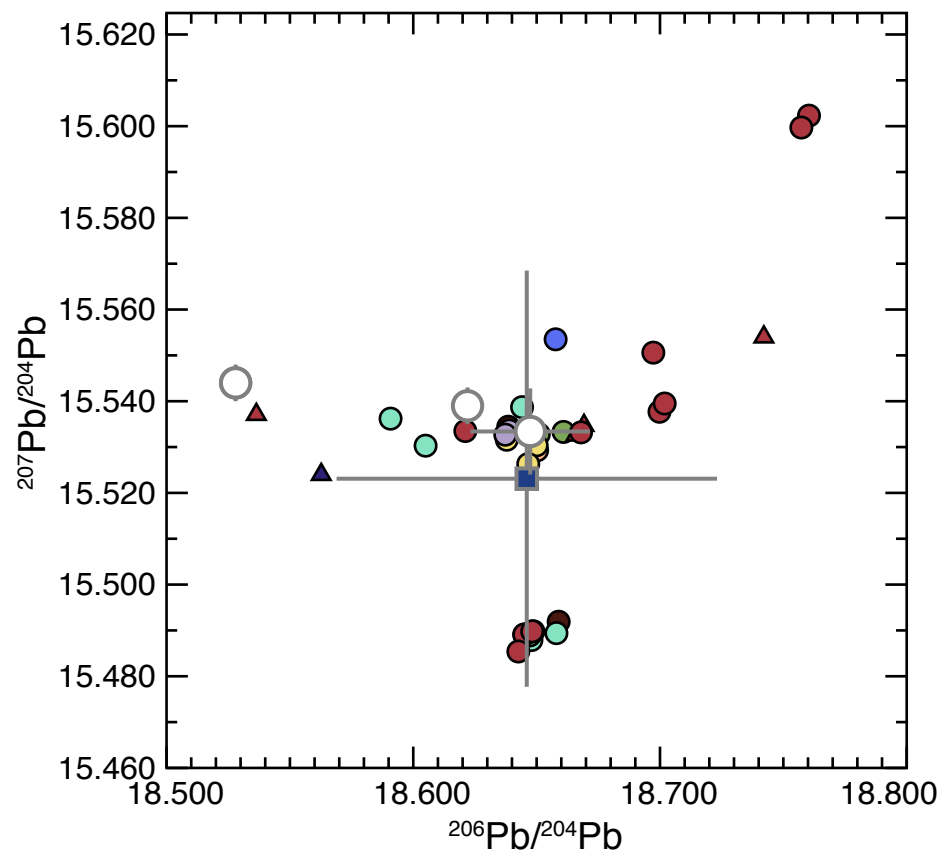
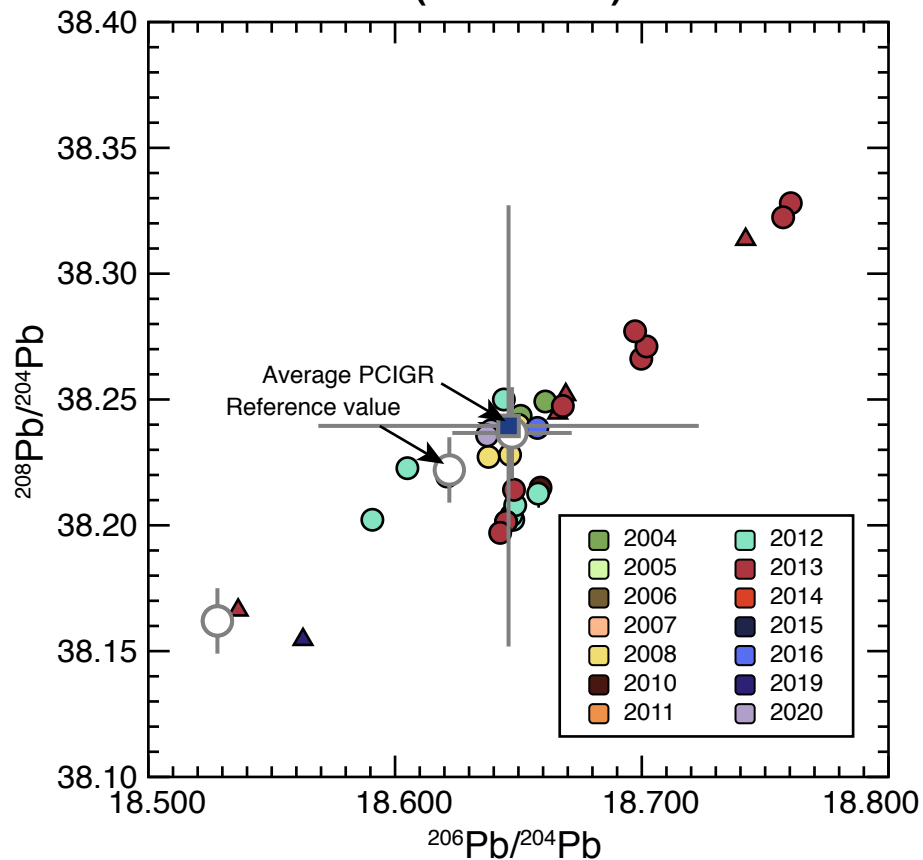
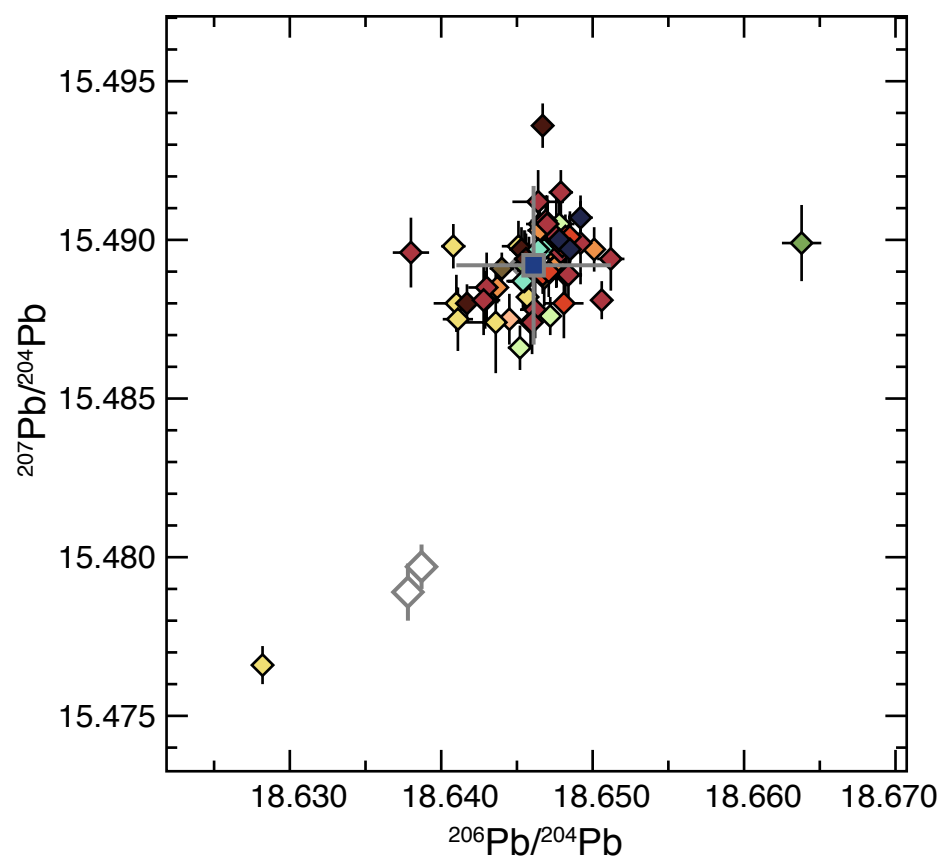
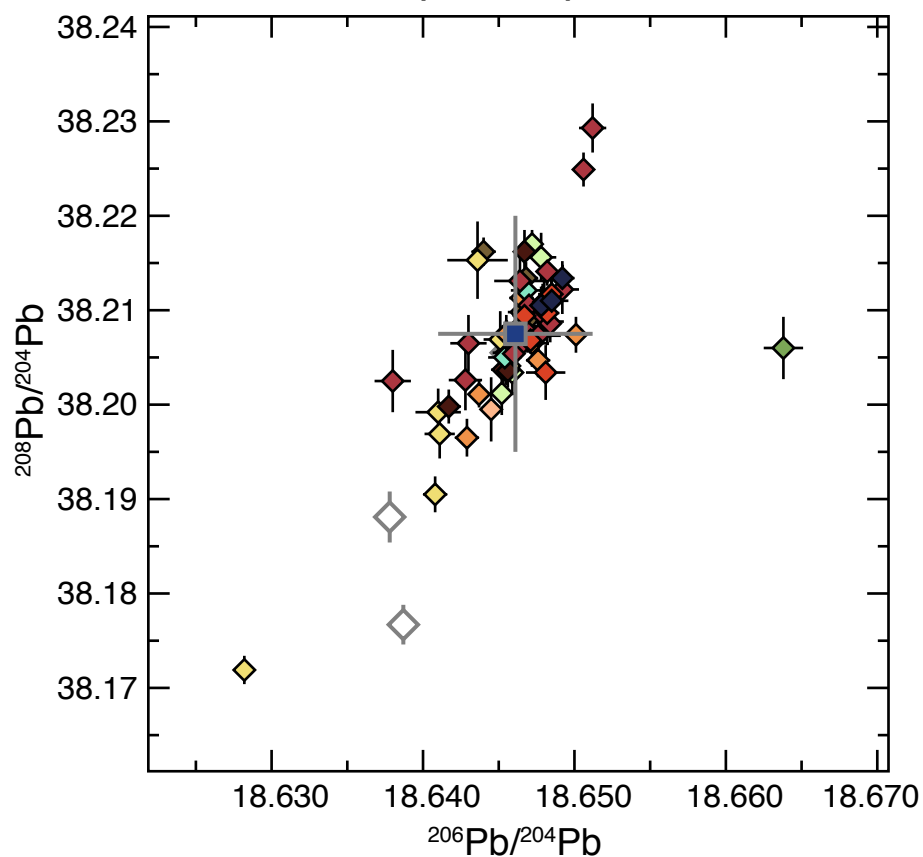


