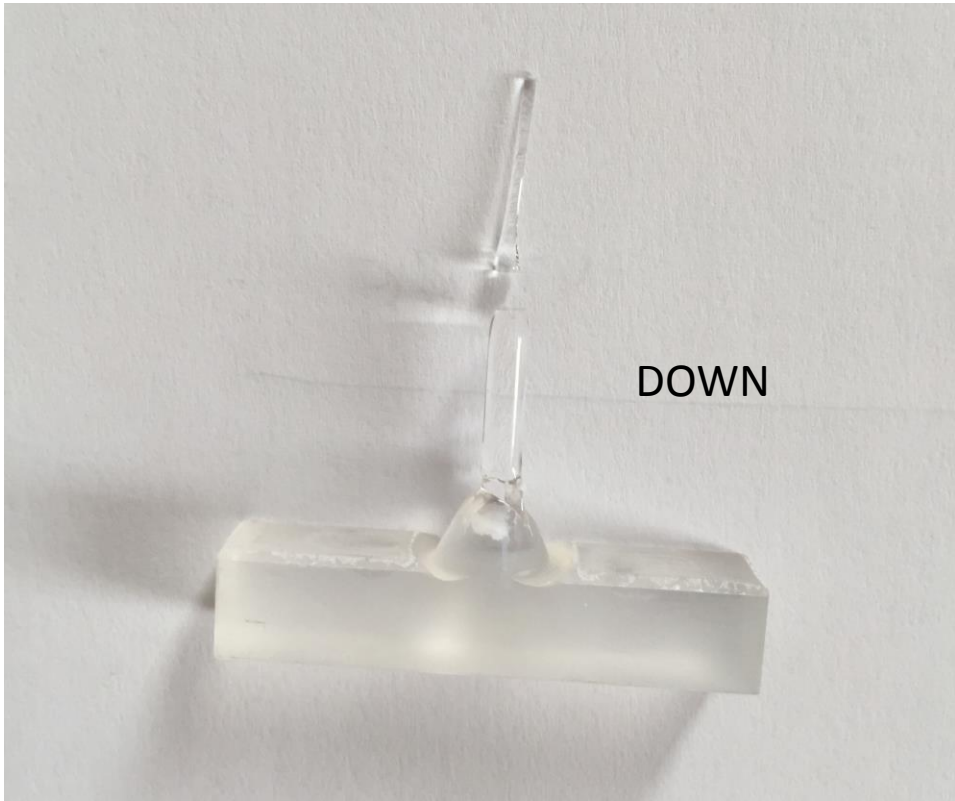
The fiber 3 and 4 survived, while fibers 1 and 2 were broken!

WI dummy- Anchors n°1

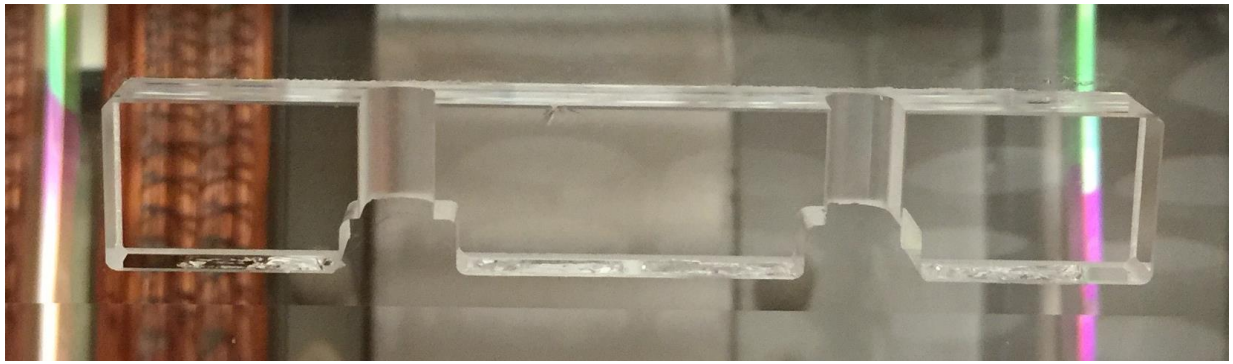




WI dummy- Anchors n°2



2° WI - Ears view after the crash



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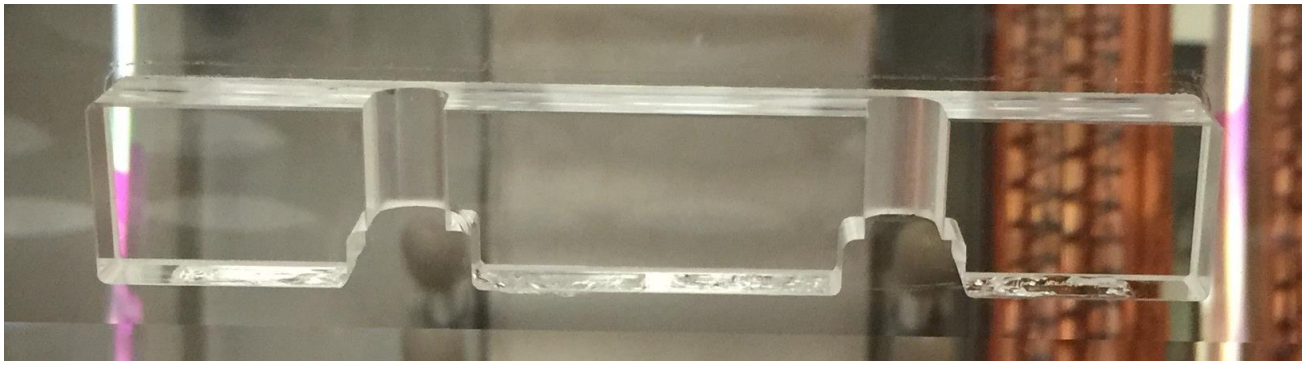
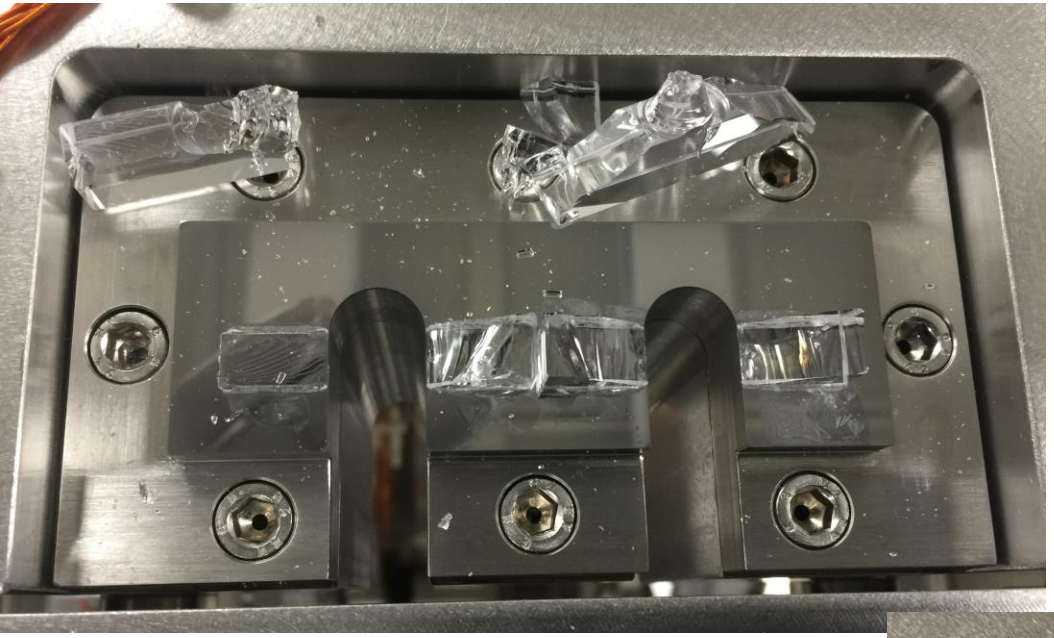


