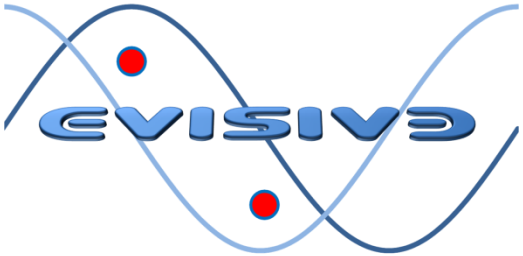
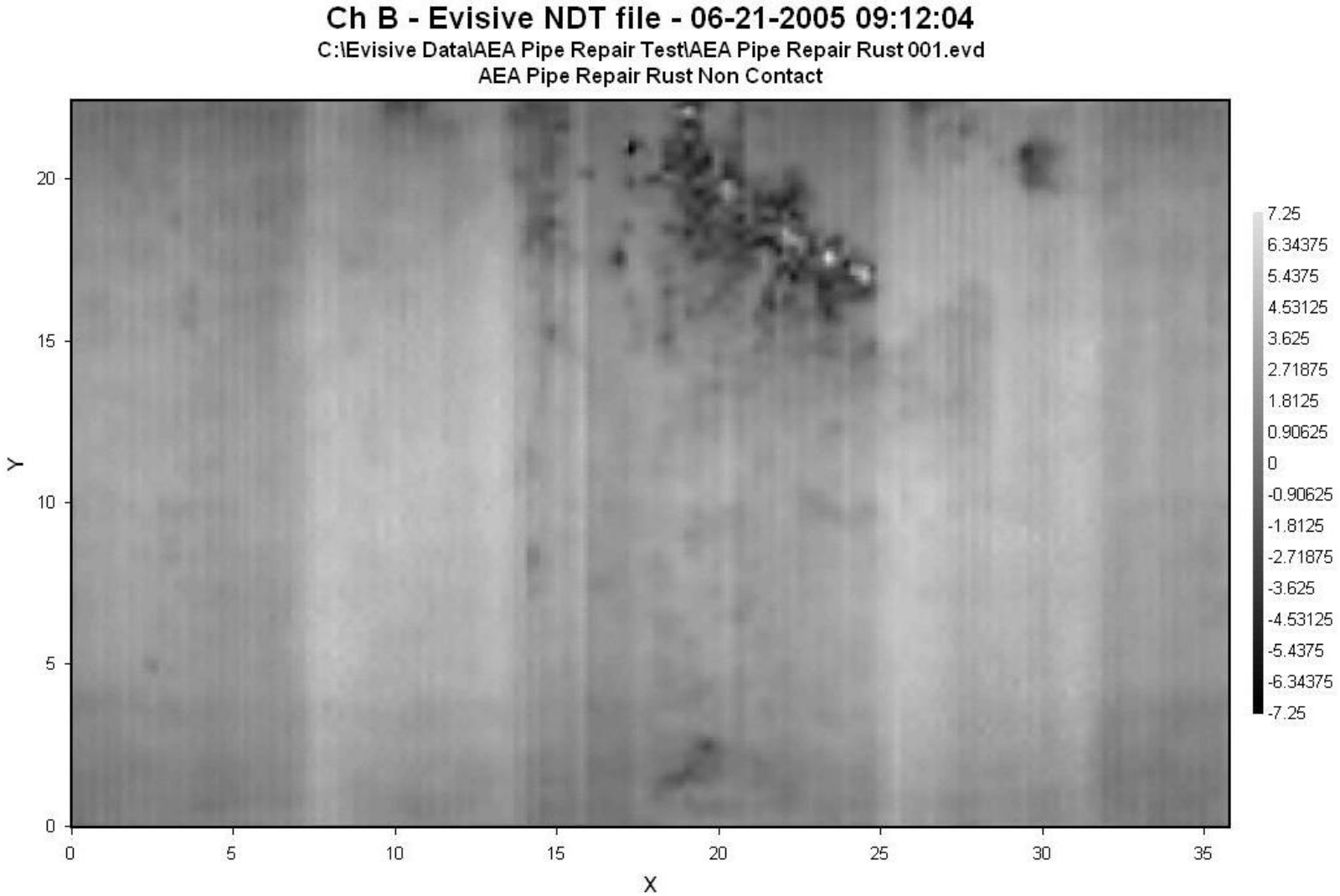
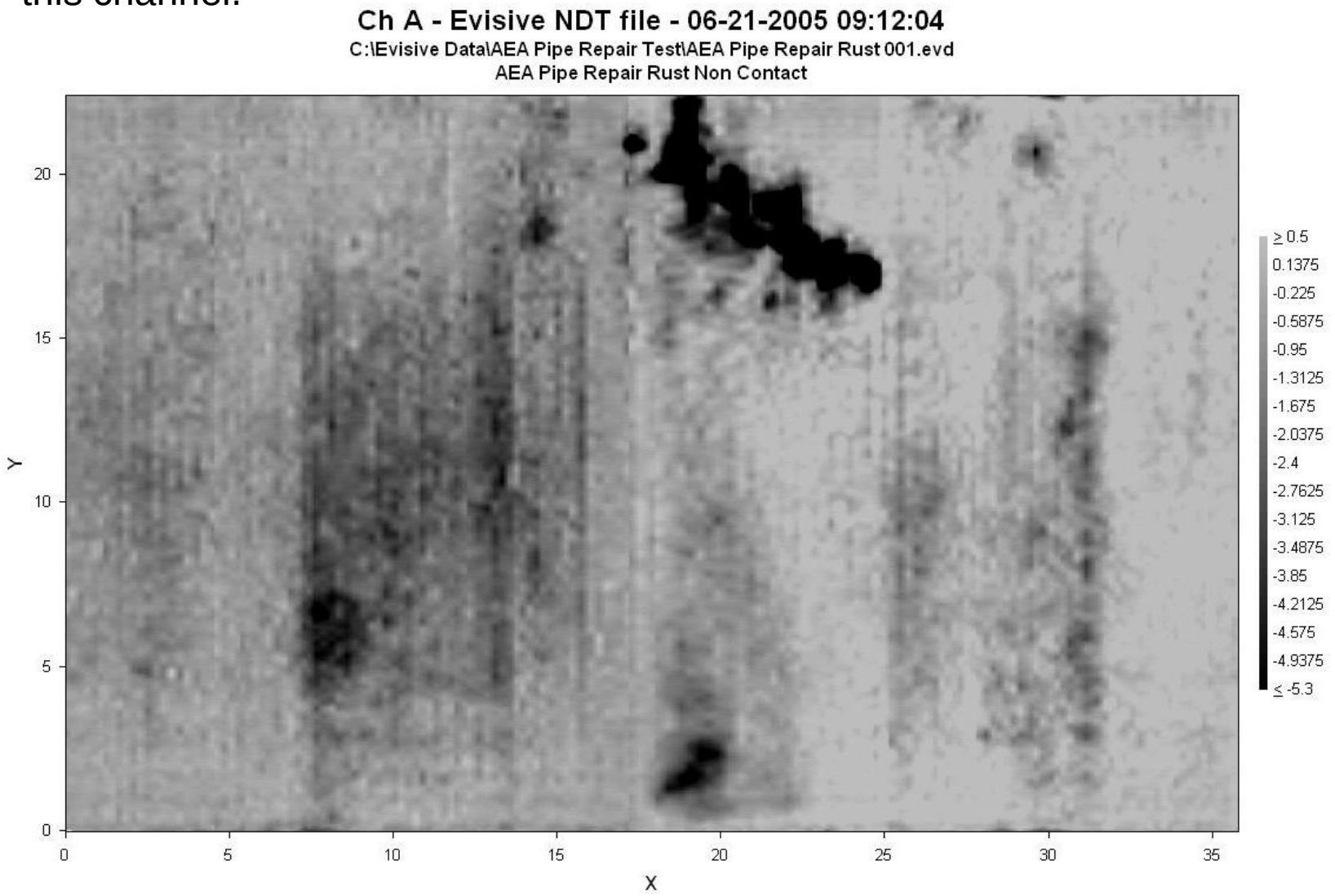
Imaging Corrosion and Pipe Surface Features Beneath Coatings Using Evisive Scan™ Technology



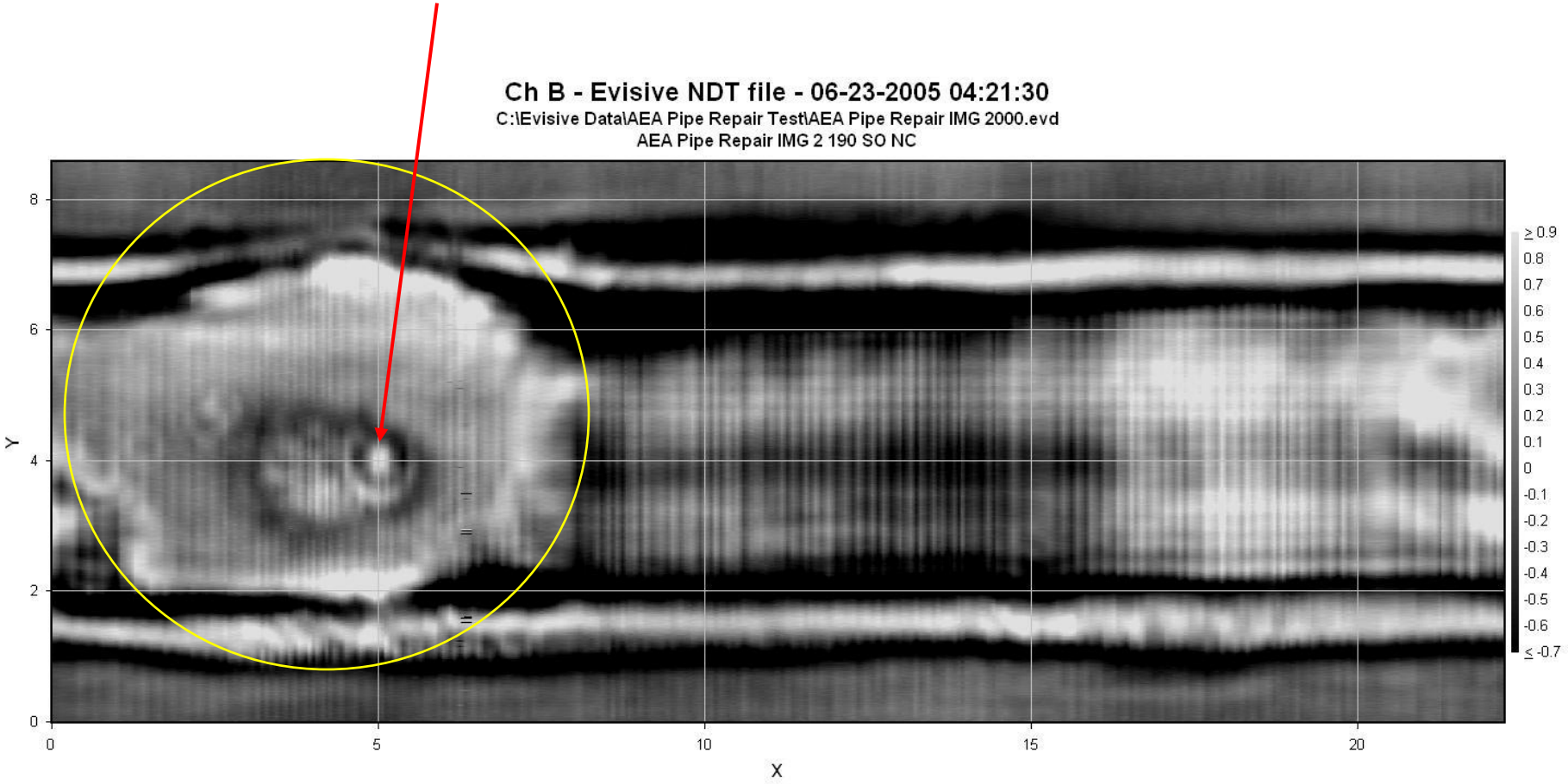
The scan below represents an image of pitting corrosion beneath an FRP over-wrap repair. The scan was optimized for focus about 1/8 inch above the surface of the pipe. The diagonal feature is a region of pitting, with the corrosion product build-up represented as light gray dots in a field of pitting.



The scan below represents an image of pitting corrosion beneath an FRP over-wrap repair. This channel of the scan was optimized for focus directly at the metal/FRP interface. The diagonal feature is again, a region of pitting. Note the ability to detect and characterize far subtler corrosion features in this channel.



In this example, a hole was drilled in the pipe wall, and a small teflon disk was placed over the hole. A commercially available over-wrap repair technology was then used on the pipe. After repair application, the pipe was pressurized until the repair failed, allowing fluid to escape. The hole and teflon disk was located at (5,4) in this scan. The area where fluid disbonded the repair can clearly be seen, and is circled in yellow. The fluid escaped from under the wrap at (4.5,7), as indicated by the red arrow. The wrap remains properly bonded from X=8 to approximately X=21, where the water induced disbond begins.



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