### BHVO-2 Basalt (unleached)

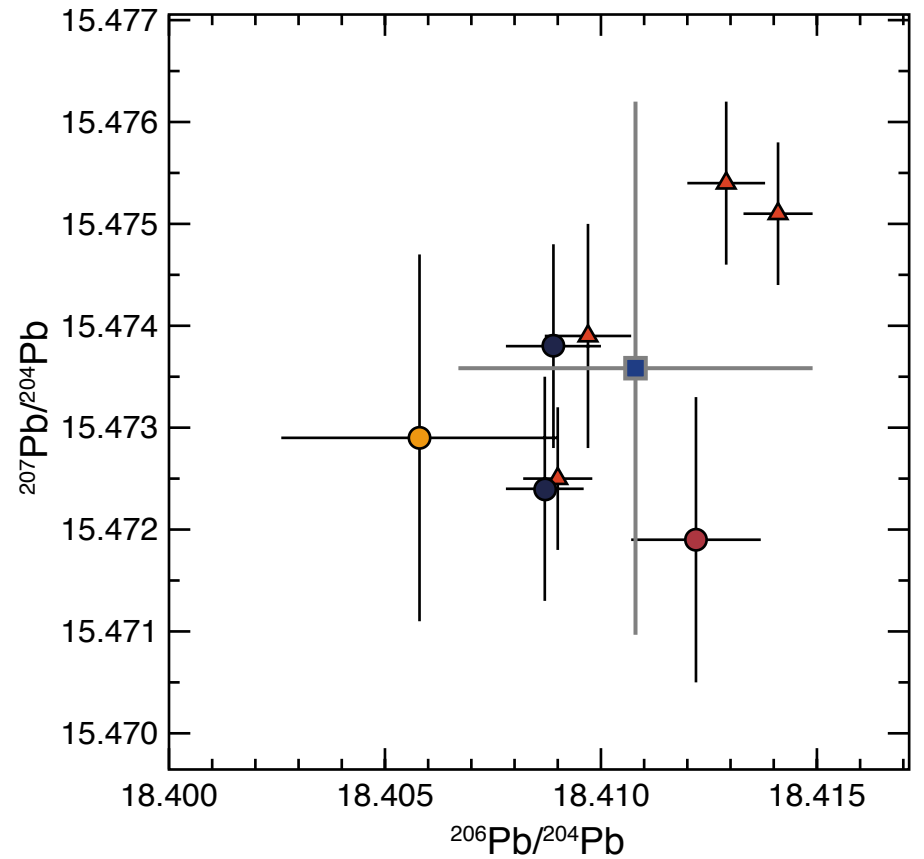
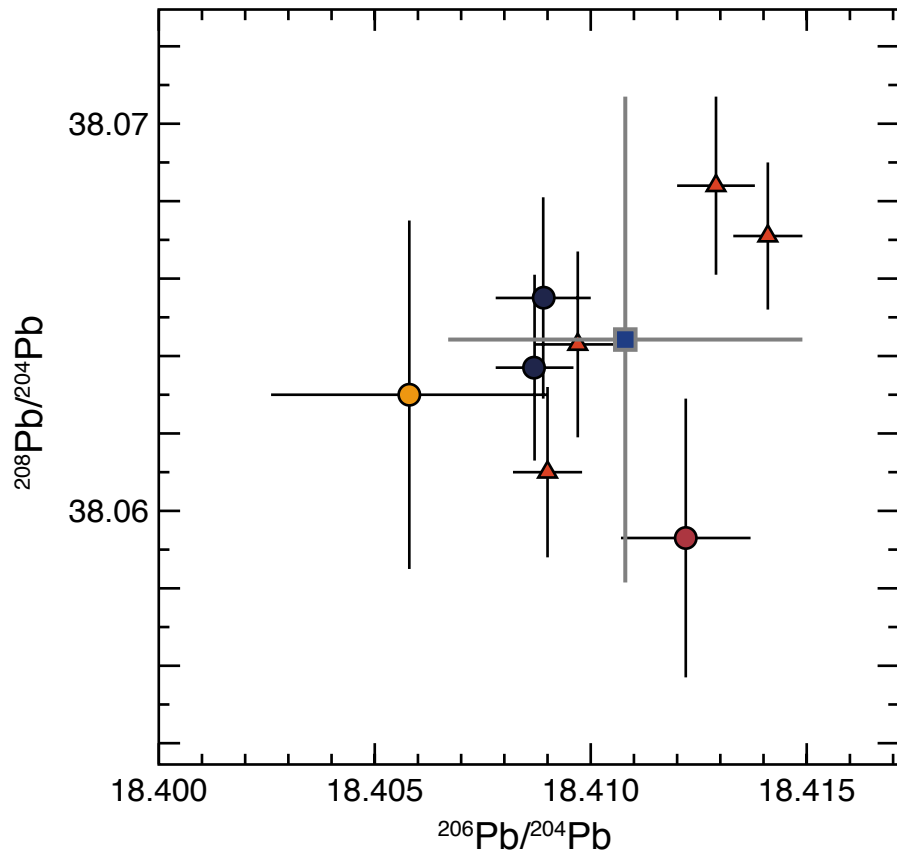


