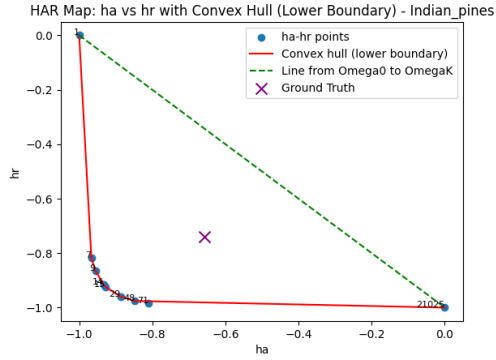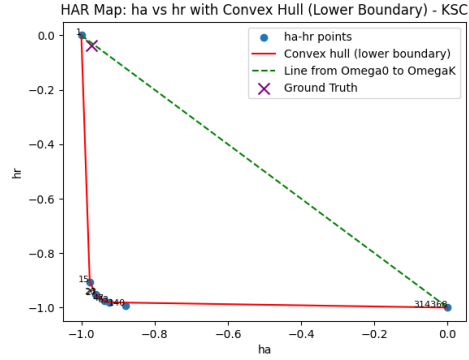# 1 Results

Figure 1: Indian Pines HARmap

Figure 2: KSC HARmap
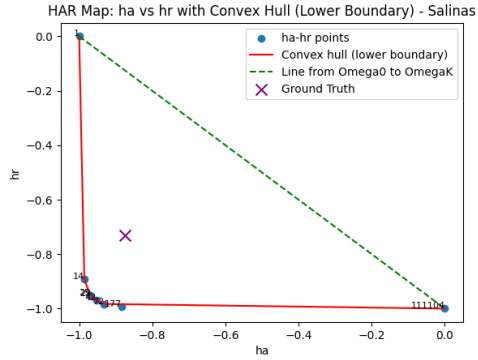

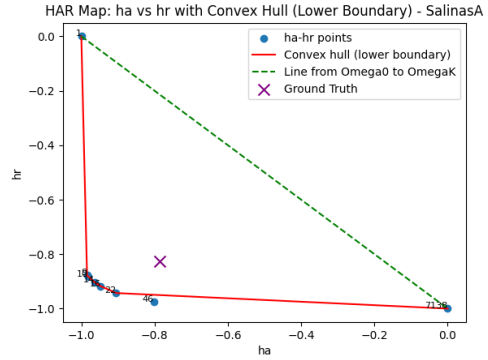Figure 3: Salinas HARmap

Figure 4: Salinas-A HARmap

The Hamiltonian functions used in this method are defined as follows:

$$h_a = -\sum_{C \in \Omega} \alpha(C, C)$$
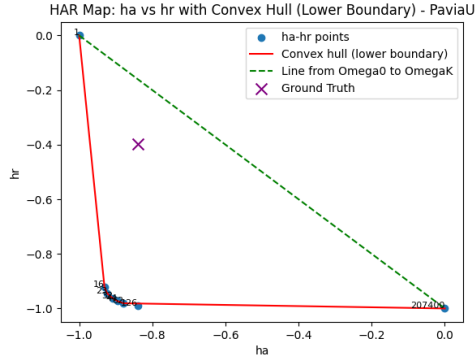
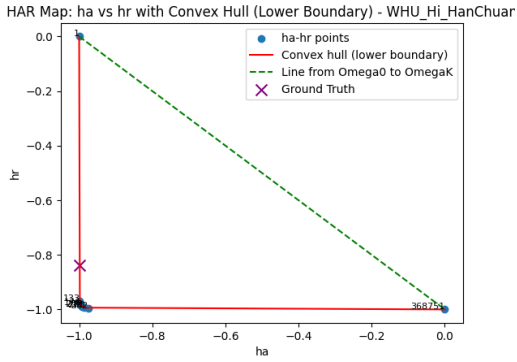$$h_r = \sum_{C \in \Omega} \alpha^2(C, V)$$

