

Experiment 2 — Figures Comparison

Compare commit_label vs commit_pred at Dice cutoffs 0.90 and 0.97. Grouped by Plan A, Plan C, and Plan B.

```
In [1]:  
from pathlib import Path  
from IPython.display import display, HTML  
  
def _repo_root():  
    p = Path().resolve()  
    for cand in [p] + list(p.parents):  
        if (cand / 'experiments' / 'scripts').is_dir():  
            return cand  
    return p  
  
ROOT = _repo_root()  
paths = {  
    'commit_label_90': ROOT / 'experiments' / 'scripts' / 'experiment_2_MM_commit_label_90',  
    'commit_label_97': ROOT / 'experiments' / 'scripts' / 'experiment_2_MM_commit_label_97',  
    'commit_pred_90': ROOT / 'experiments' / 'scripts' / 'experiment_2_MM_commit_pred_90',  
    'commit_pred_97': ROOT / 'experiments' / 'scripts' / 'experiment_2_MM_commit_pred_97',  
}  
  
def plan_a_figures(root: Path) -> Path: return root / 'A' / 'results' / 'figures'  
def plan_b_figures(root: Path) -> Path: return root / 'B' / 'figures'  
  
def list_pngs(p: Path):  
    if not p.exists():  
        return {}  
    return {f.name: f for f in sorted(p.glob('*.*'))}  
  
def build_pairs(dir90: Path, dir97: Path, filter_fn=lambda n: True):  
    d90, d97 = list_pngs(dir90), list_pngs(dir97)  
    commons = sorted(n for n in (d90.keys() & d97.keys()) if filter_fn(n))  
    return [(n, str(d90[n]), str(d97[n])) for n in commons]  
  
def build_pairs_map(dir90: Path, dir97: Path, filter_fn=lambda n: True):  
    d90, d97 = list_pngs(dir90), list_pngs(dir97)  
    names = sorted(n for n in (d90.keys() & d97.keys()) if filter_fn(n))  
    return {n: (str(d90[n]), str(d97[n])) for n in names}  
  
def show_interleaved(heading, label_map, pred_map, col_titles=('cutoff 0.90', 'cutoff 0.97')):  
    display(HTML(f'

## {heading}

'))  
    names = sorted(set(label_map.keys()) | set(pred_map.keys()))  