### BHVO-2 Basalt (leached)

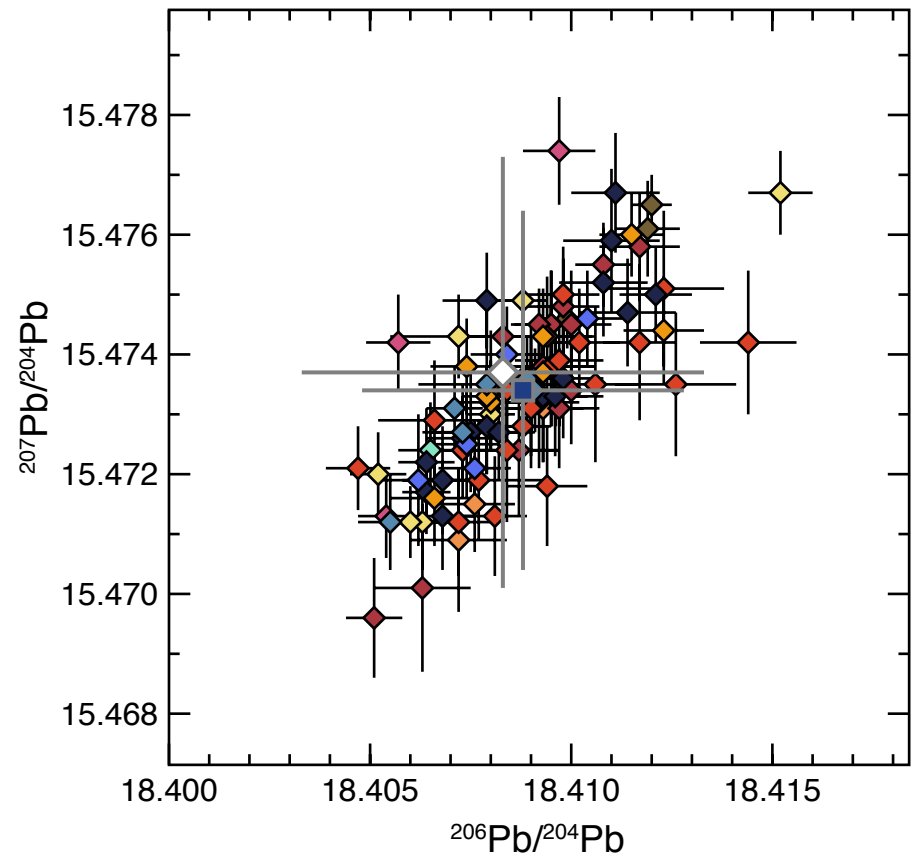
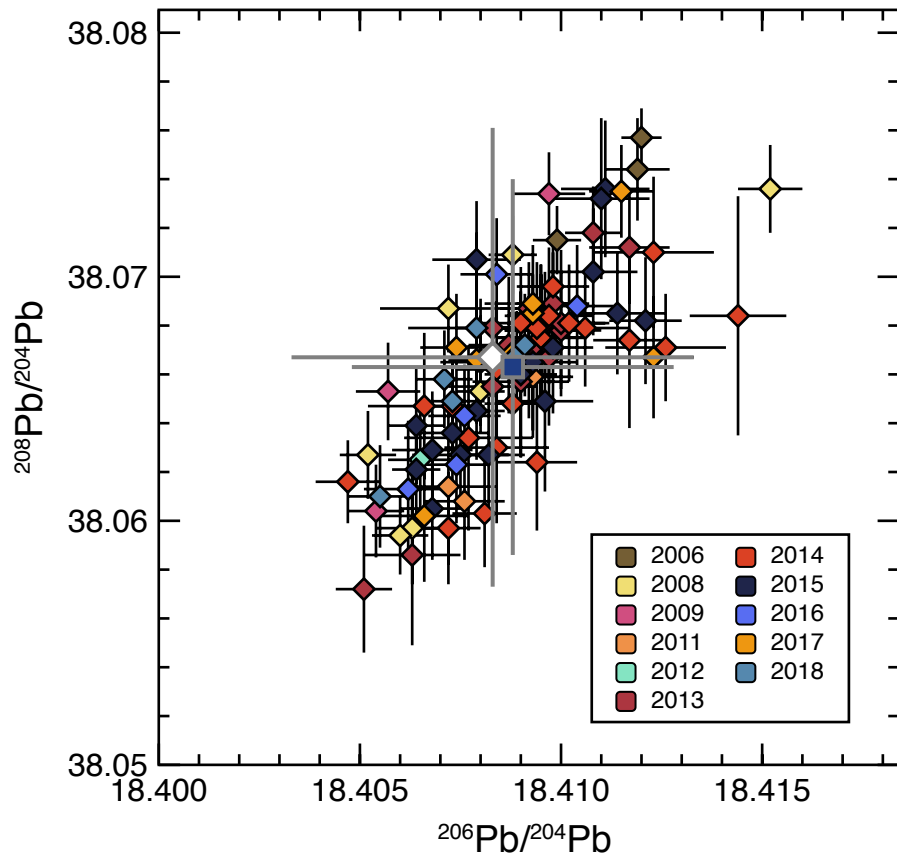


**Comparison of the Pb isotopic variations between unleached and leached reference materials analyzed via MC-ICP-MS at PCIGR (5 images).** Left panels:  $^{208}\text{Pb}/^{204}\text{Pb}$  vs  $^{206}\text{Pb}/^{204}\text{Pb}$ . Right panels:  $^{207}\text{Pb}/^{204}\text{Pb}$  vs  $^{206}\text{Pb}/^{204}\text{Pb}$ . Circles: unleached; triangles: high-pressure dissolution; diamonds: leached. The mean and 2 standard deviations of the reference material are represented by the blue square symbols, and literature reported reference values are represented by the white symbols. Reference value sources: Weis et al. (2006); Nobre Silva et al. (2013); Fourny et al. (2016).