3

4

2° WI - Marionetta view after the crash

1

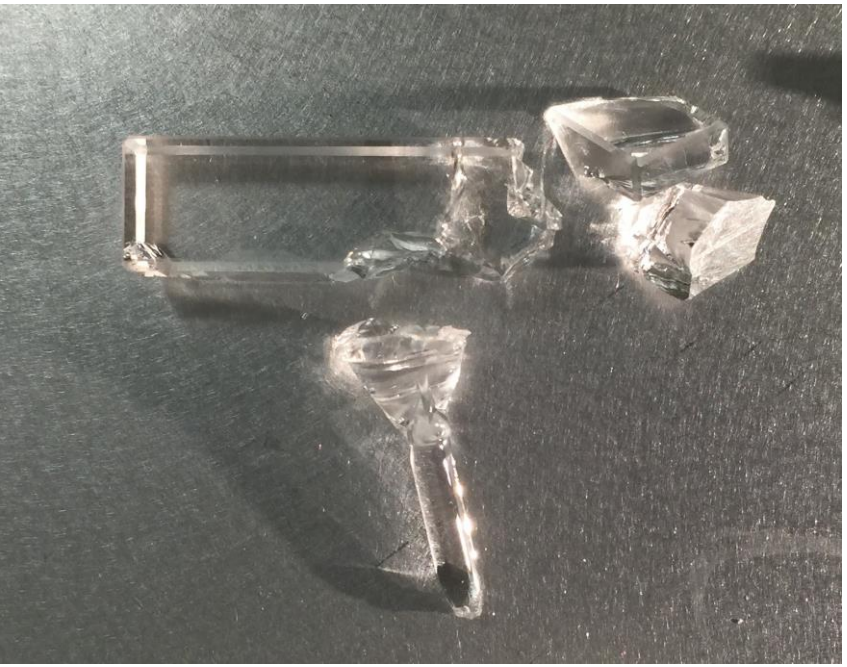


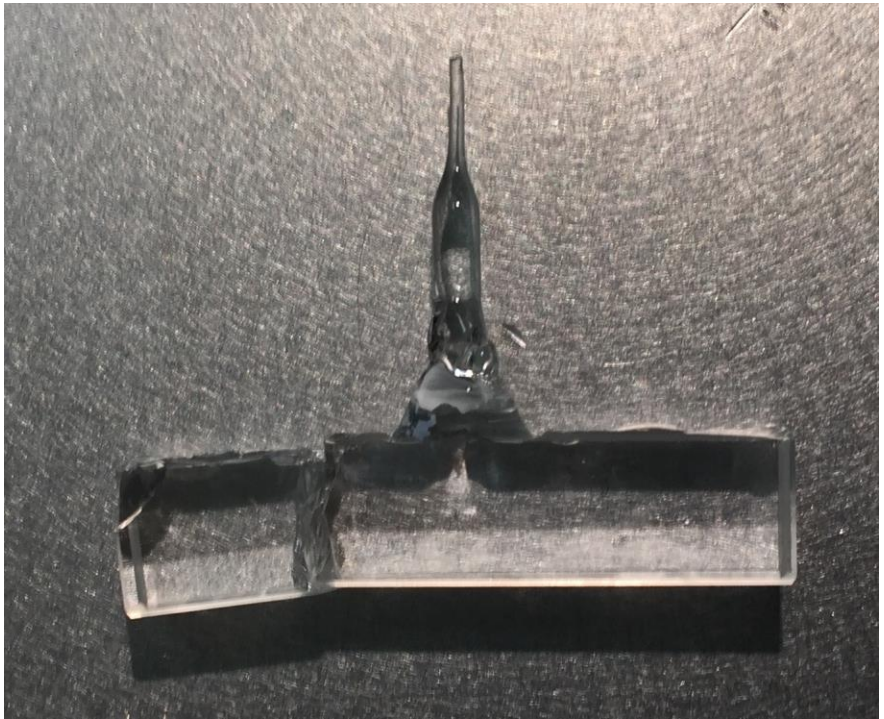
2

3

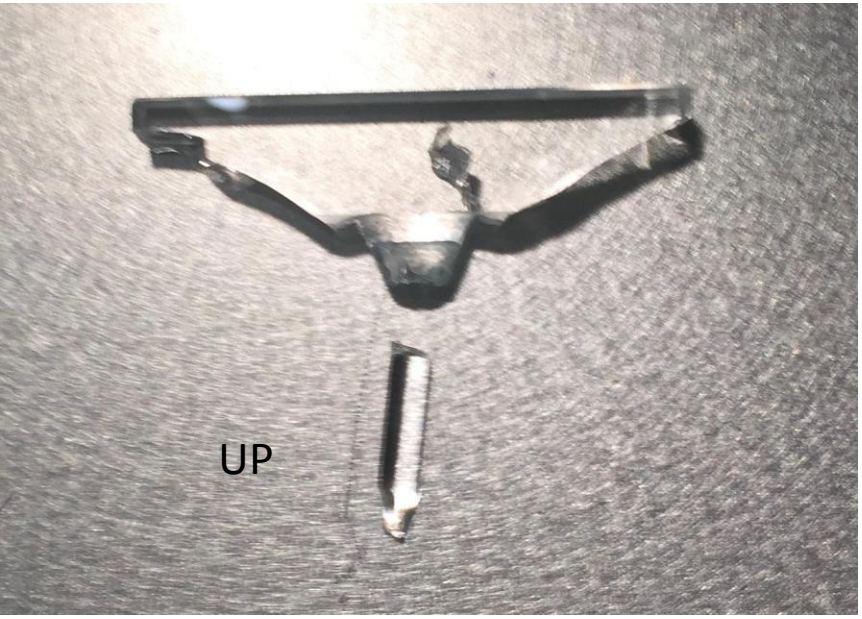
4

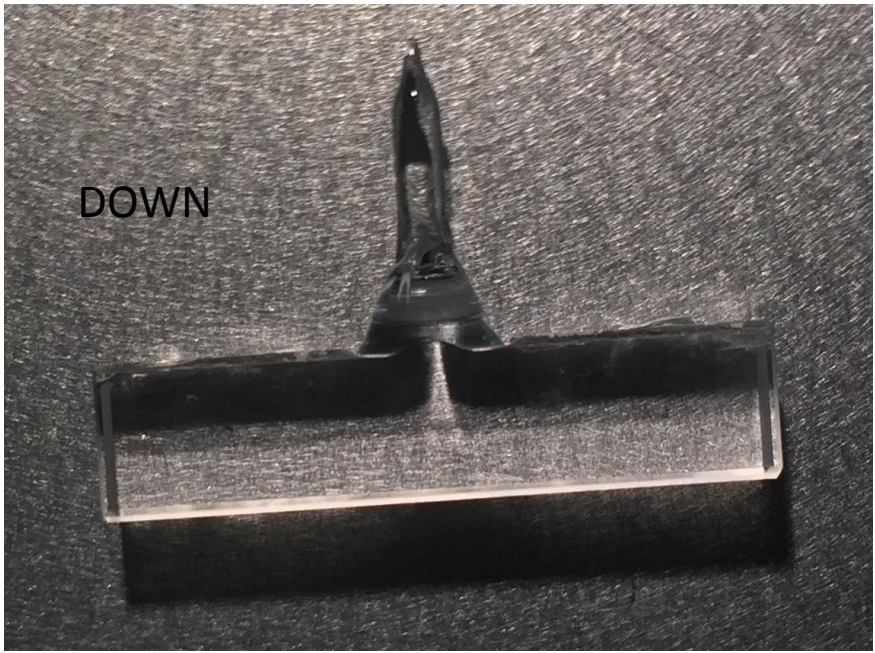