    if not names:  
        display(HTML('No matching figures.'))  
        return []  
    rows = []  
    for name in names:  
        rows.append(f'| {name} | |
')  
        if name in label_map:  
            p90, p97 = label_map[name]  
            rows.append(  
                f'| <div style="font-size:12px;color:#555">commit_label — {col_titles[0]}</div>                 f' <div style="font-size:12px;color:#555">commit_label — {col_titles[1]}</div> | |
')  
        if name in pred_map:  
            p90, p97 = pred_map[name]  
            rows.append(  
                f'| <div style="font-size:12px;color:#555">commit_pred — {col_titles[0]}</div>                 f' <div style="font-size:12px;color:#555">commit_pred — {col_titles[1]}</div> | |
')  
    html1 = "<table style='width:100%'>{}</table>".format("\n".join(rows))  
    display(HTML(html1))  
  
is_plan_c = lambda n: n.startswith('eval_') or n.startswith('plan_c_')  
is_not_plan_c = lambda n: not is_plan_c(n)
```

Plan A (non-Plan C) — Interleaved Label/Pred

```
In [2]:  
label_map = build_pairs_map(plan_a_figures(paths['commit_label_90']), plan_a_figures(paths['commit_label_97']), is_not_plan_c)
```

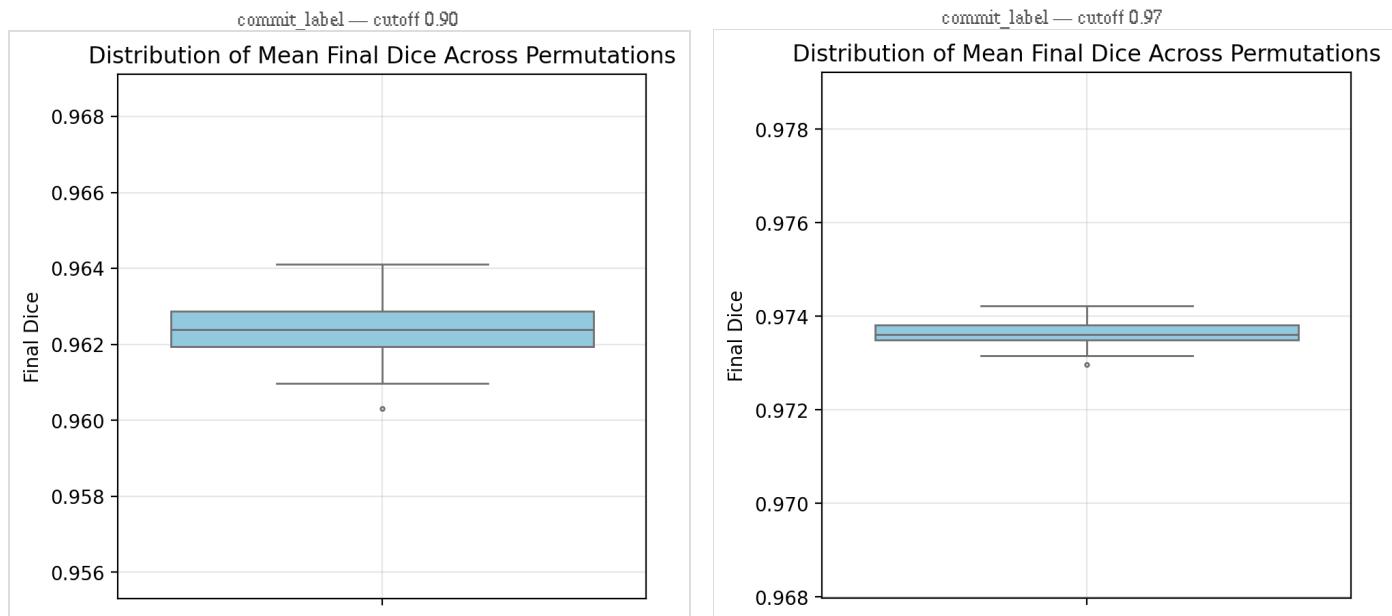
```

pred_map = build_pairs_map(plan_a_figures(paths['commit_pred_90']), plan_a_figures(paths['commit_pred_97']), is_not_plan_c)
show_interleaved('Plan A — Interleaved (commit_label & commit_pred)', label_map, pred_map)

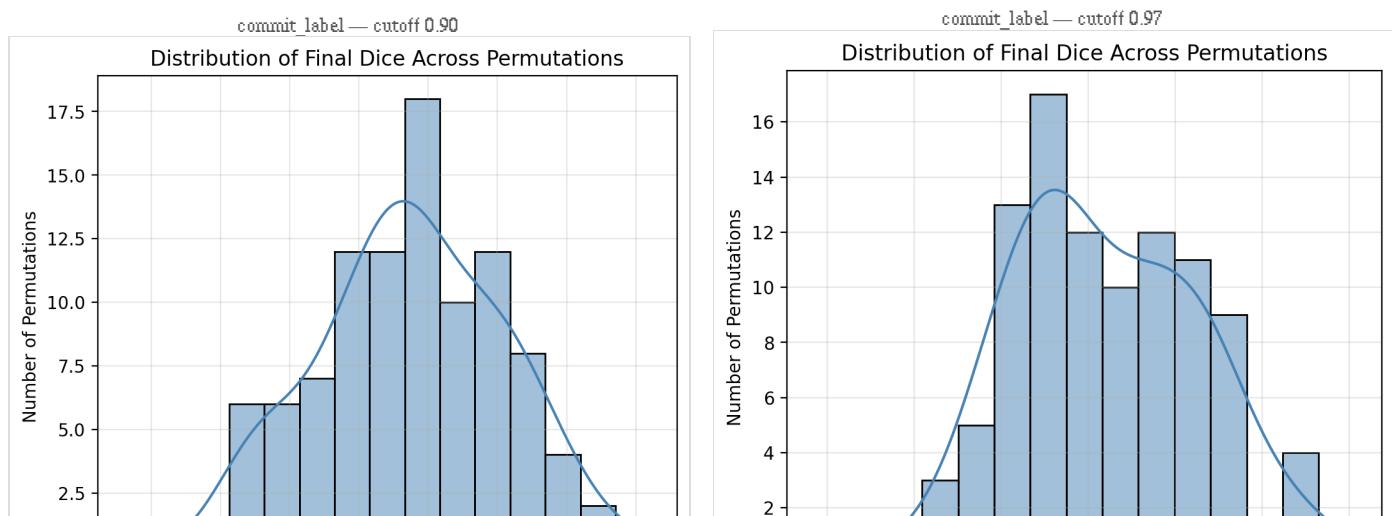
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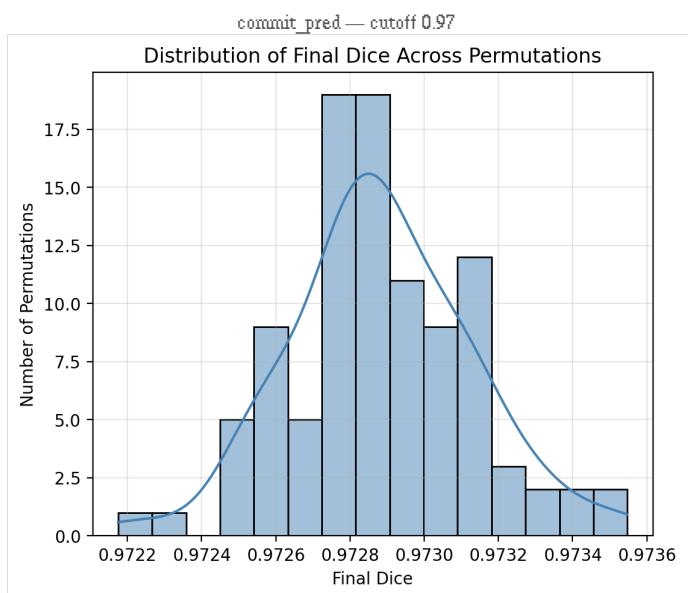
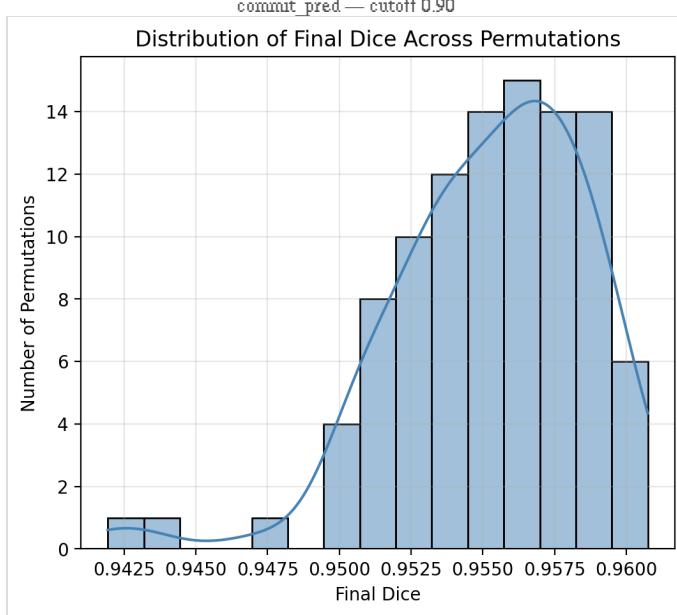
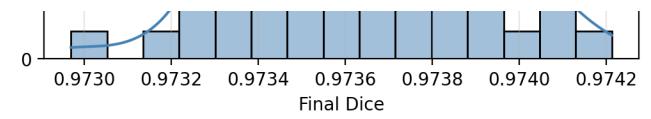
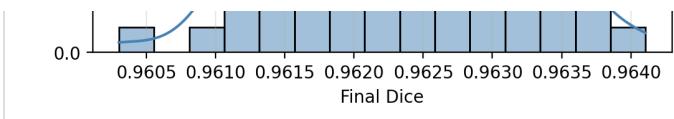
Plan A — Interleaved (commit_label & commit_pred)

final_dice_mean_box.png

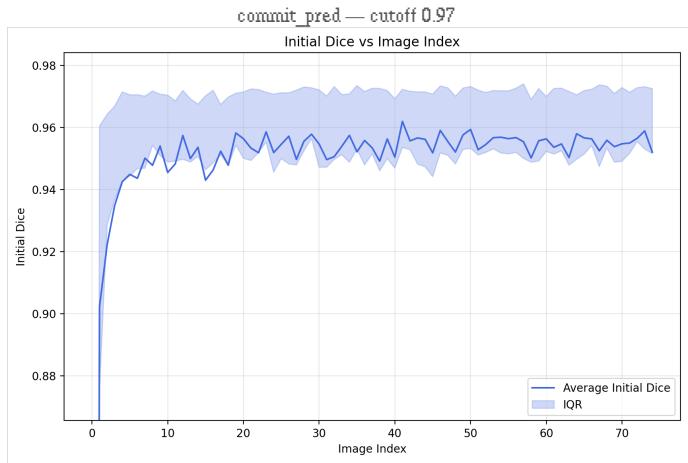