### Kil-93 Basalt (unleached)

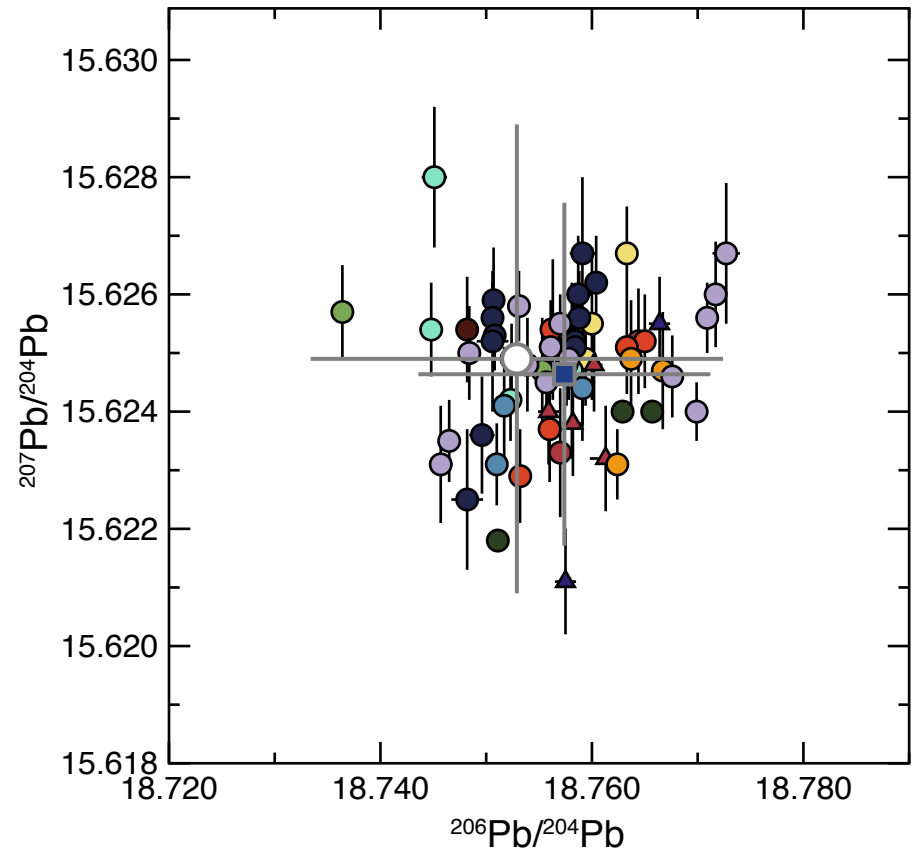
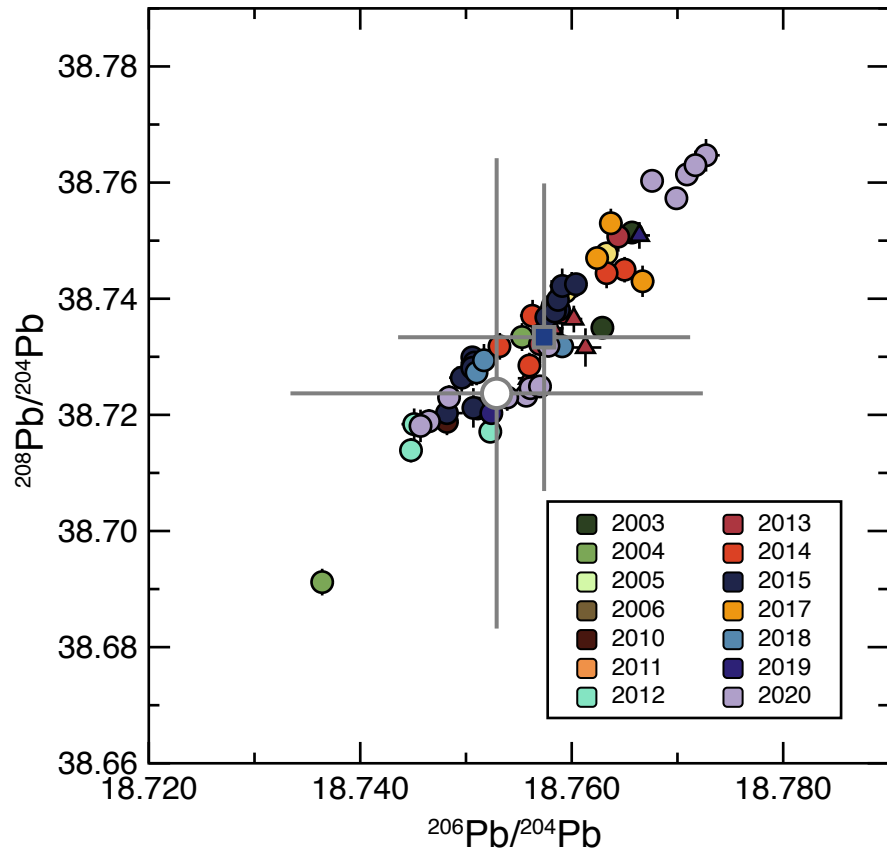