2° WI - Anchors n°1



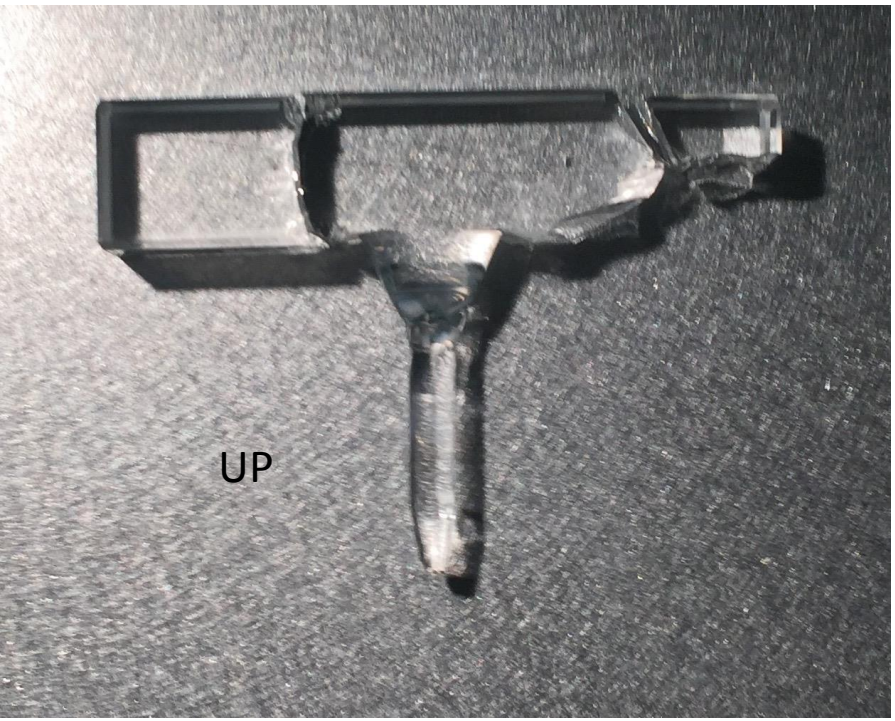


2° WI - Anchors n°2



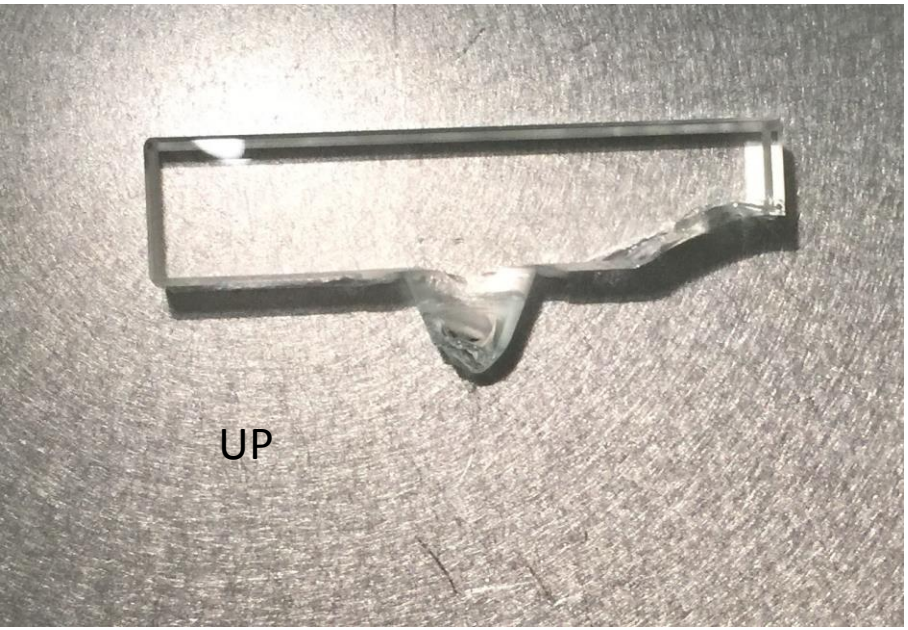


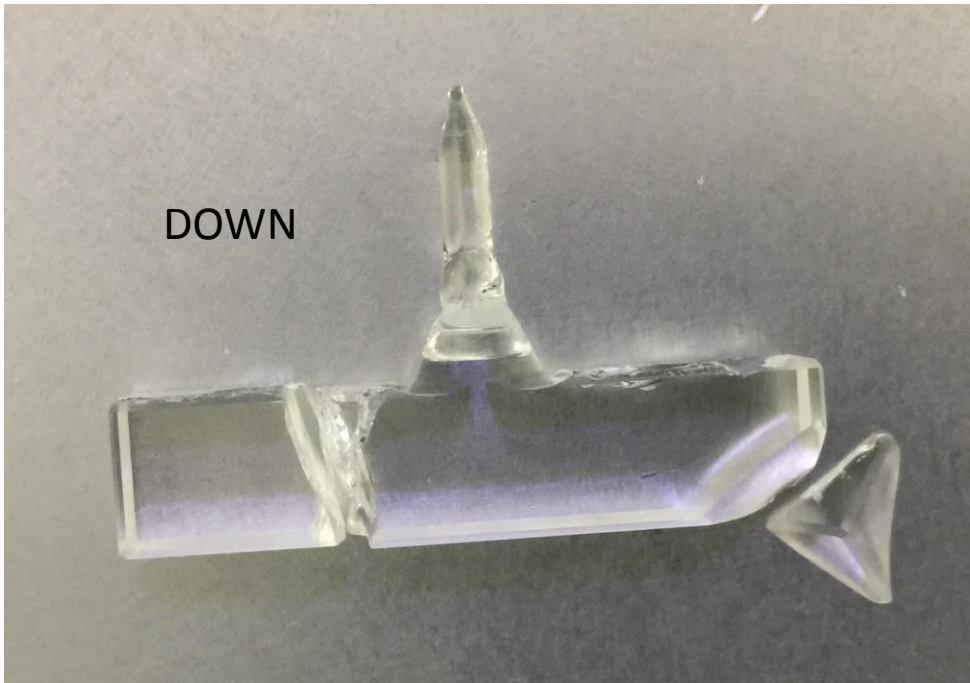
2° WI - Anchors n°3