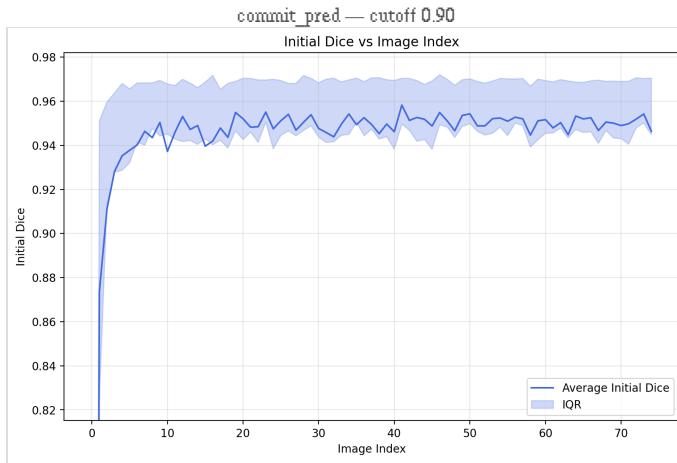
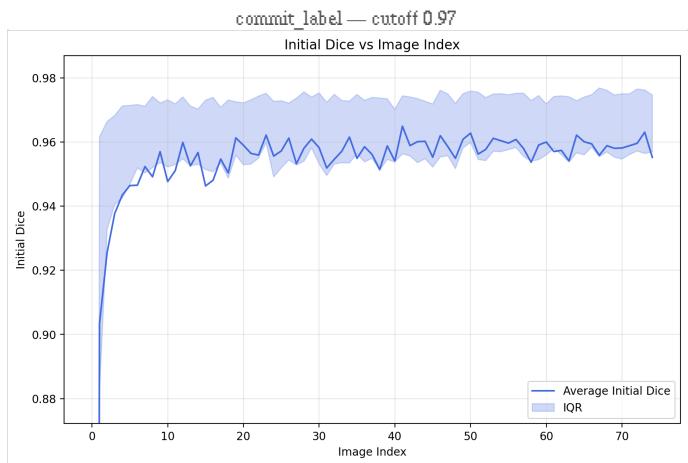
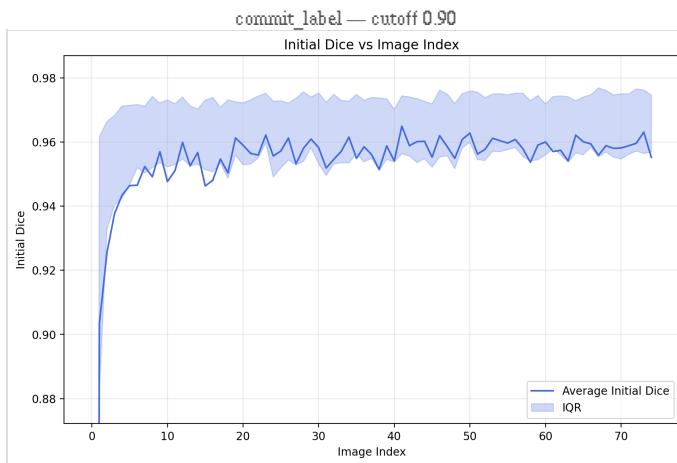


final_dice_mean_hist.png

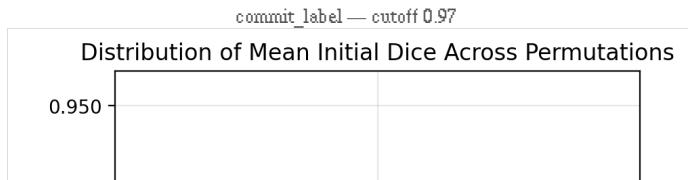
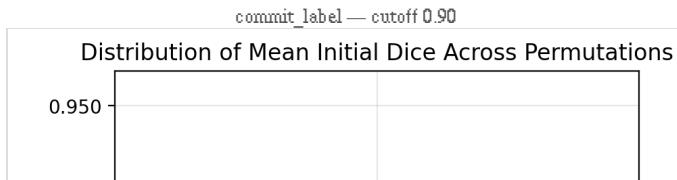


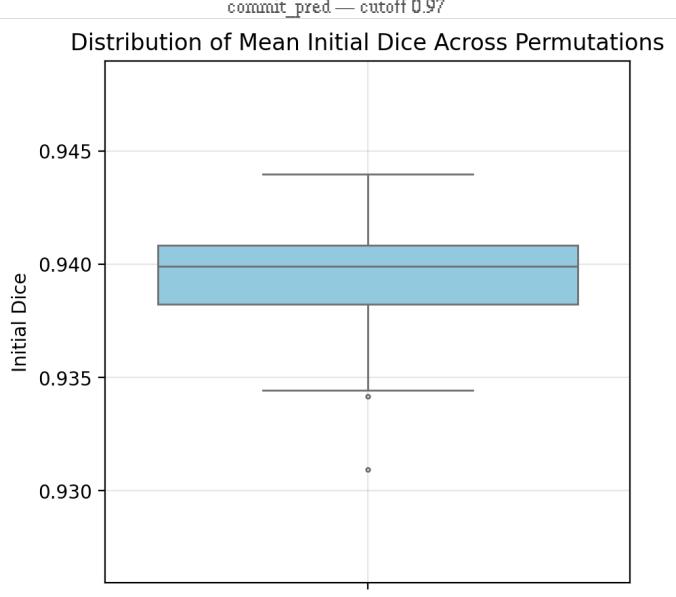
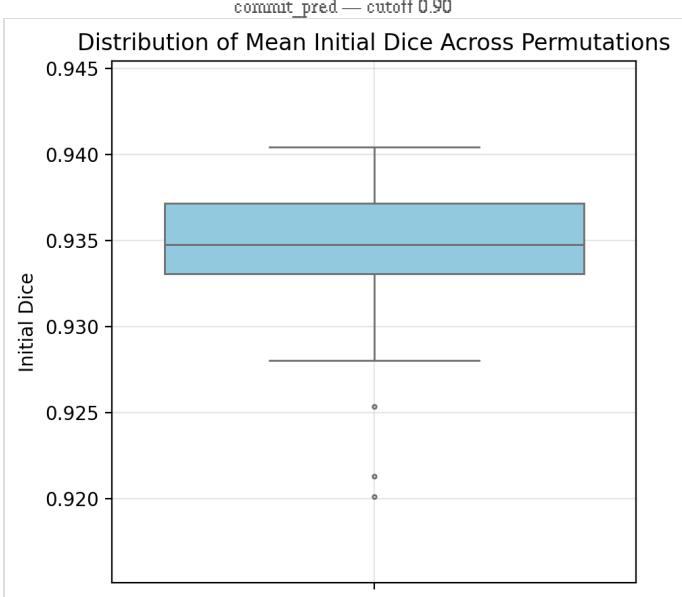
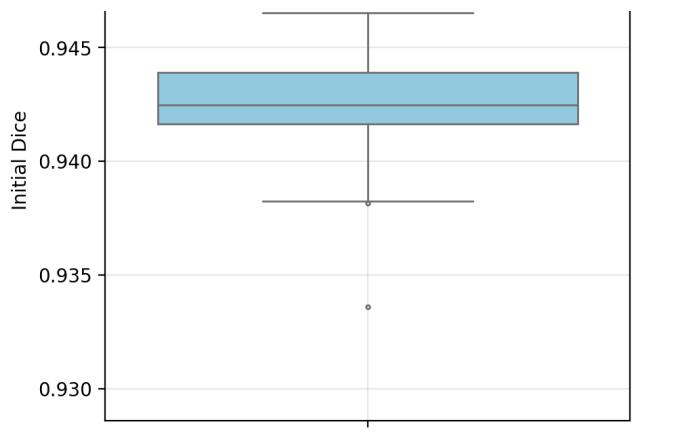
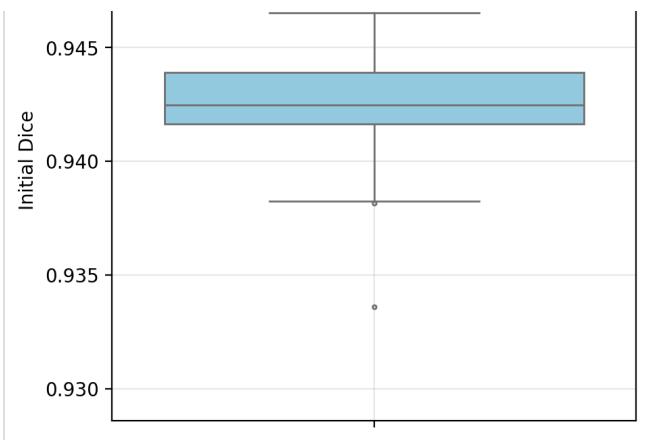


initial_dice_iqr.png

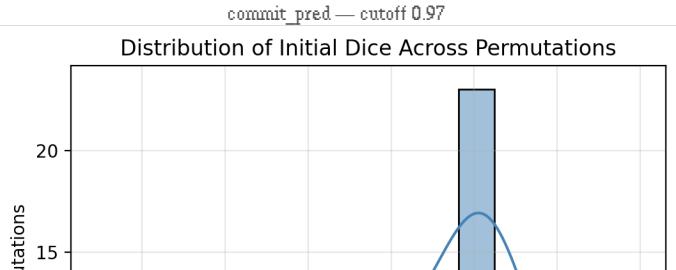
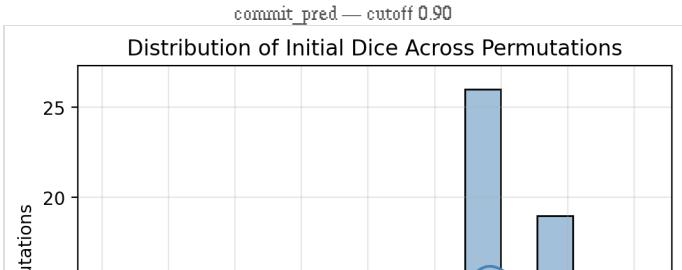
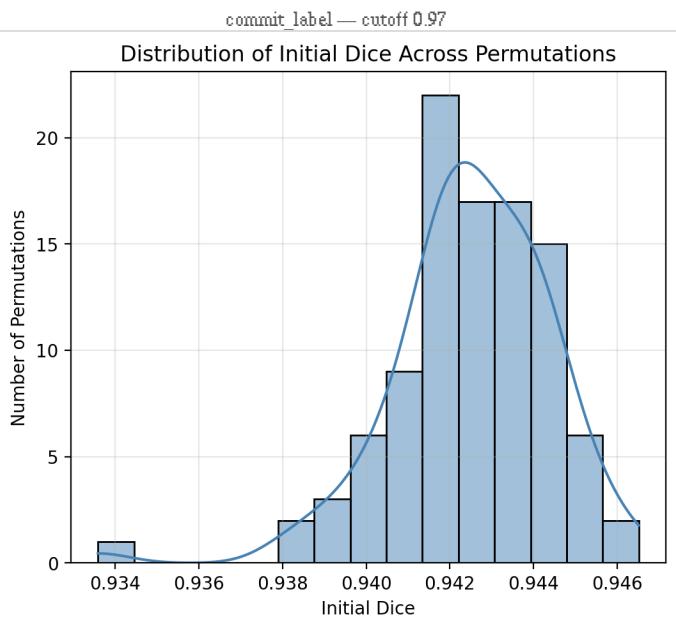
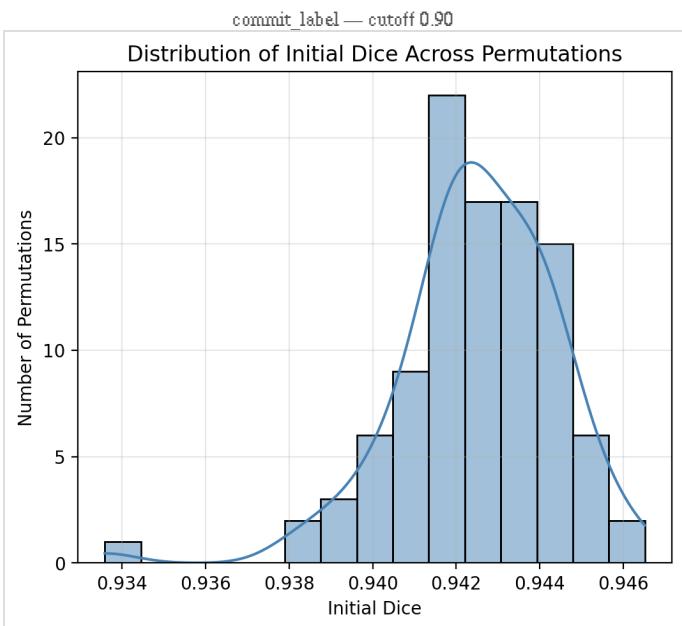


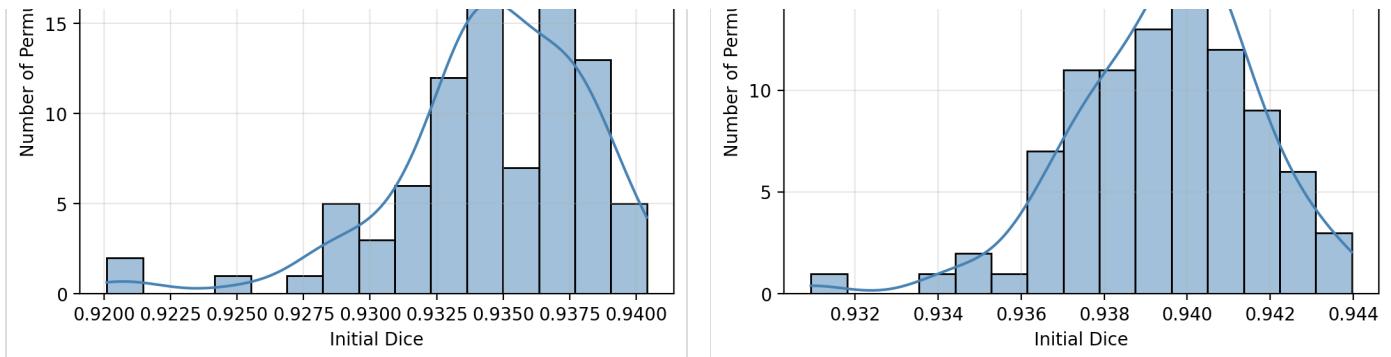
initial_dice_mean_box.png



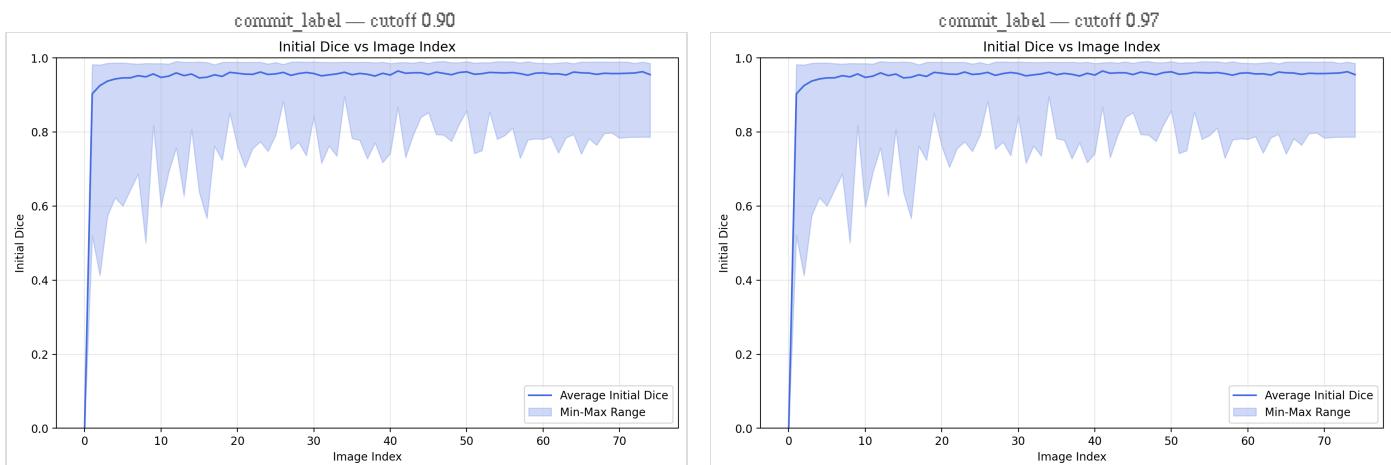


initial_dice_mean_hist.png

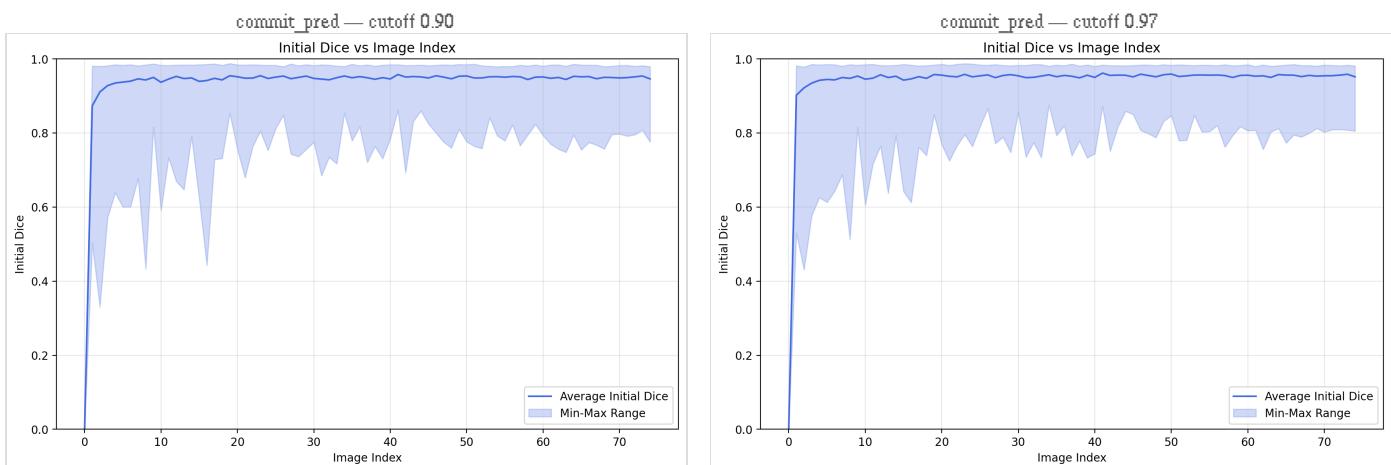




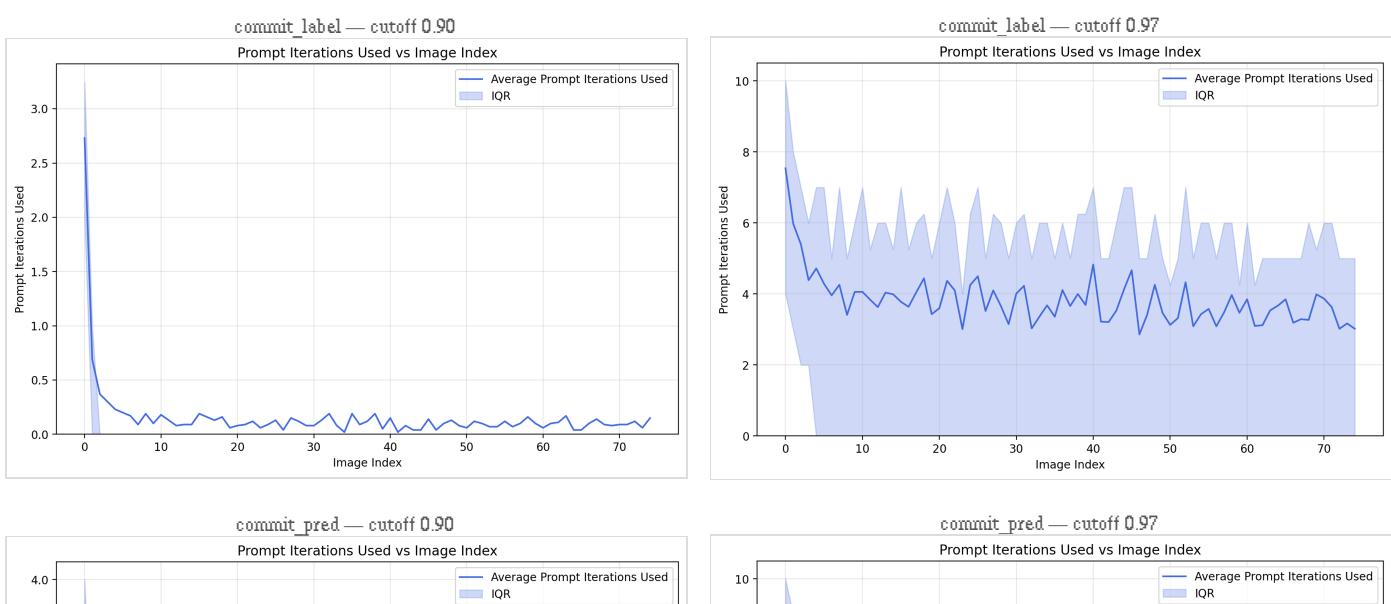
initial_dice_range.png

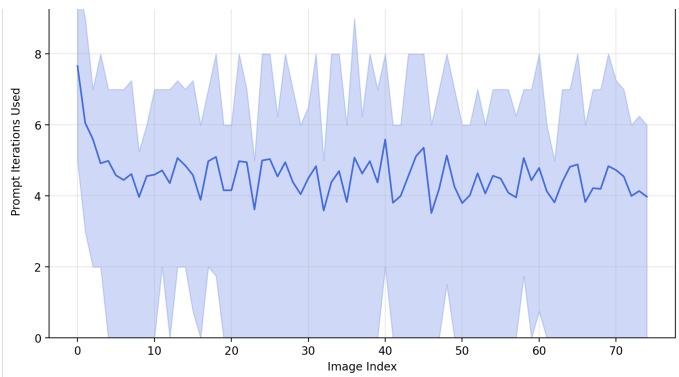
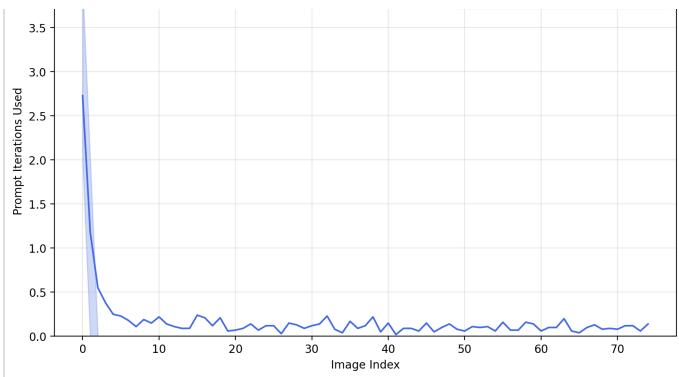