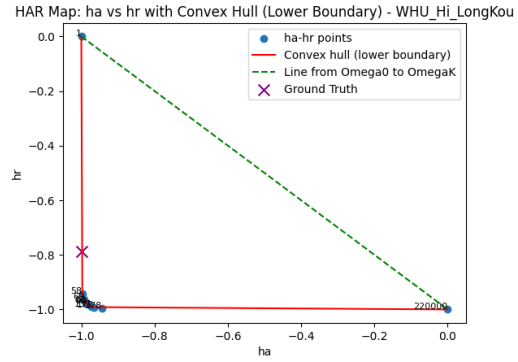Figure 5: Pavia University HARmap

Figure 6: WHU Hi HanChuan HARmap

Figure 7: WHU Hi LongKou HARmap

2   Datasets

Table 1: Summary of hyperspectral datasets

| Dataset	#x	#y	#λ	λ (nm)	#C	Res. (m)	Year
Indian Pines	145	145	220	400–2500	16	20	1992
KSC	512	614	176	400–2500	13	18	1996
Salinas	512	217	204	400–2500	16	3.7	1998
Salinas-A	86	83	204	400–2500	6	3.7	1998
Botswana	1476	256	145	400–2500	14	30	2001
Pavia	1096	1096	102	430–860	9	1.3	2003
Pavia University	610	610	103	430–860	9	1.3	2003
WHU-Hi-HanChuan	1217	303	274*	400–1000	16	0.109	2016
WHU-Hi-HongHu	940	475	270*	400–1000	22	0.043	2017
WHU-Hi-LongKou	550	400	270*	400–1000	9	0.463	2018
BigEarthNet-S2-s	1200	1200	13	443–2190	12	10-60	2017
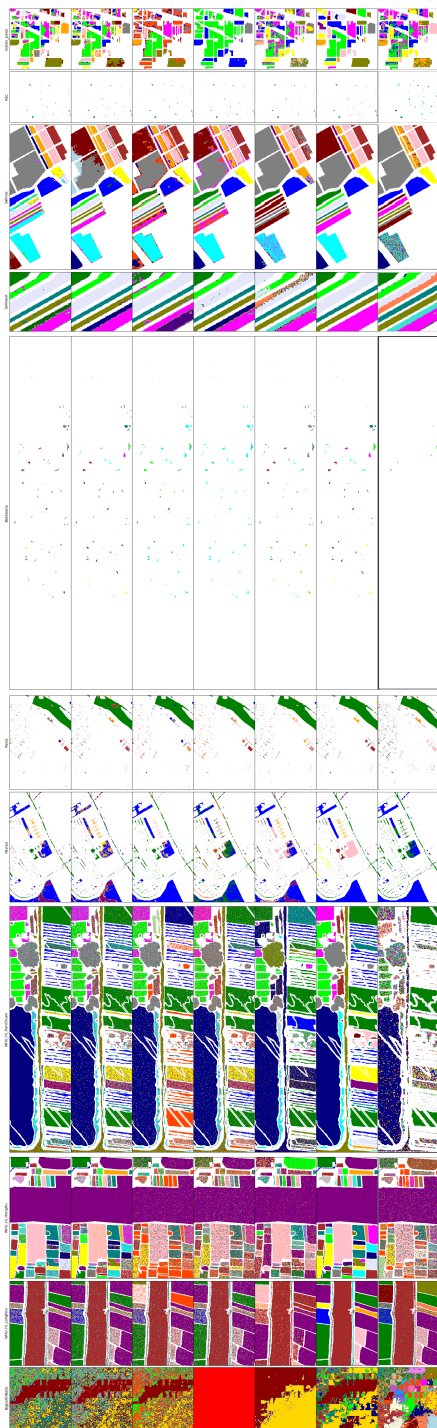
Figure 8: Teasor's Plot

Indian Pines: [**?**], KSC, Salinas, Salinas-A, Botswana, Pavia and Pavia University: [**?**], WHU-Hi-HanChuan, WHU-Hi-HongHu, WHU-Hi-LongKou: [**?**, **?**], BigEarthNet-S2-s: [**?**, **?**].

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