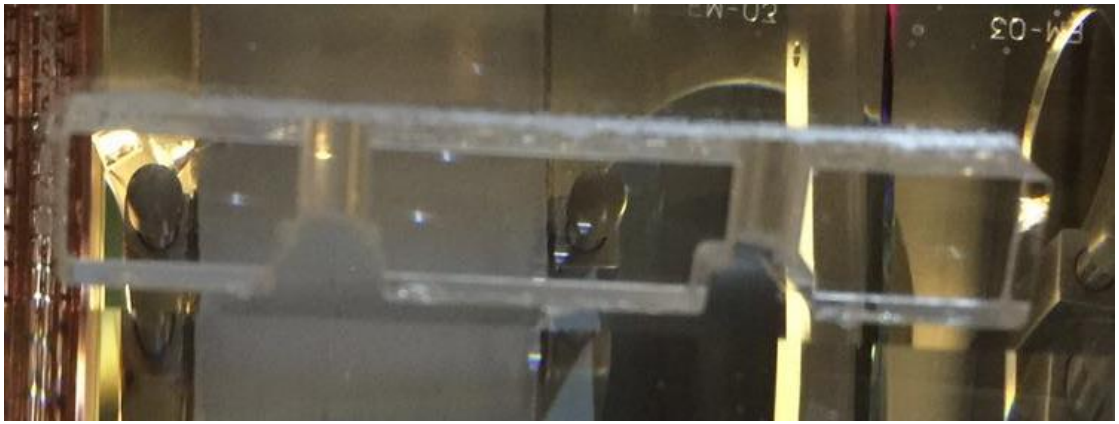
According to the data the crash begun from this fiber. The anchors performed as expected. The failure started at the level of the fiber (or at the level of the 3mm bar close to the welding).