commit_label — cutoff 0.97

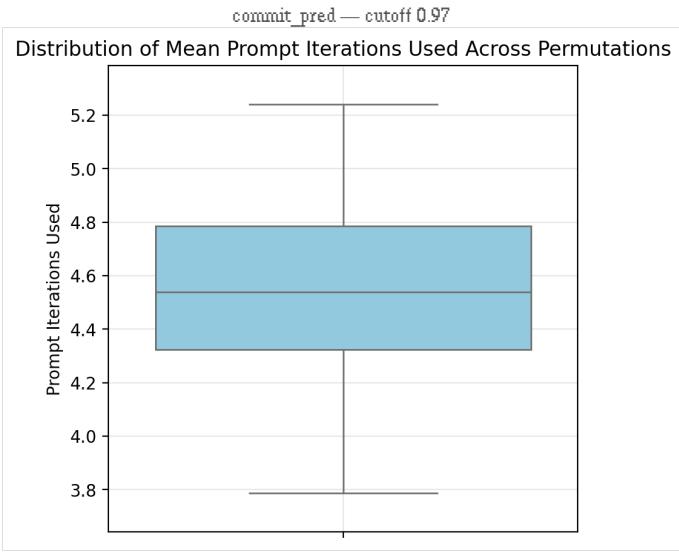
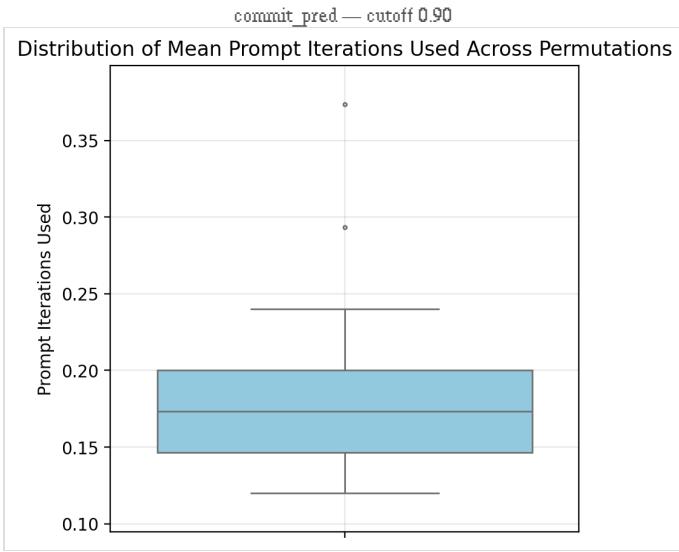
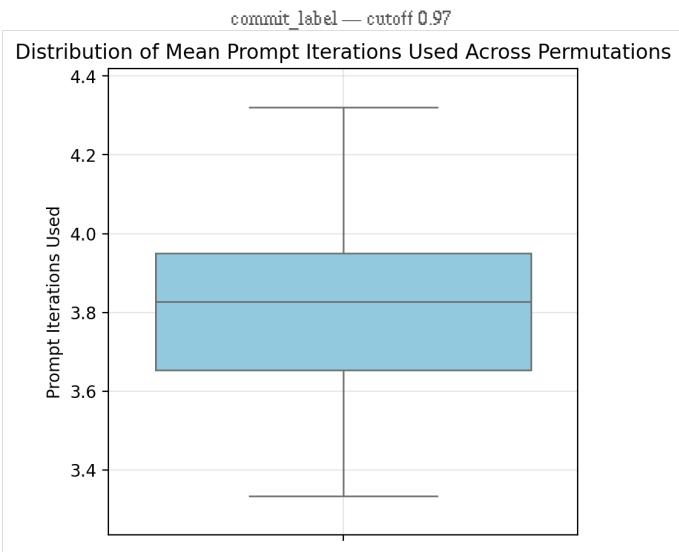
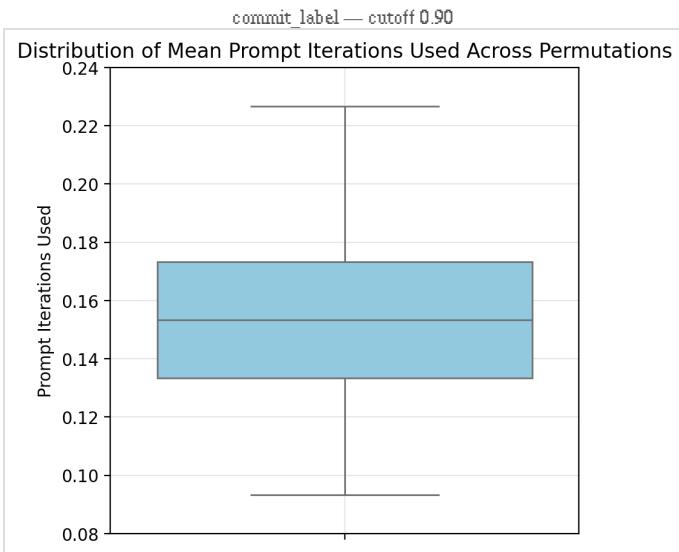


iterations_iqr.png

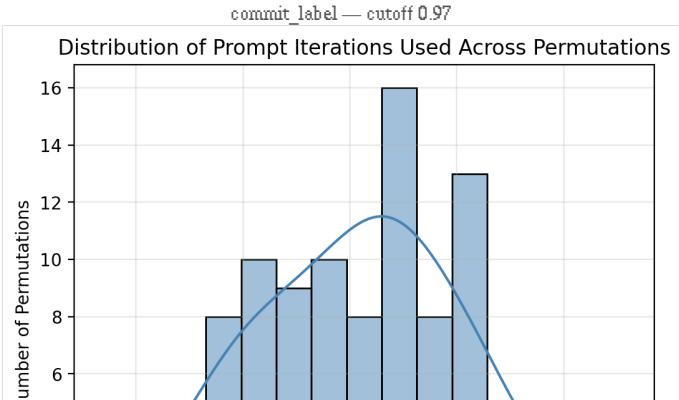
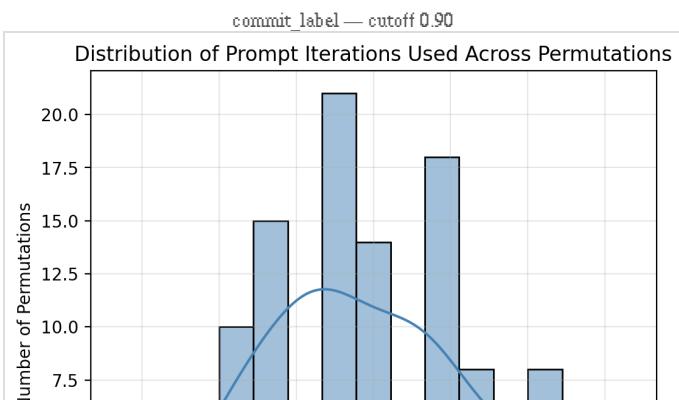


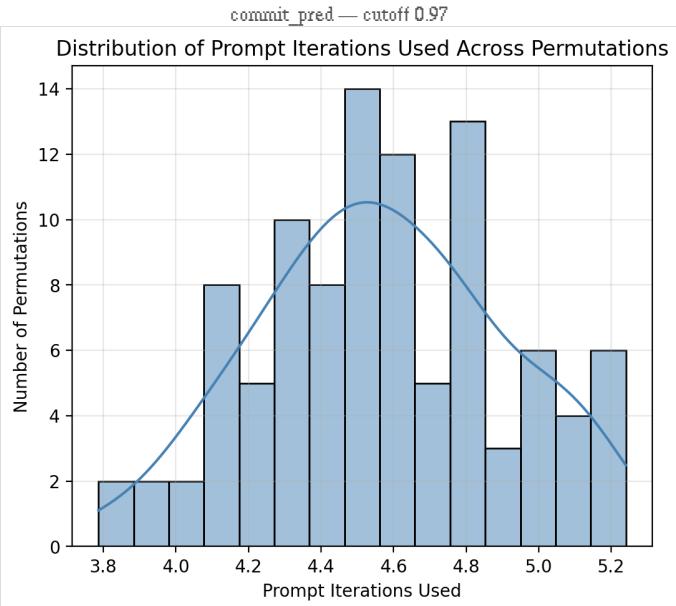
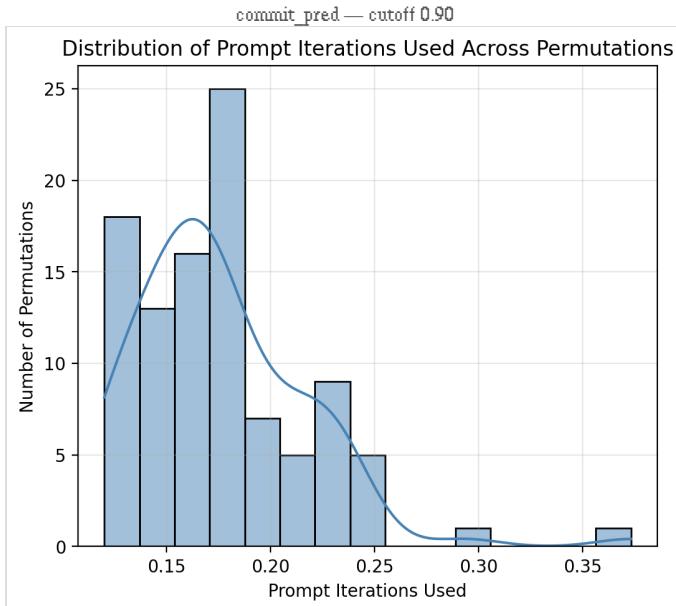
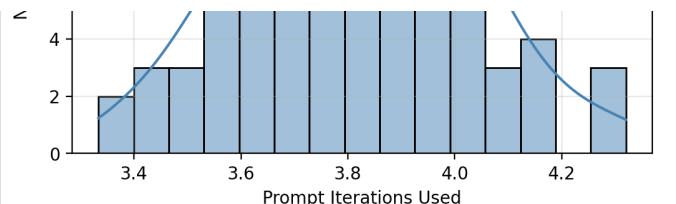
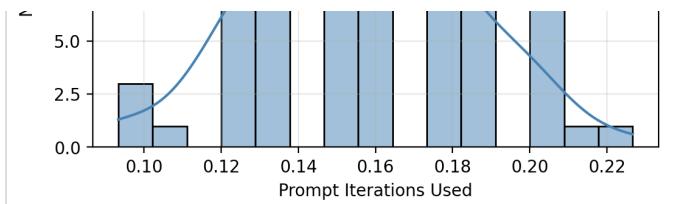


iterations_mean_box.png

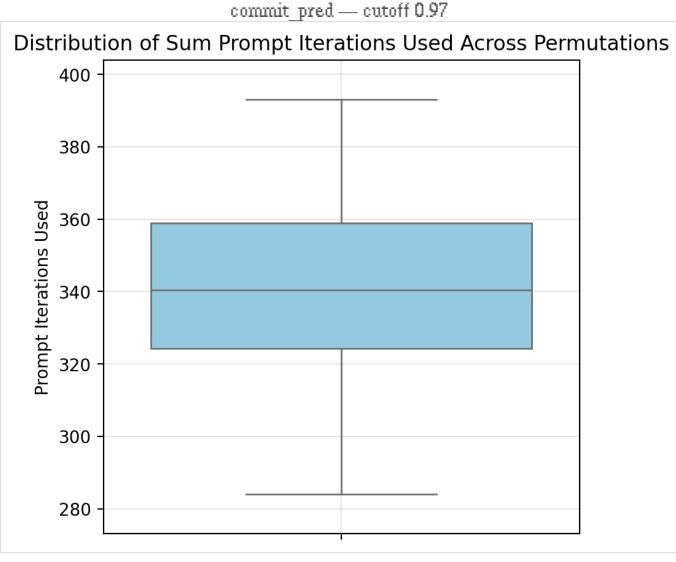
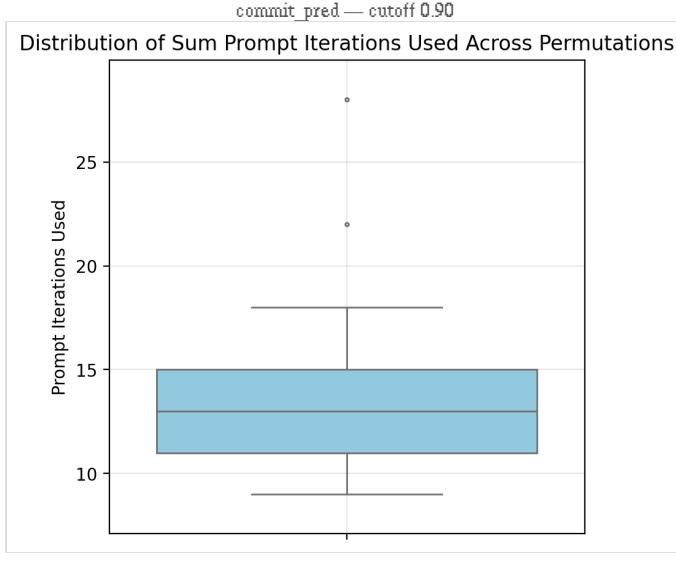
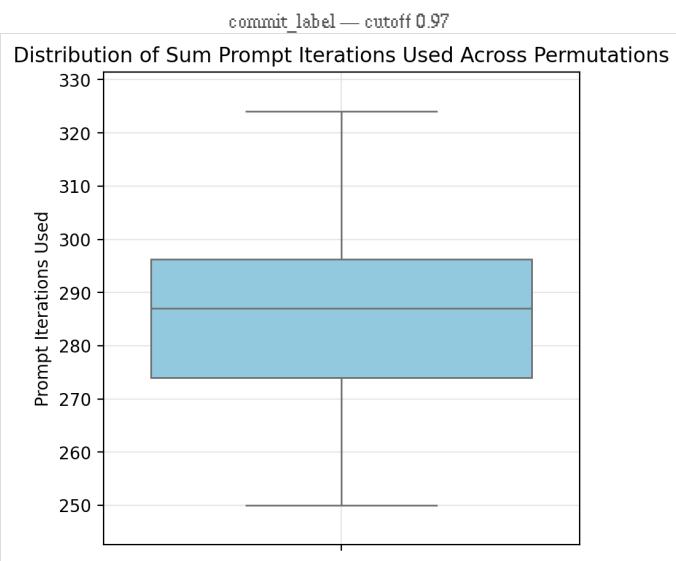
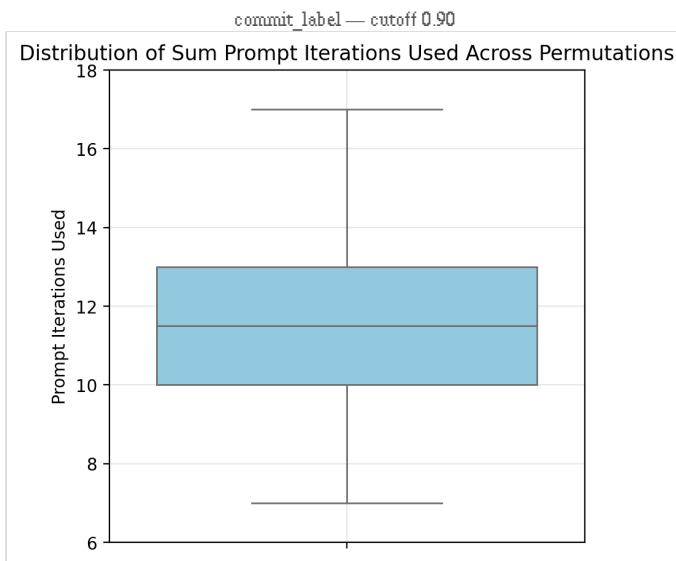


iterations_mean_hist.png

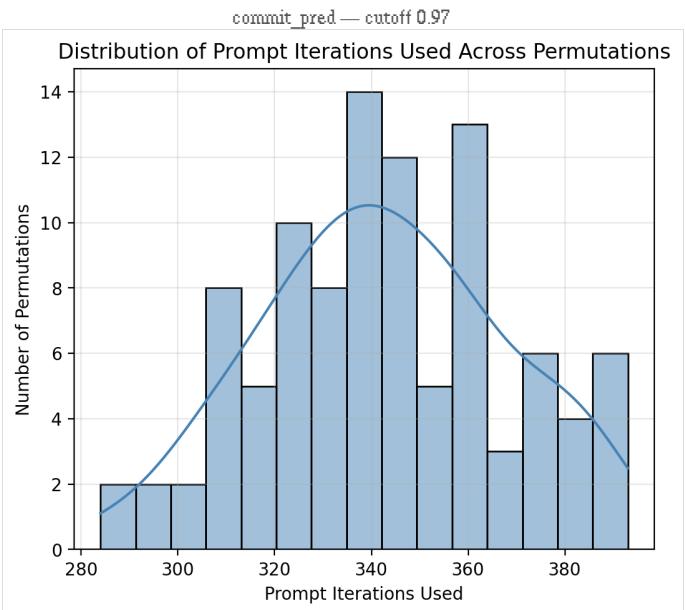
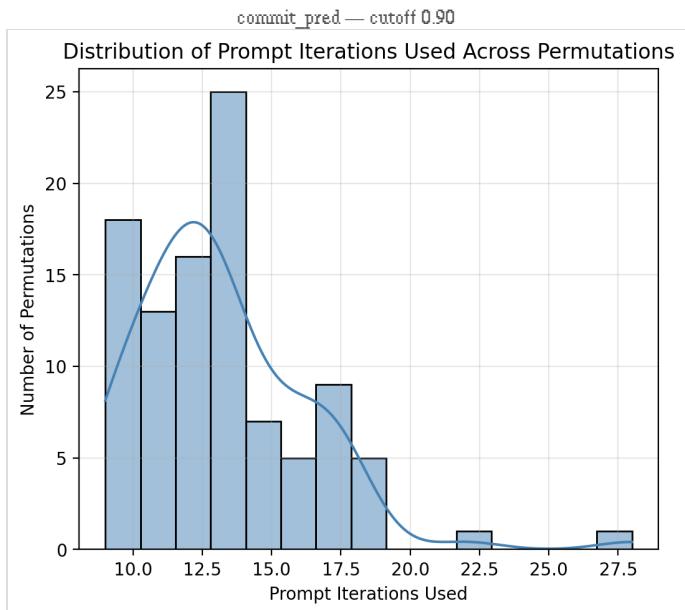
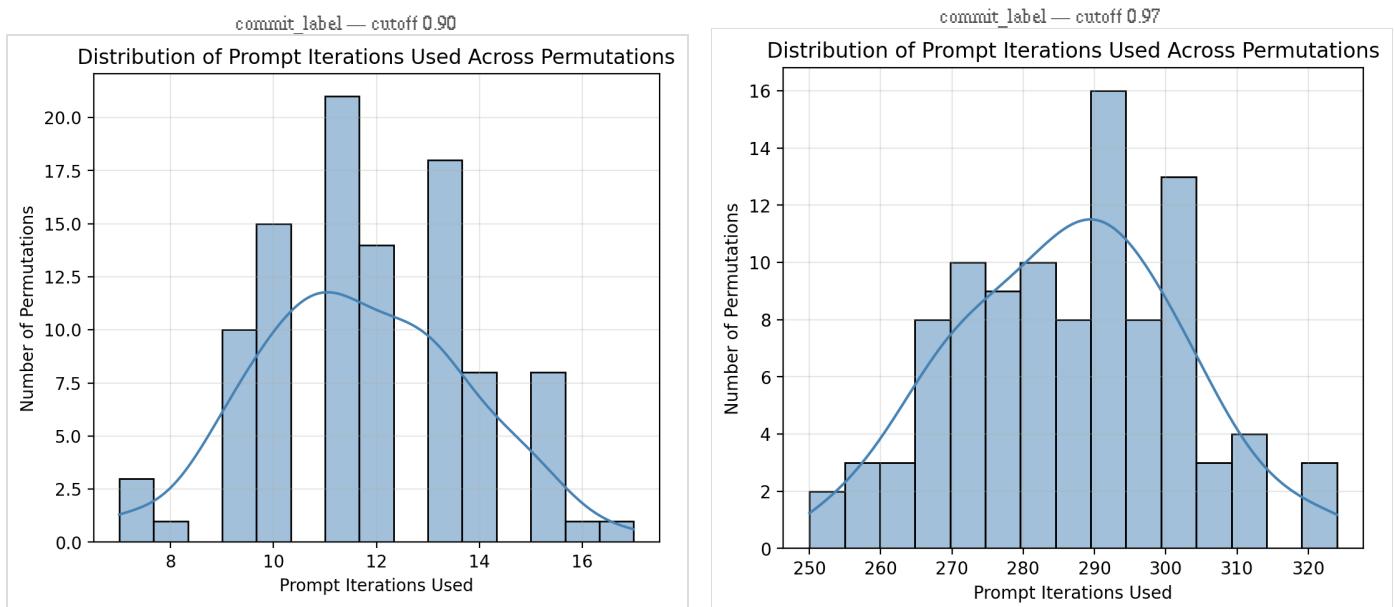




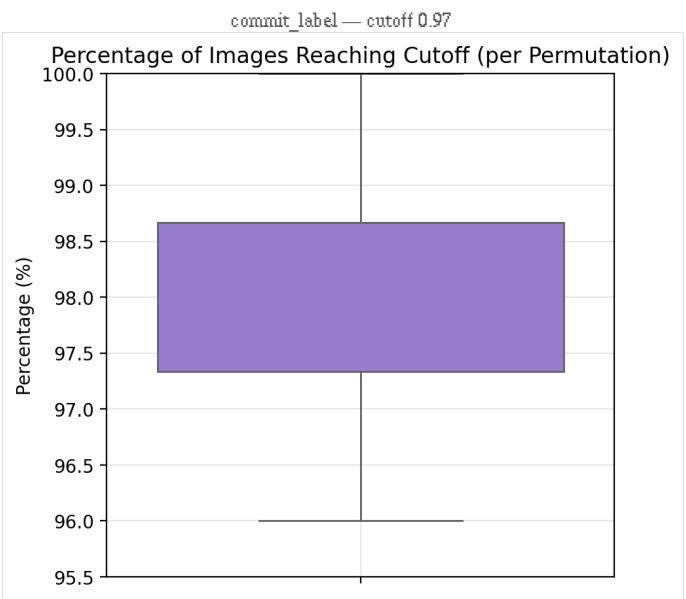
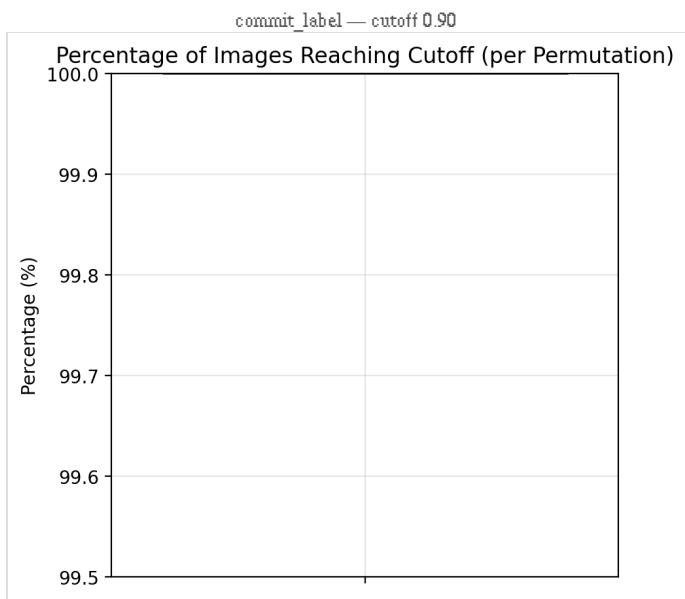
iterations_sum_box.png



iterations_sum_hist.png