### Kil-93 Basalt (leached)

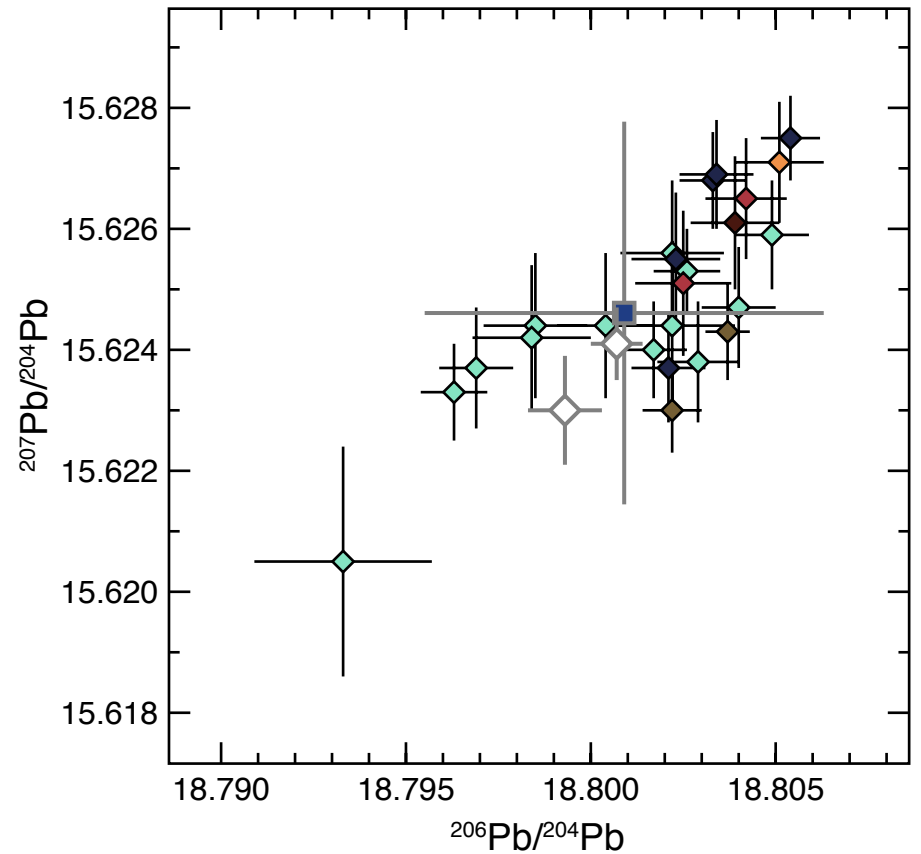
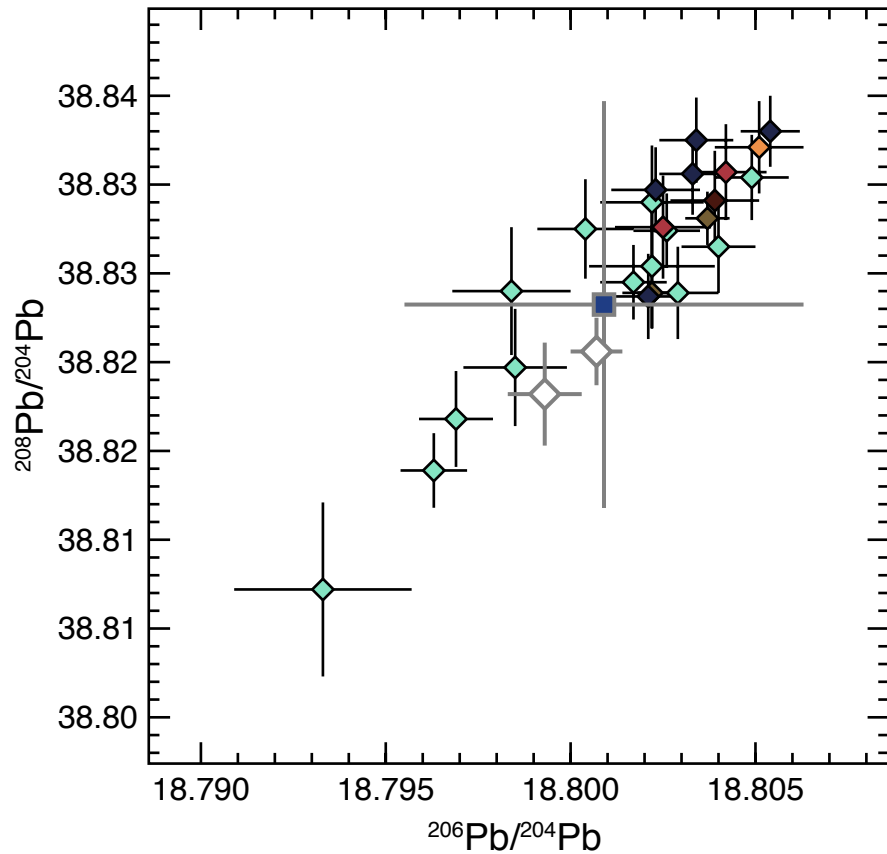


**Comparison of the Pb isotopic variations between unleached and leached reference materials analyzed via MC-ICP-MS at PCIGR (cont'd).** Left panels:  $^{208}\text{Pb}/^{204}\text{Pb}$  vs  $^{206}\text{Pb}/^{204}\text{Pb}$ . Right panels:  $^{207}\text{Pb}/^{204}\text{Pb}$  vs  $^{206}\text{Pb}/^{204}\text{Pb}$ . Circles: unleached; triangles: high-pressure dissolution; diamonds: leached. The mean and 2 standard deviations of the reference material are represented by the blue square symbols, and literature reported reference values are represented by the white symbols. Reference value sources: Weis et al. (2006); Nobre Silva et al. (2013); Fourny et al. (2016).