2° WI - Anchors n°4



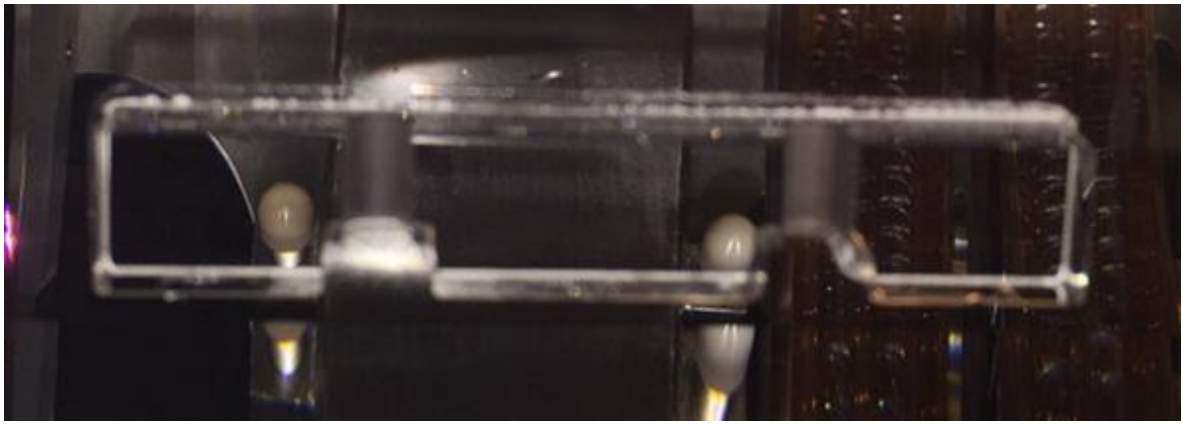


WE - Ears view after the crash



1

2



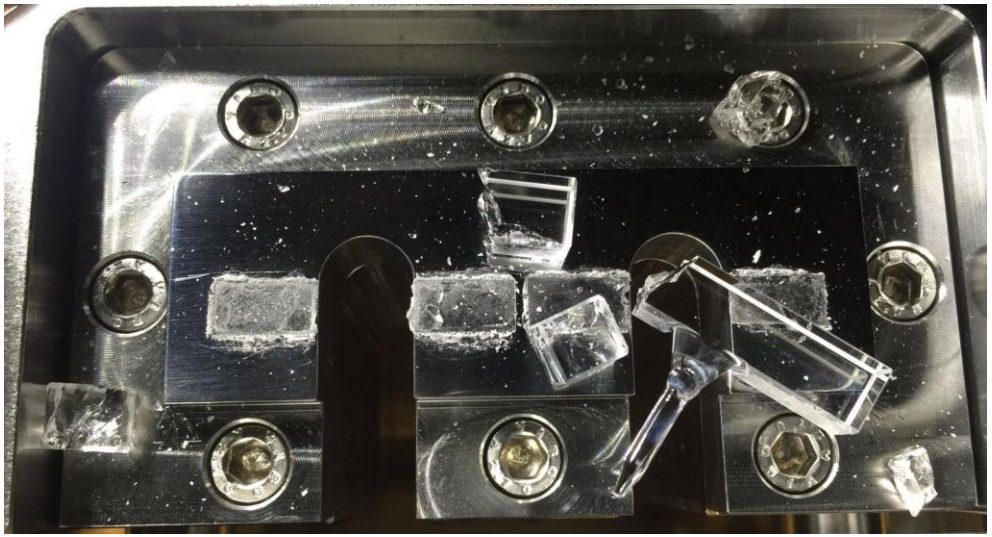
3

4

WE - Marionetta view after the crash

1

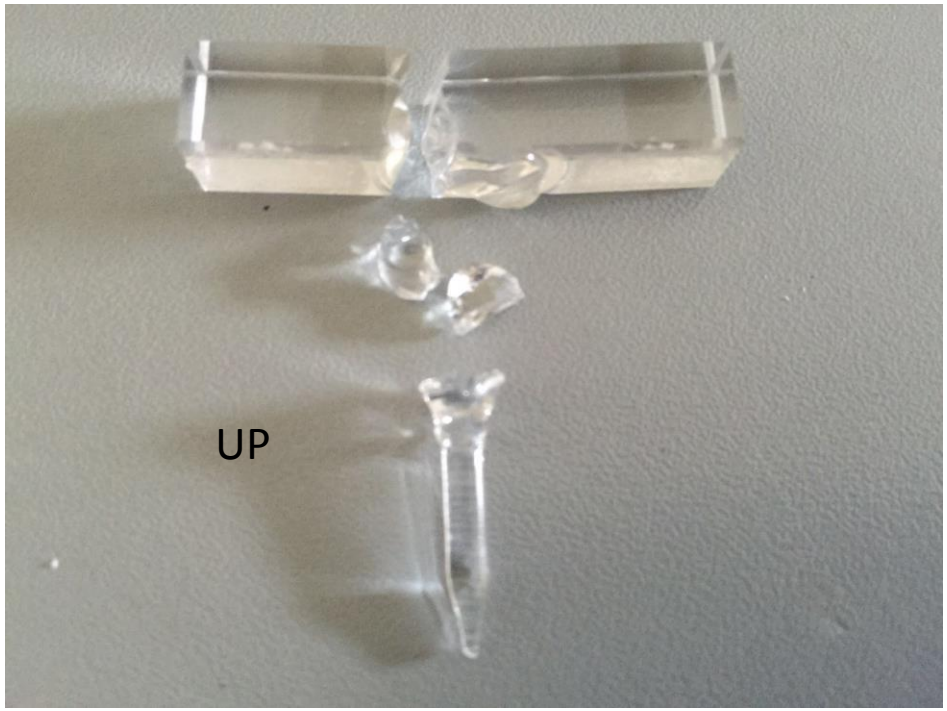