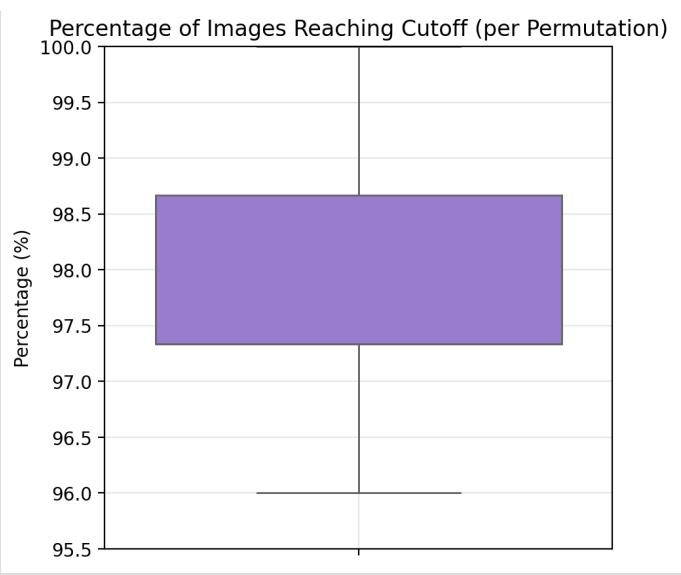
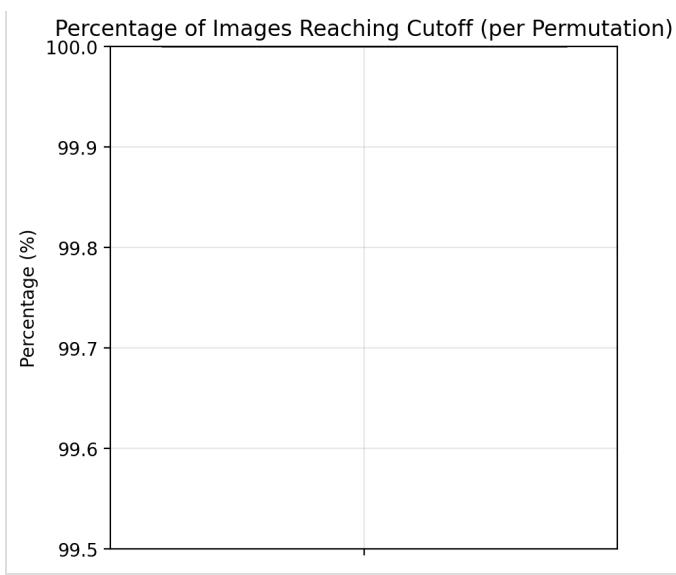


reached_cutoff_percentage_box.png

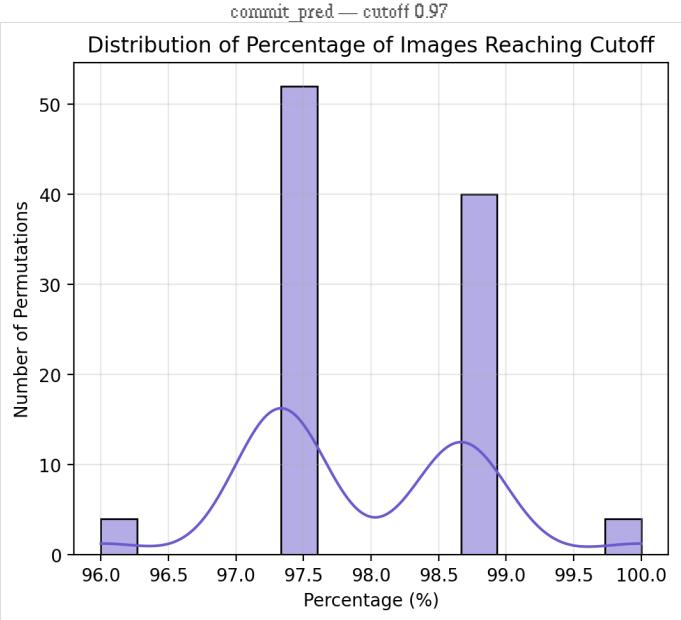
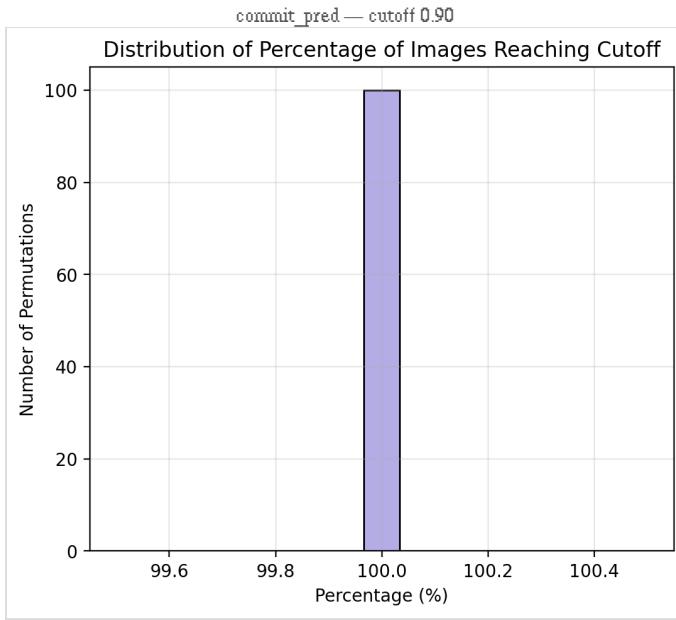
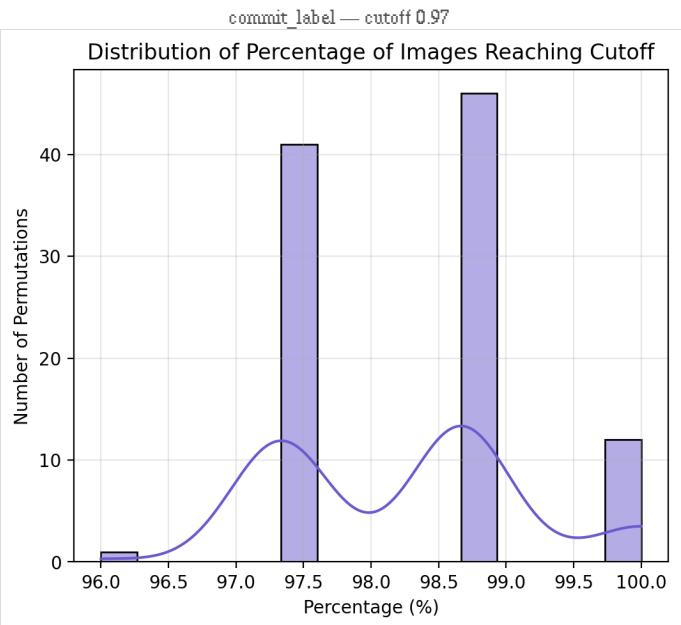
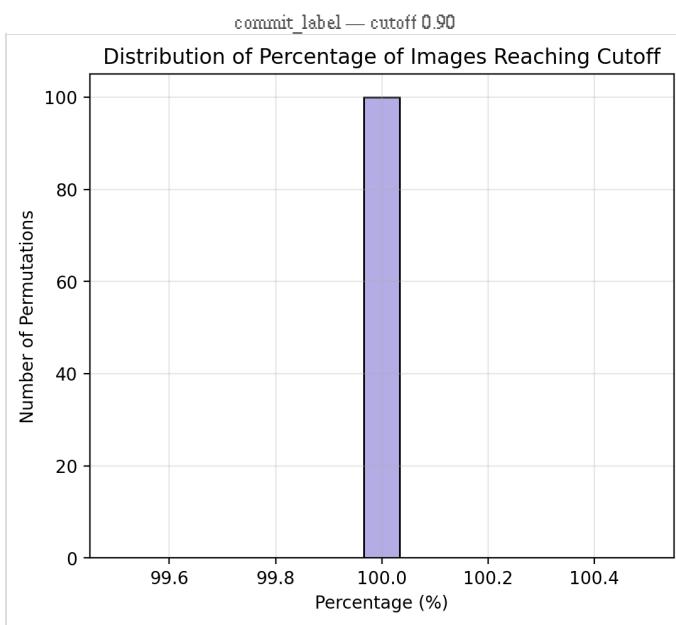


commit_pred — cutoff 0.90

commit_pred — cutoff 0.97



reached_cutoff_percentage_hist.png



Plan C (eval_* + plan_c_*) — Interleaved Label/Pred

In [3]:

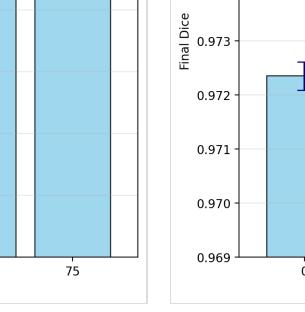
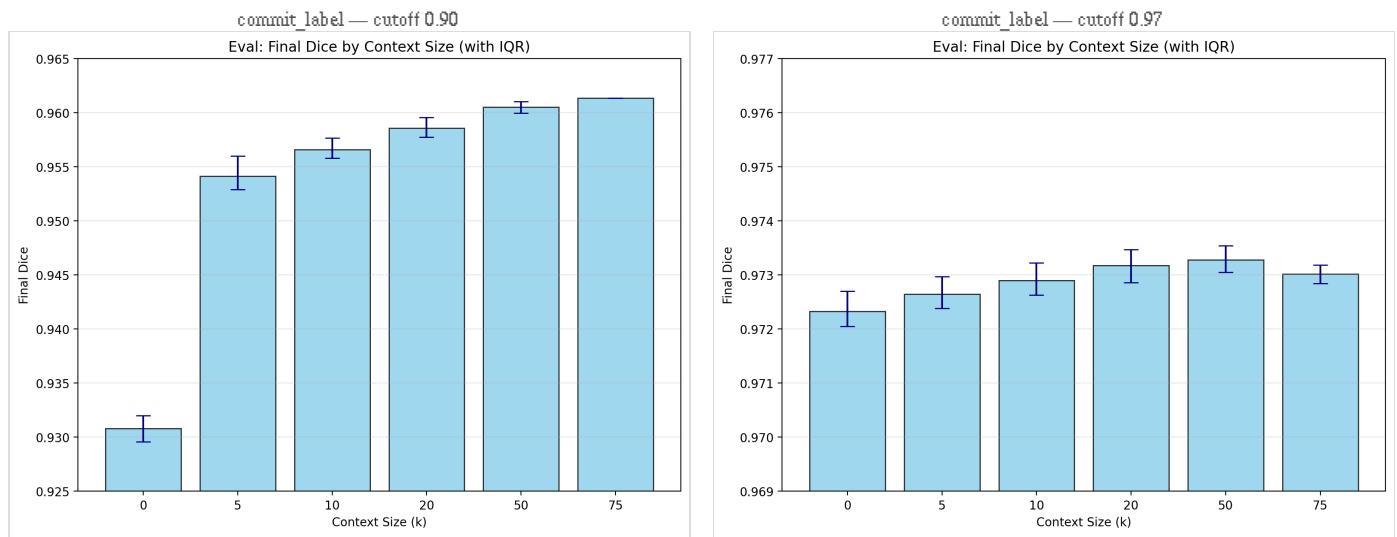
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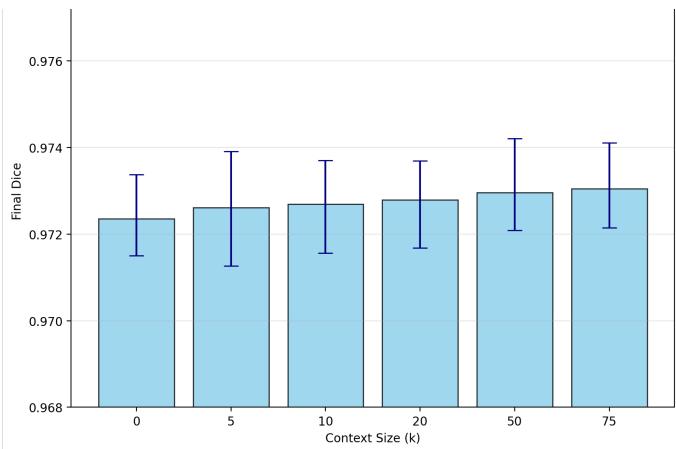
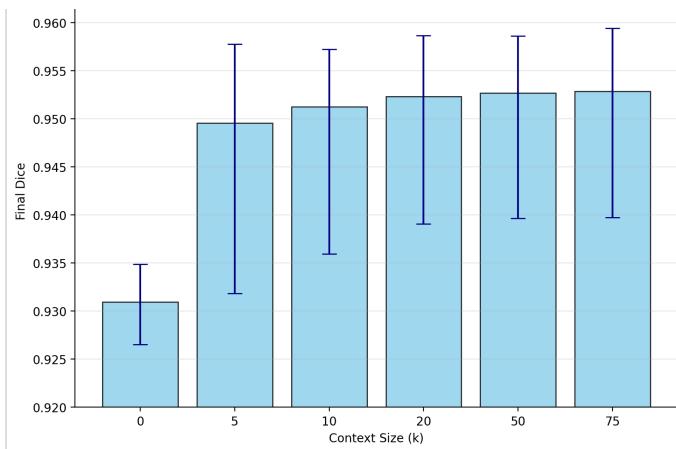
label_map = build_pairs_map(plan_a_figures(paths['commit_label_90']), plan_a_figures(paths['commit_label_97']), is_plan_c)
pred_map = build_pairs_map(plan_a_figures(paths['commit_pred_90']), plan_a_figures(paths['commit_pred_97']), is_plan_c)