### BCR-2 Basalt (unleached)

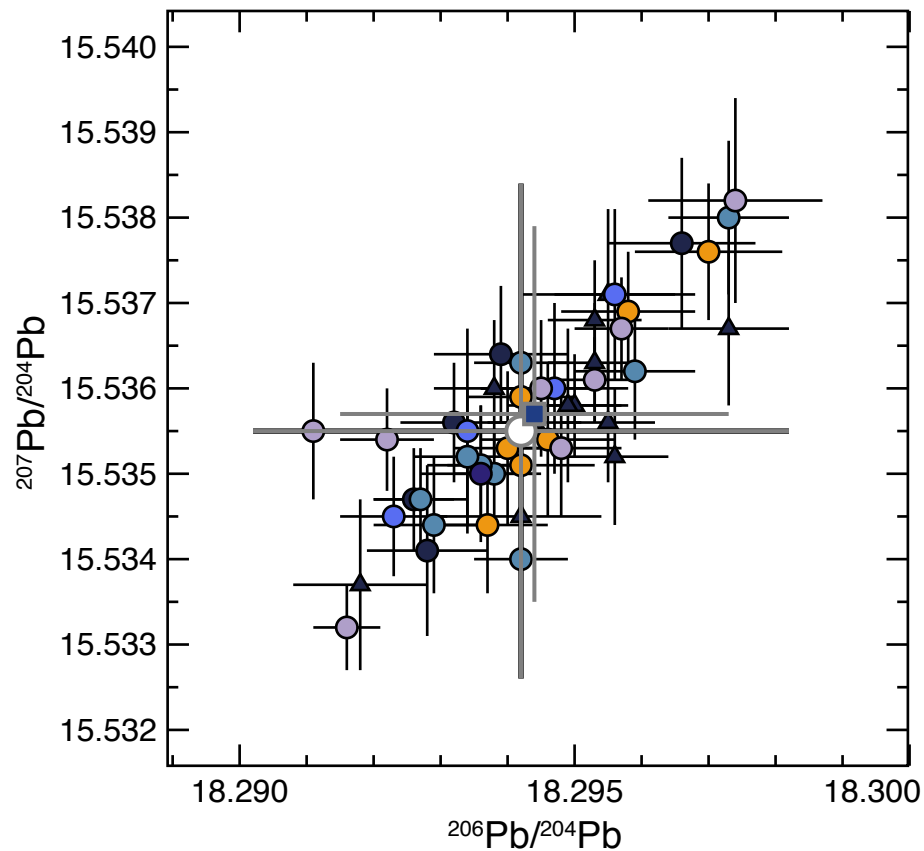
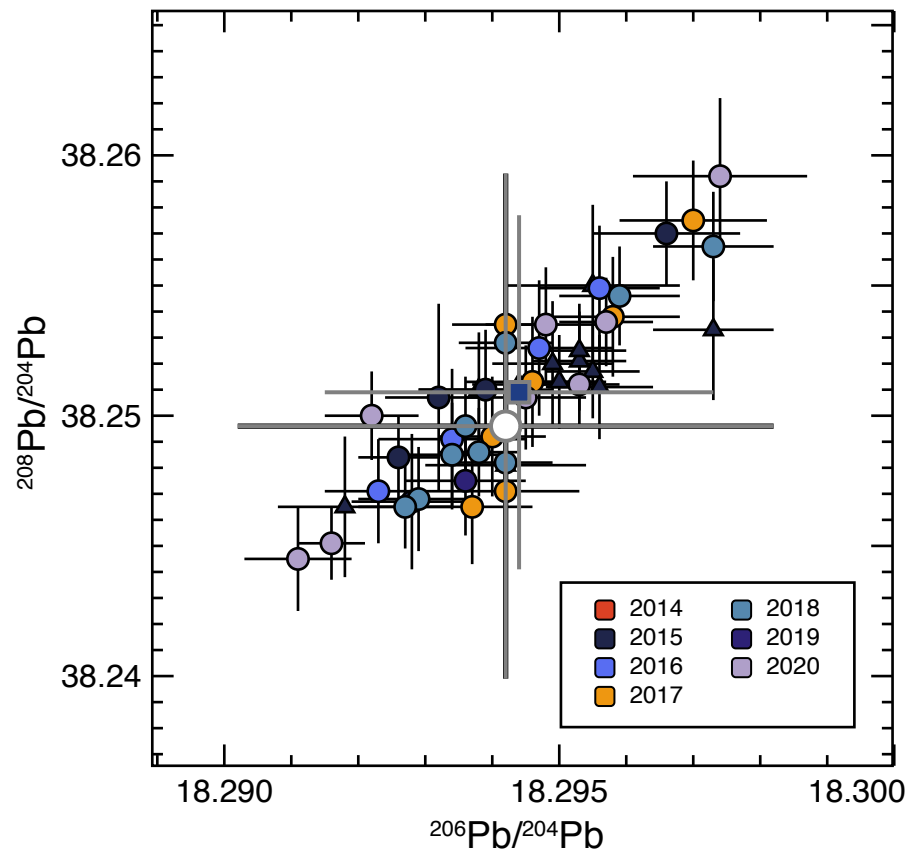


### BCR-2 Basalt (leached)

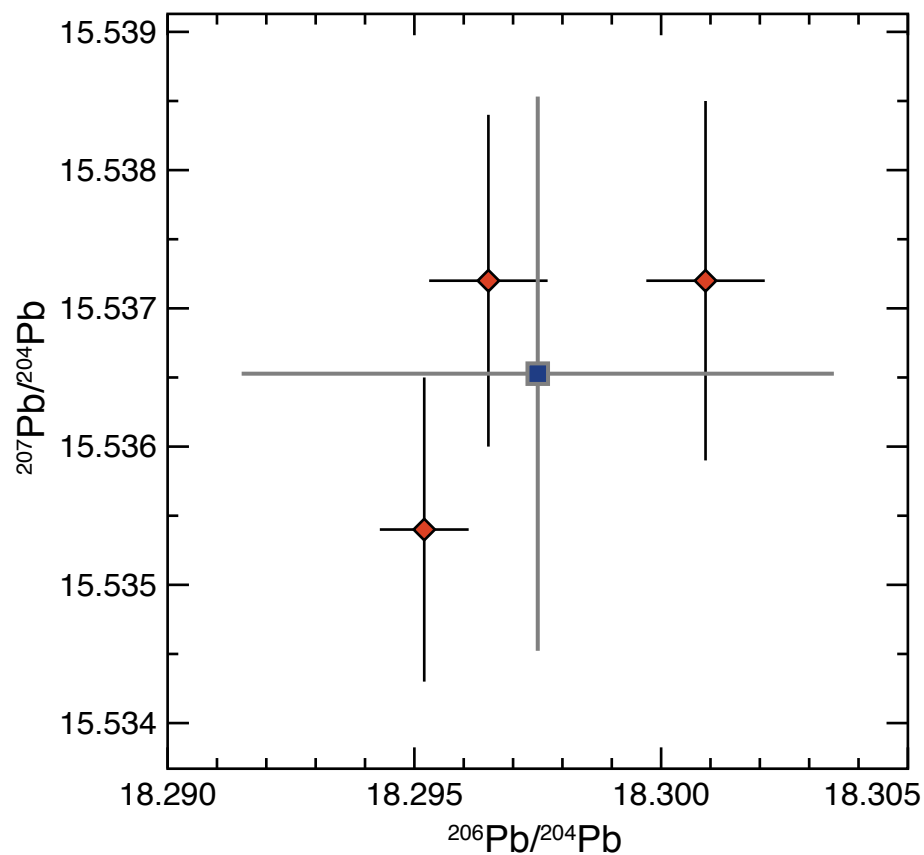
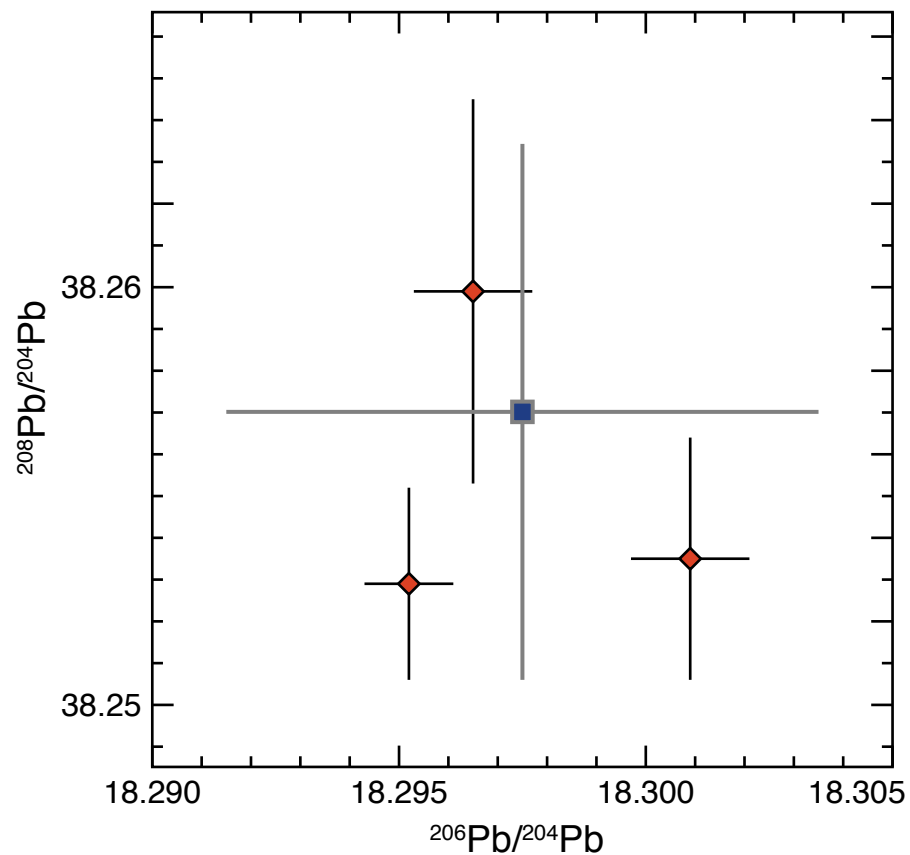