2

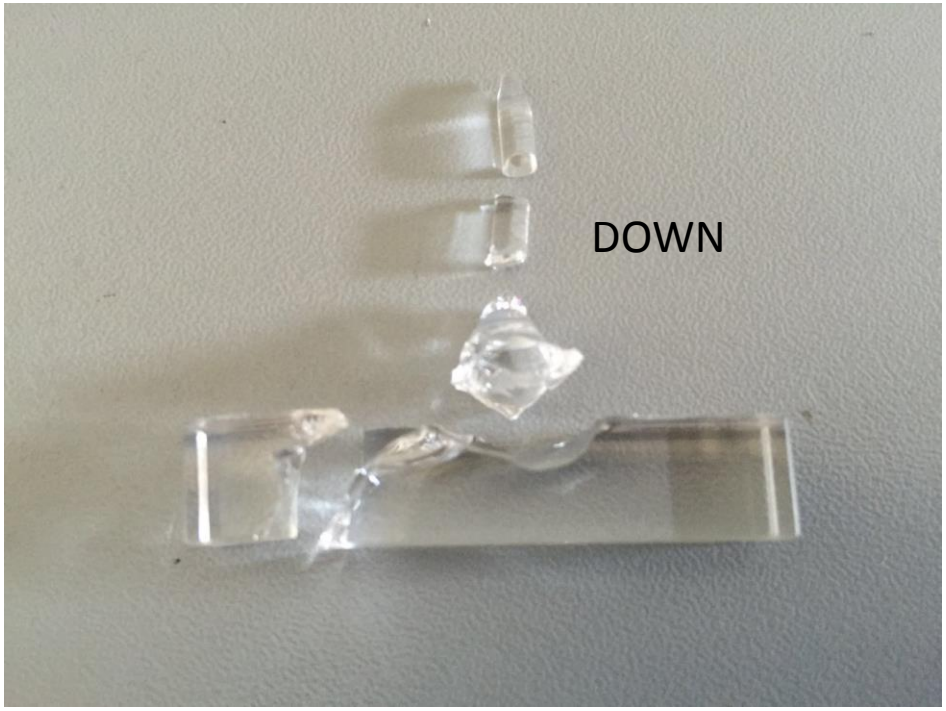


3

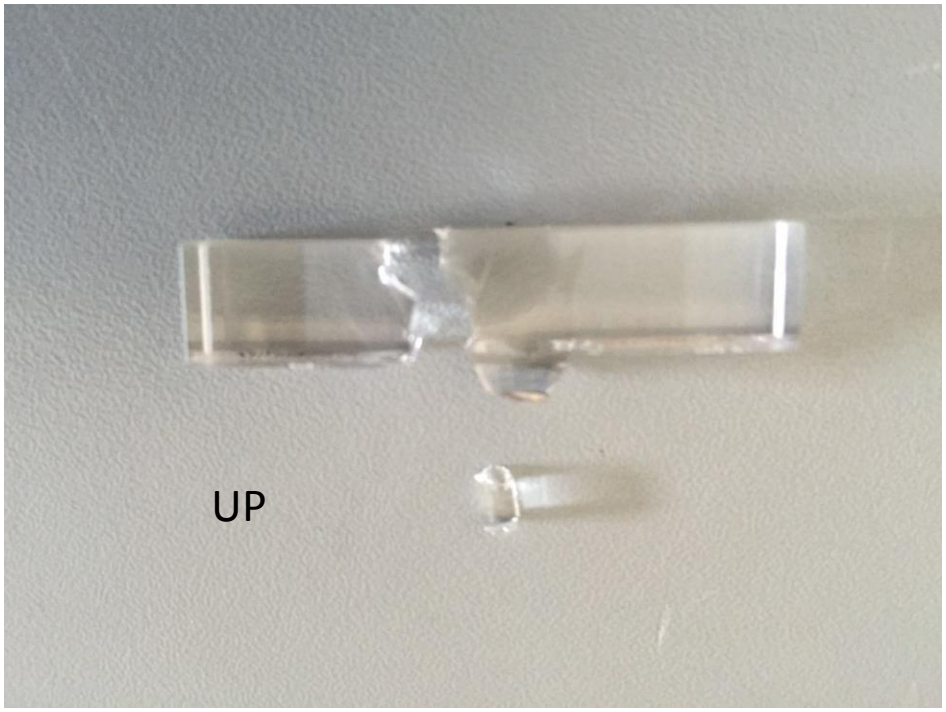
4

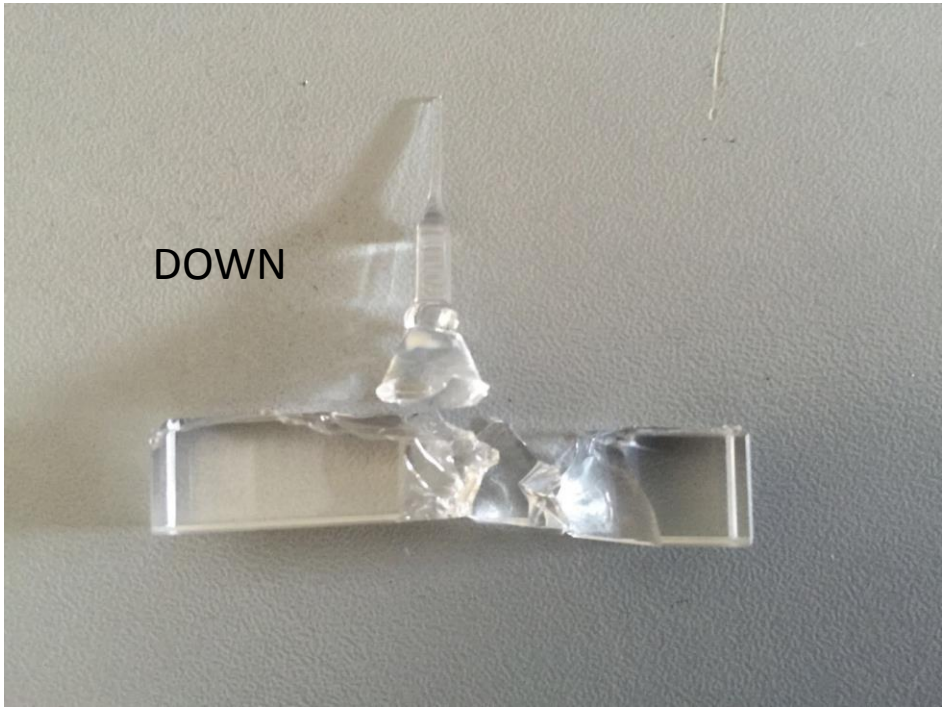
WE - Anchors n°1



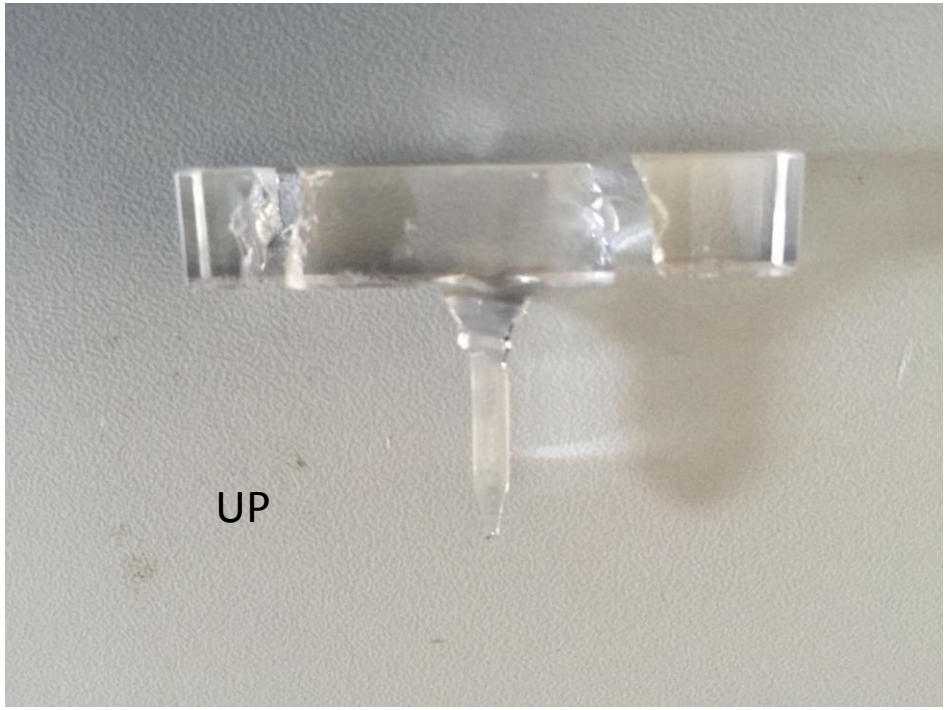


WE - Anchors n°2

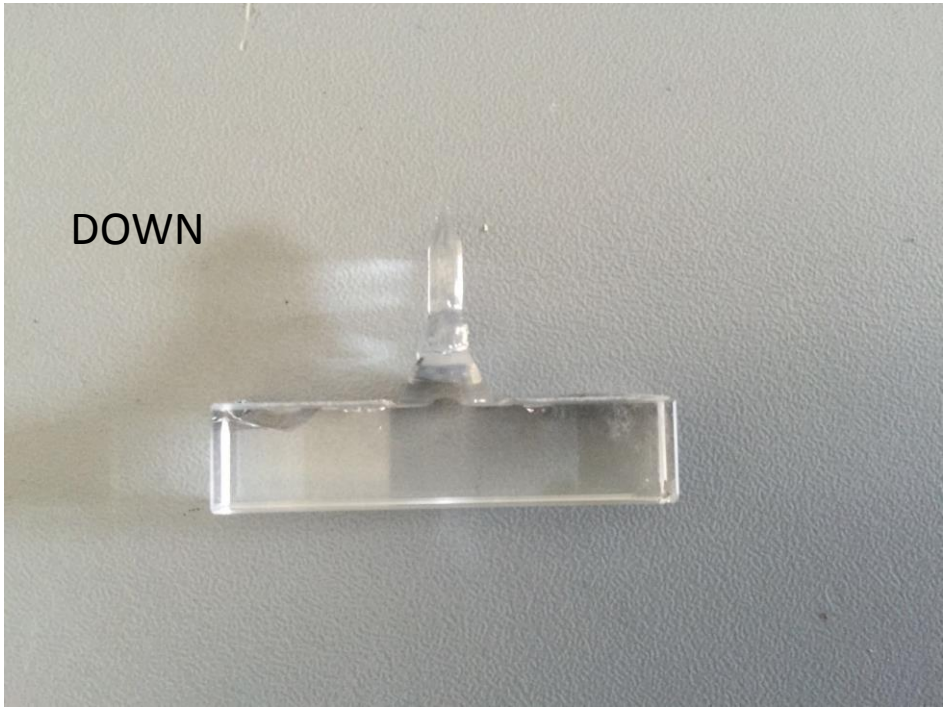




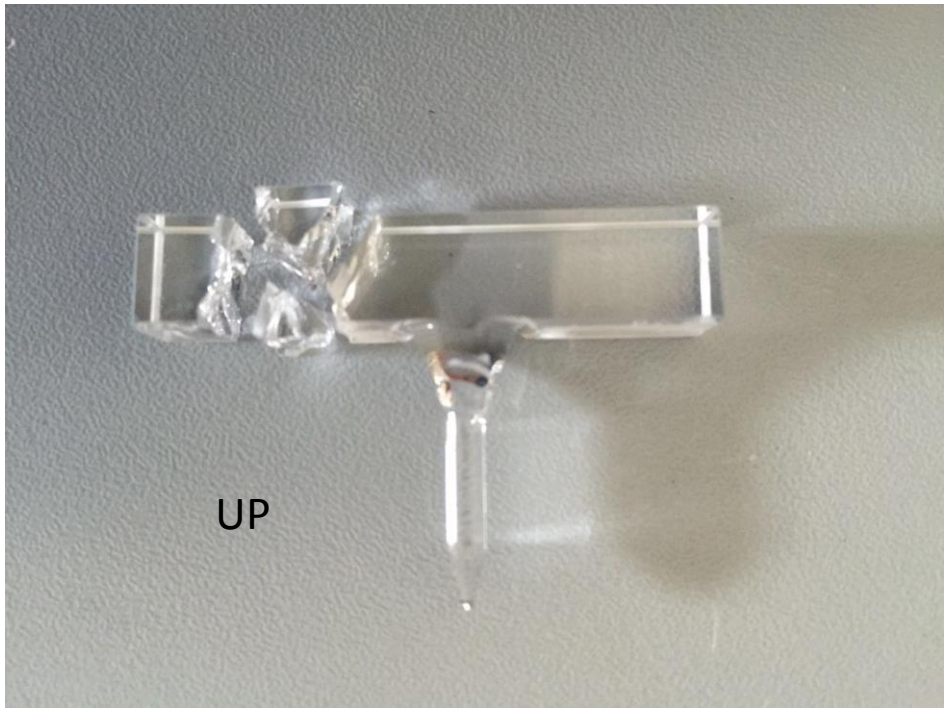
WE - Anchors n°3

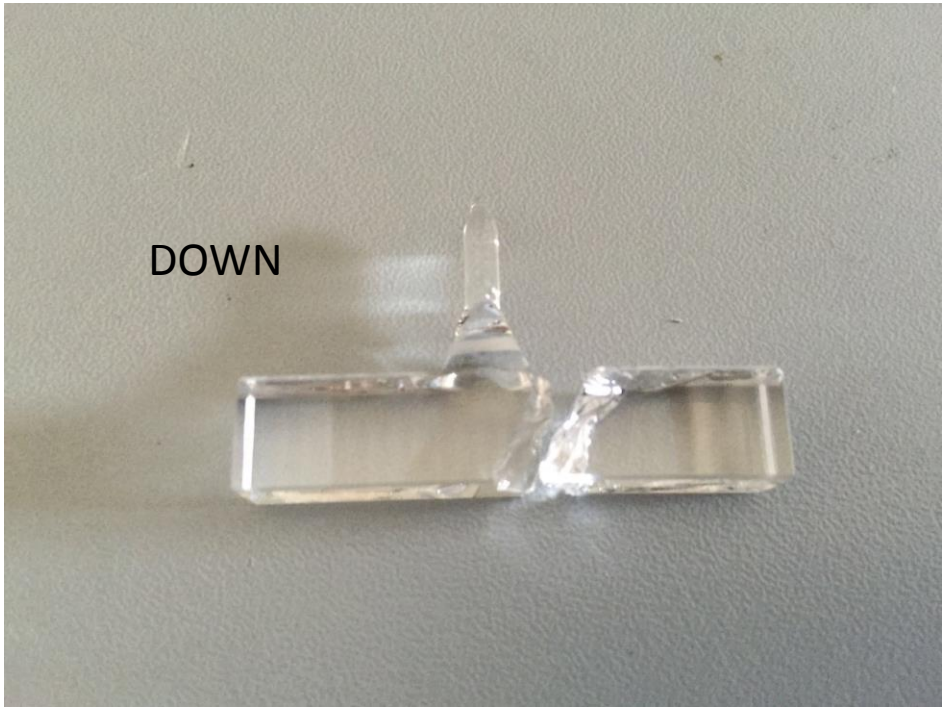


According to the data the crash begun from this fiber..it seems that the failure was induced by the fiber