**Comparison of the Pb isotopic variations between unleached and leached reference materials analyzed via MC-ICP-MS at PCIGR (cont'd).** Left panels:  $^{208}\text{Pb}/^{204}\text{Pb}$  vs  $^{206}\text{Pb}/^{204}\text{Pb}$ . Right panels:  $^{207}\text{Pb}/^{204}\text{Pb}$  vs  $^{206}\text{Pb}/^{204}\text{Pb}$ . Circles: unleached; triangles: high-pressure dissolution; diamonds: leached. The mean and 2 standard deviations of the reference material are represented by the blue square symbols, and literature reported reference values are represented by the white symbols. Reference value sources: Weis et al. (2006); Nobre Silva et al. (2013); Fourny et al. (2016).

### JB-3 Basalt (unleached)

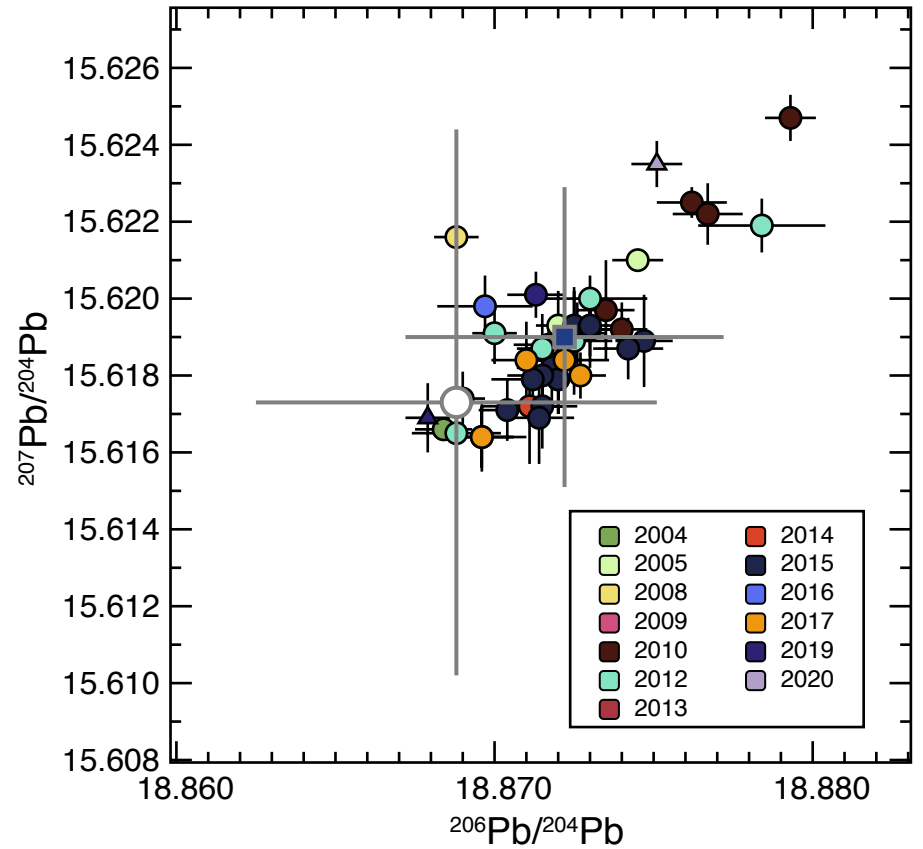
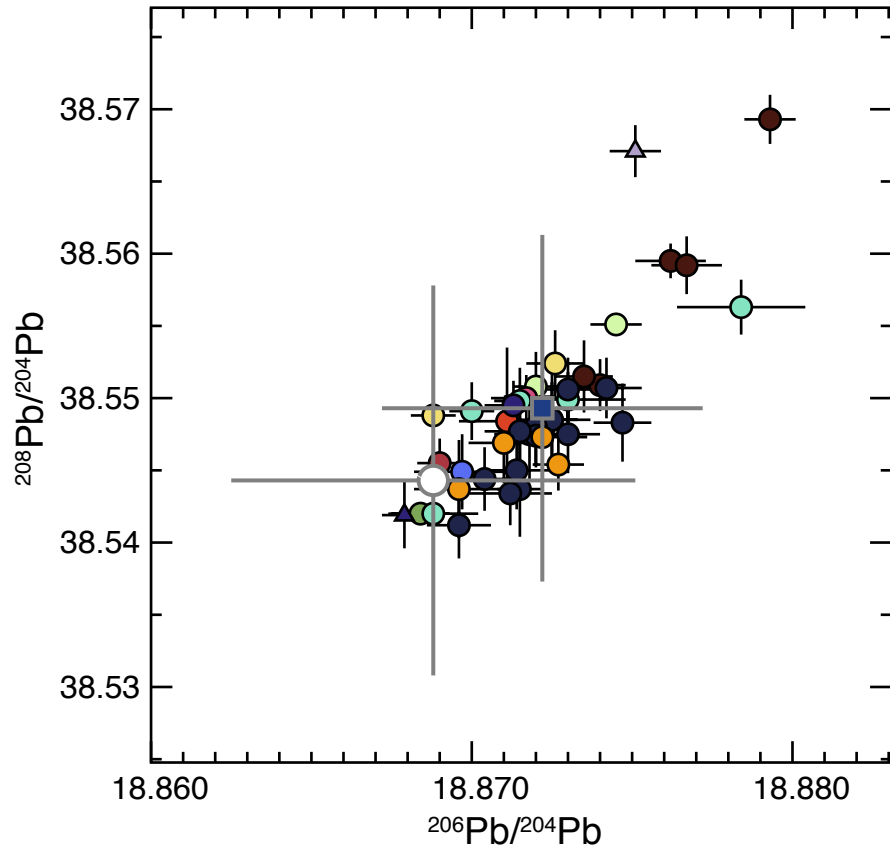