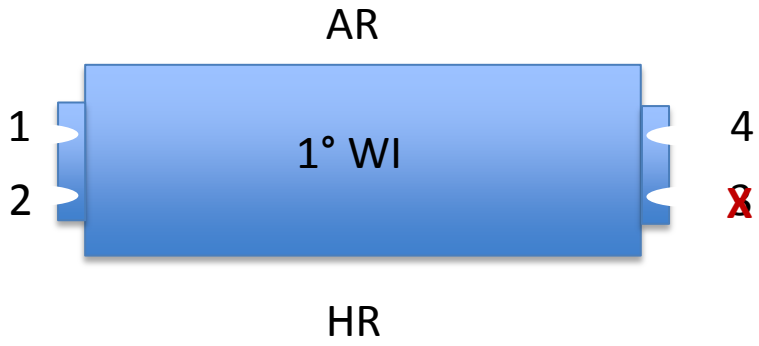


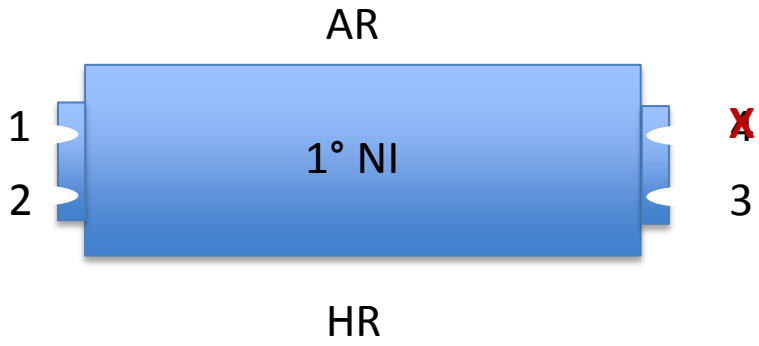
WE - Anchors n°4

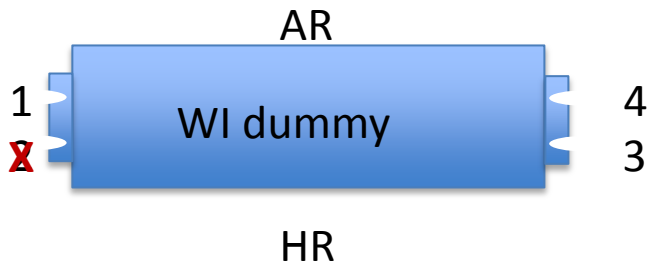


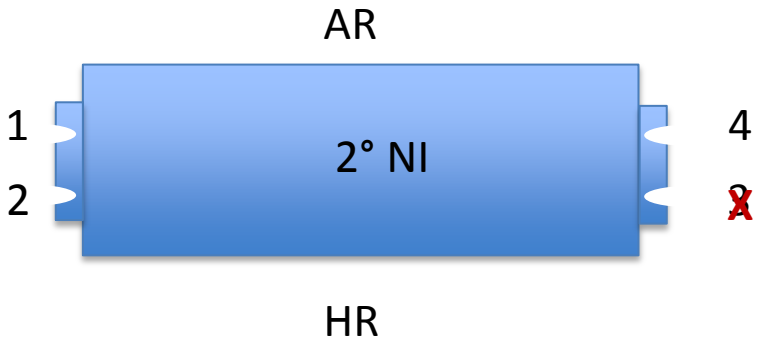


Summary


AR
1° WI
1
2
4
3
HR


AR
1° NI
1
2
4
3
HR


AR
WI dummy
1
2
4
3
HR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2° NI
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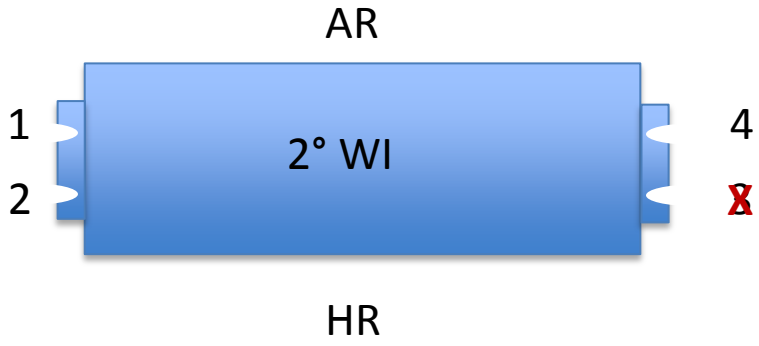
2
4
3
HR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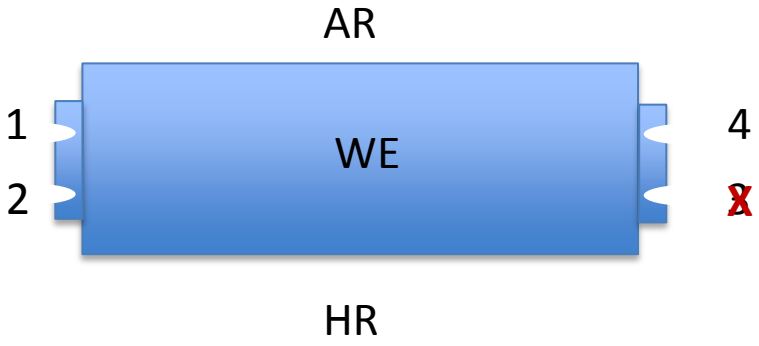
2° WI
1
2
4
3
HR


AR
WE
1
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