### JB-3 Basalt (leached)

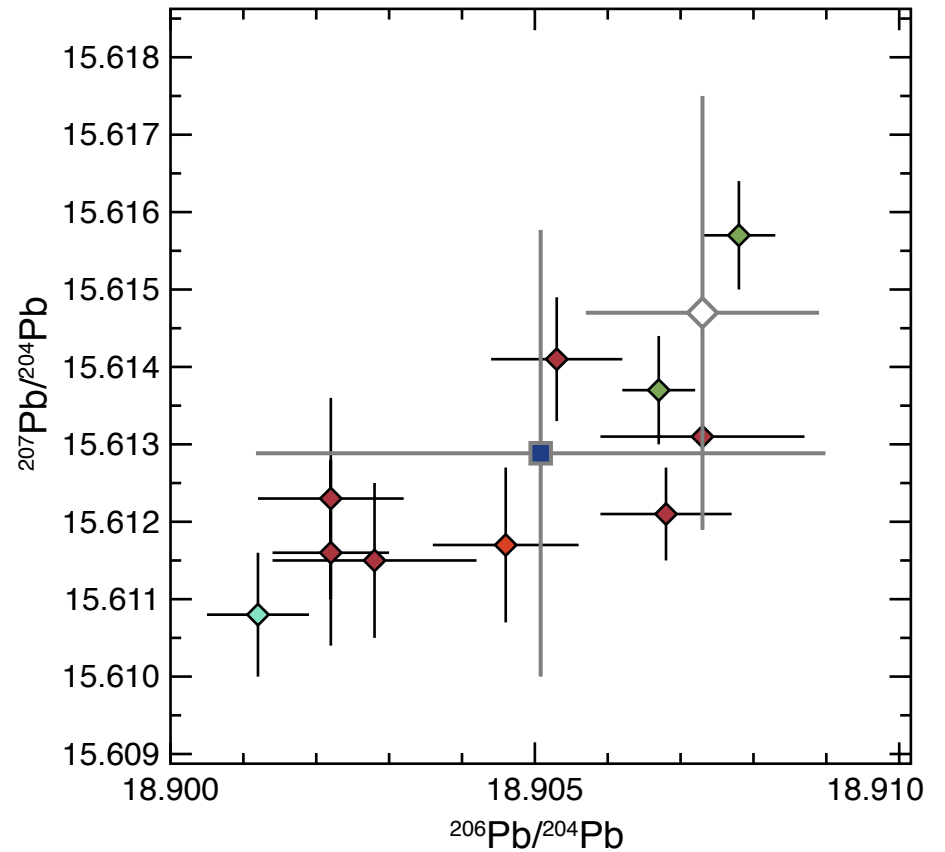
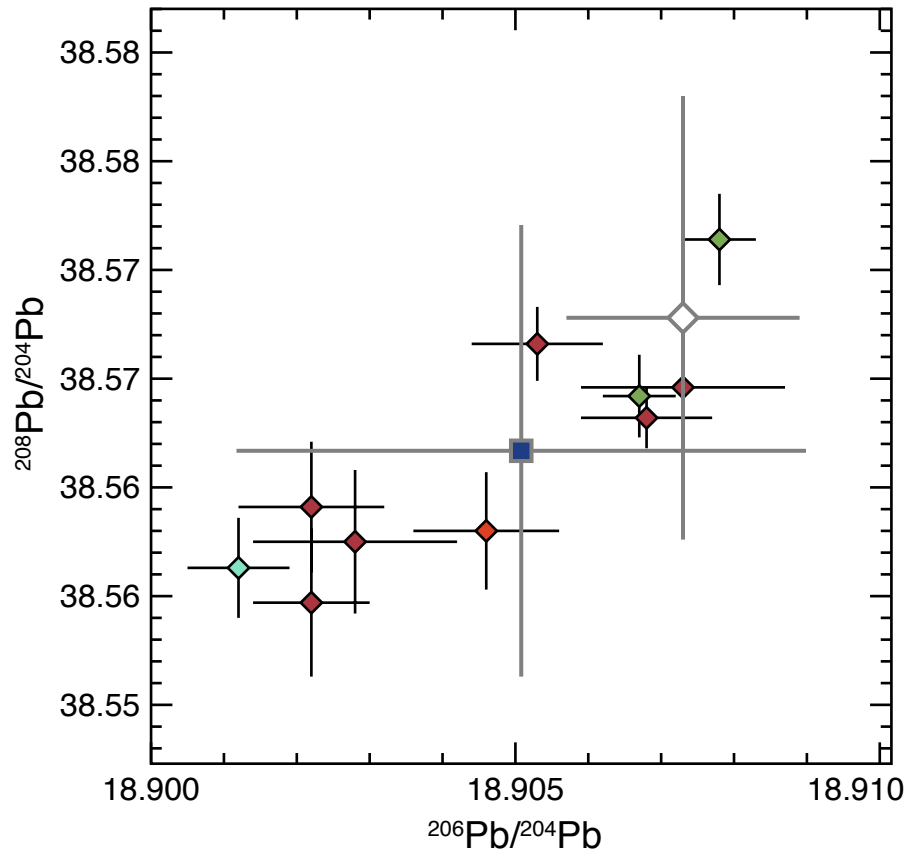


**Comparison of the Pb isotopic variations between unleached and leached reference materials analyzed via MC-ICP-MS at PCIGR (cont'd).** Left panels:  $^{208}\text{Pb}/^{204}\text{Pb}$  vs  $^{206}\text{Pb}/^{204}\text{Pb}$ . Right panels:  $^{207}\text{Pb}/^{204}\text{Pb}$  vs  $^{206}\text{Pb}/^{204}\text{Pb}$ . Circles: unleached; triangles: high-pressure dissolution; diamonds: leached. The mean and 2 standard deviations of the reference material are represented by the blue square symbols, and literature reported reference values are represented by the white symbols. Reference value sources: Weis et al. (2006); Nobre Silva et al. (2013); Fourny et al. (2016).

### AGV-2 Andesite (unleached)



### AGV-2 Andesite (leached)



**Comparison of the Pb isotopic variations between unleached and leached reference materials analyzed via MC-ICP-MS at PCIGR.** Left panels:  $^{208}\text{Pb}/^{204}\text{Pb}$  vs  $^{206}\text{Pb}/^{204}\text{Pb}$ . Right panels:  $^{207}\text{Pb}/^{204}\text{Pb}$  vs  $^{206}\text{Pb}/^{204}\text{Pb}$ . Circles: unleached; triangles: high-pressure dissolution; diamonds: leached. The mean and 2 standard deviations of the reference material are represented by the blue square symbols, and literature reported reference values are represented by the white symbols. Reference value sources: Weis et al. (2006); Nobre Silva et al. (2013); Fourny et al. (2016).