show_interleaved('Plan C — Interleaved (commit_label & commit_pred)', label_map, pred_map)

```

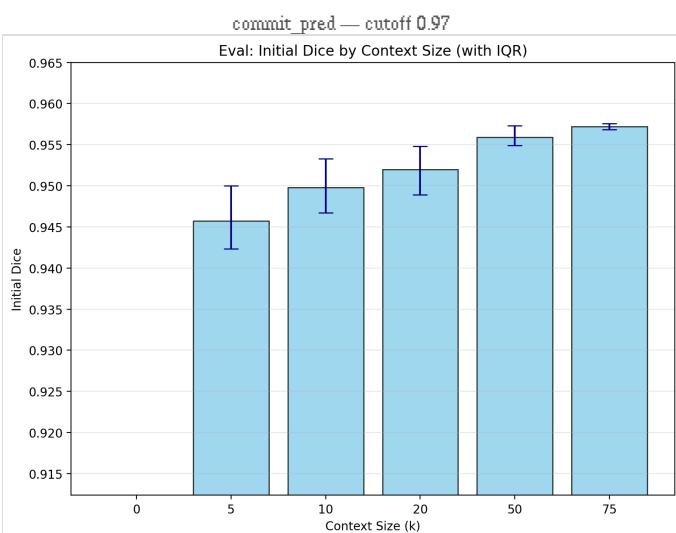
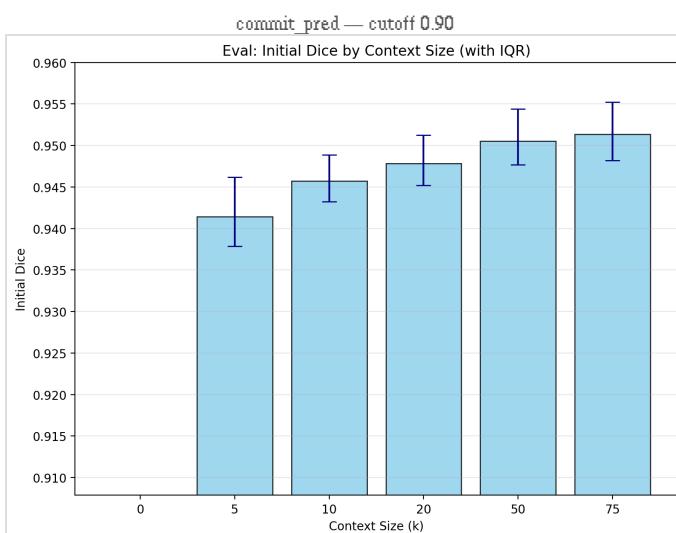
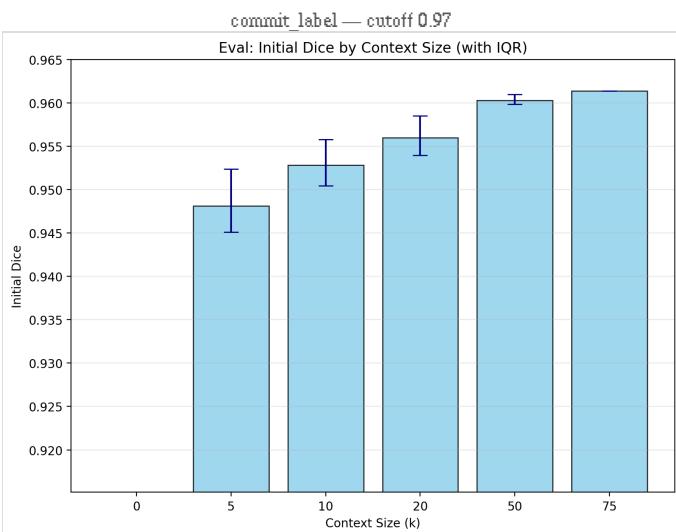
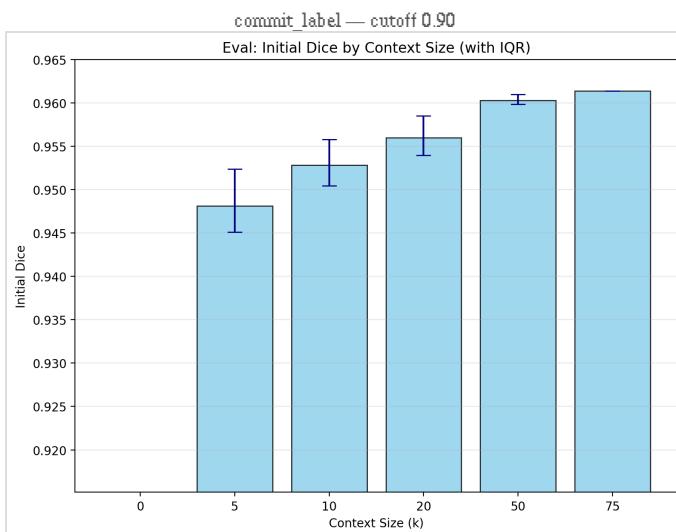
Plan C — Interleaved (commit_label & commit_pred)

eval_final_dice_iqr.png

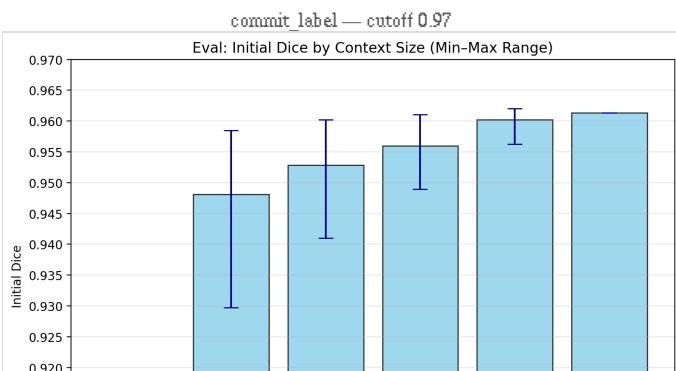
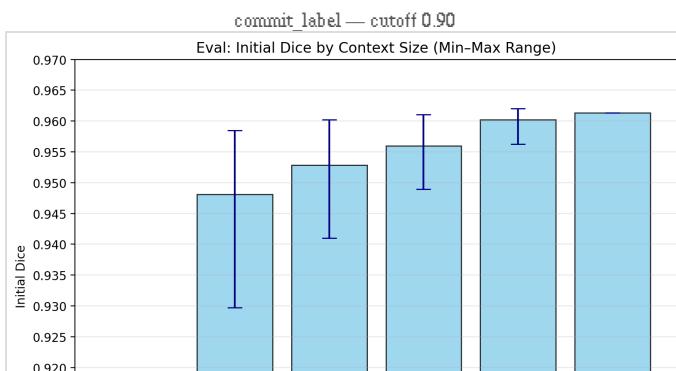


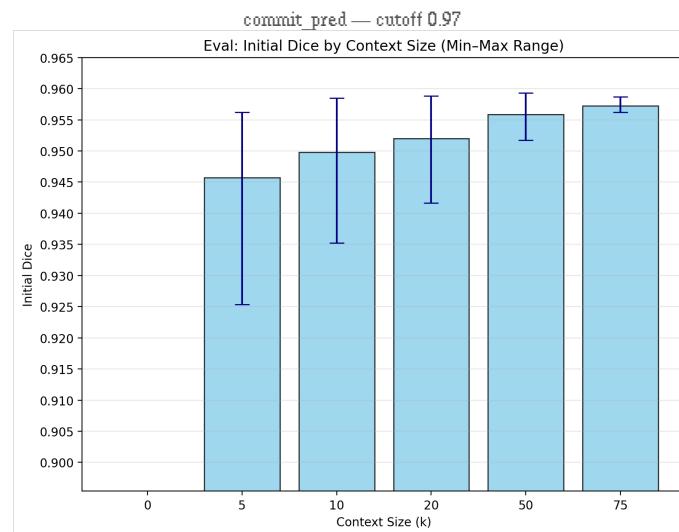
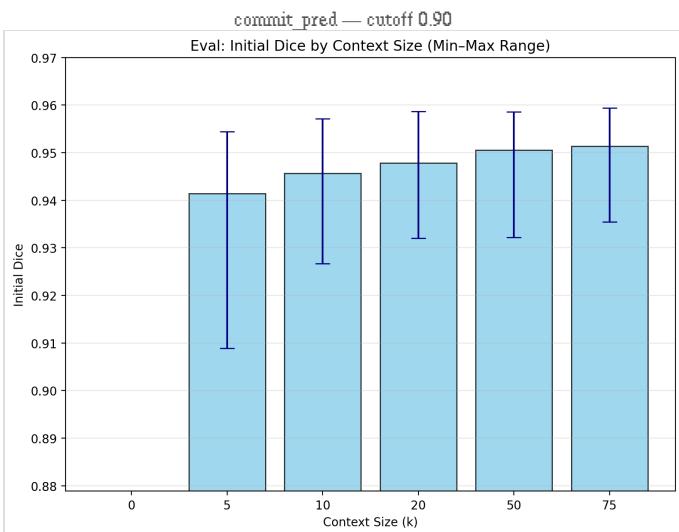
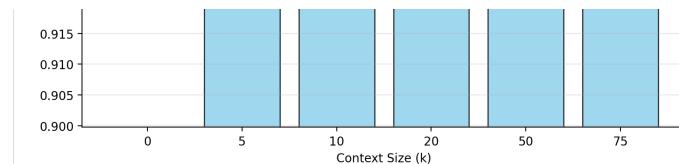
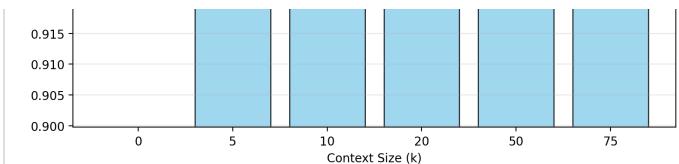


eval_initial_dice_iqr.png

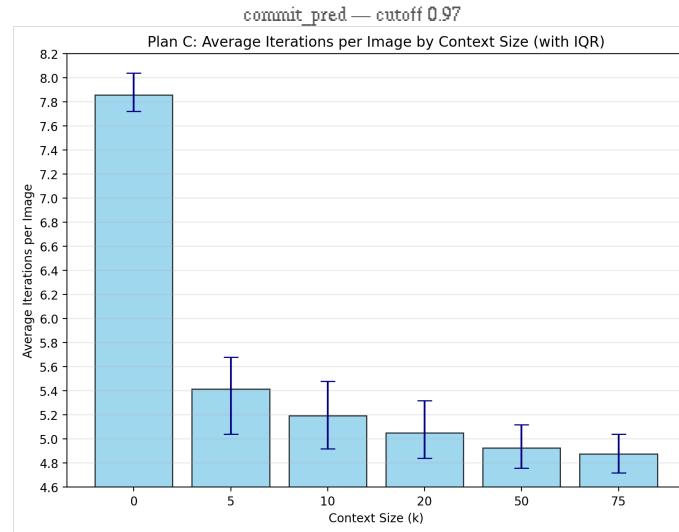
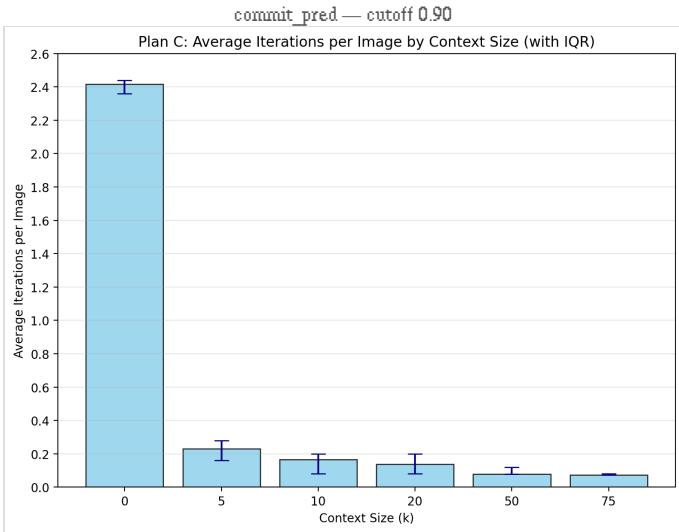
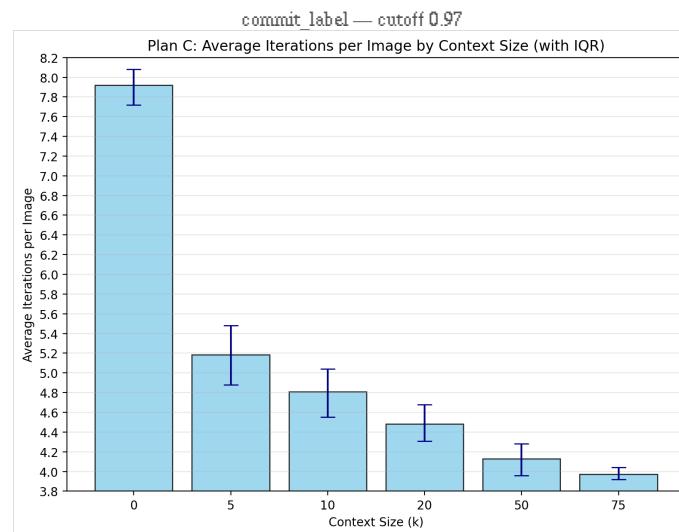
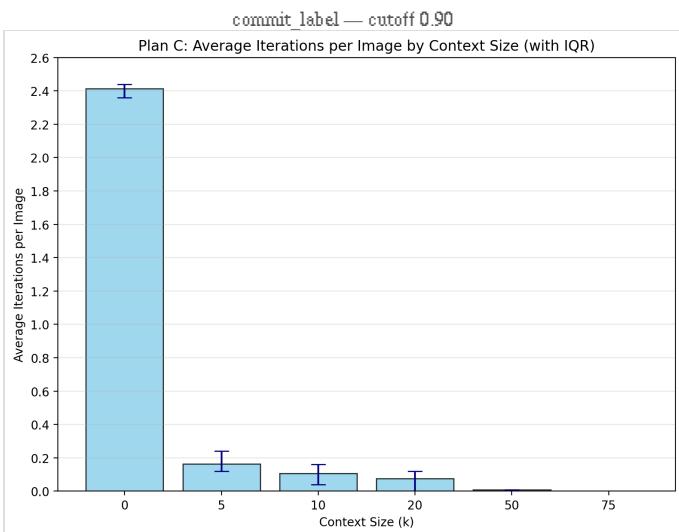


eval_initial_dice_range.png



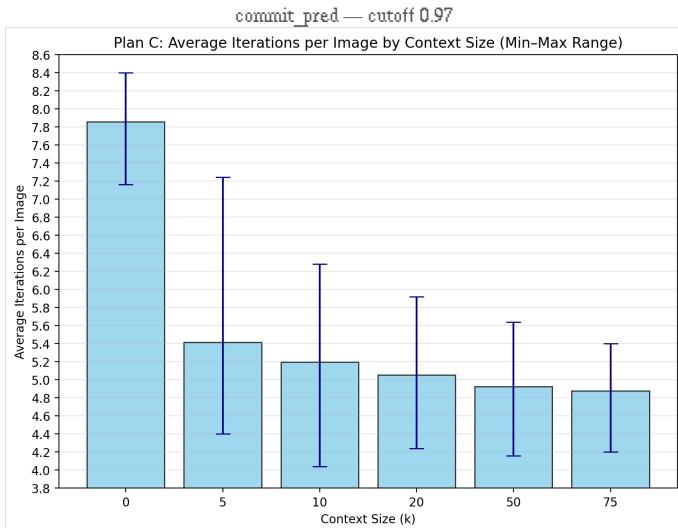
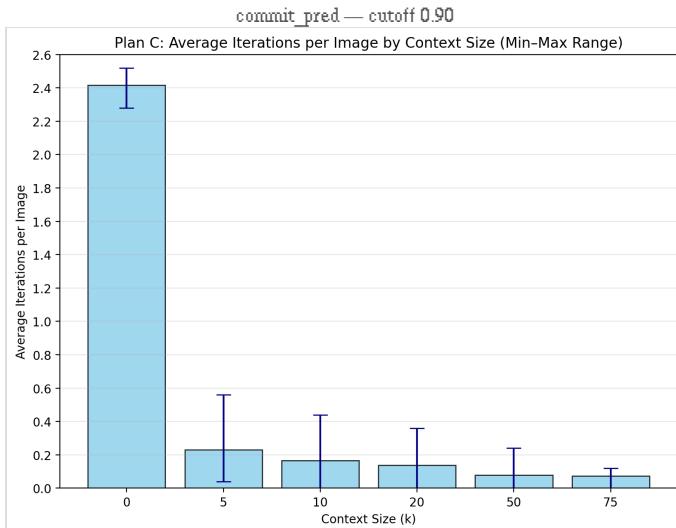
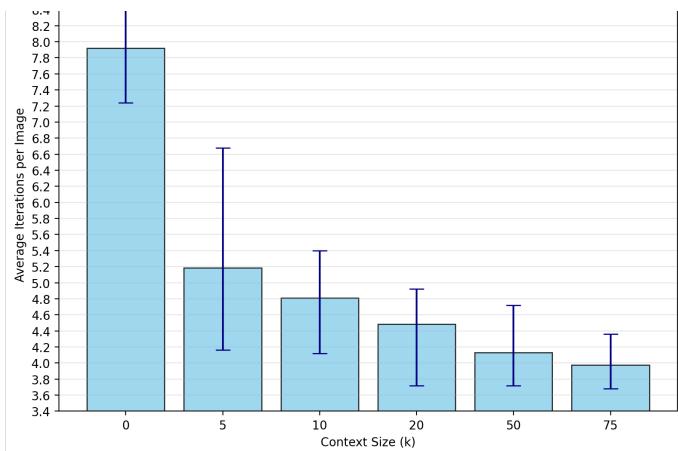
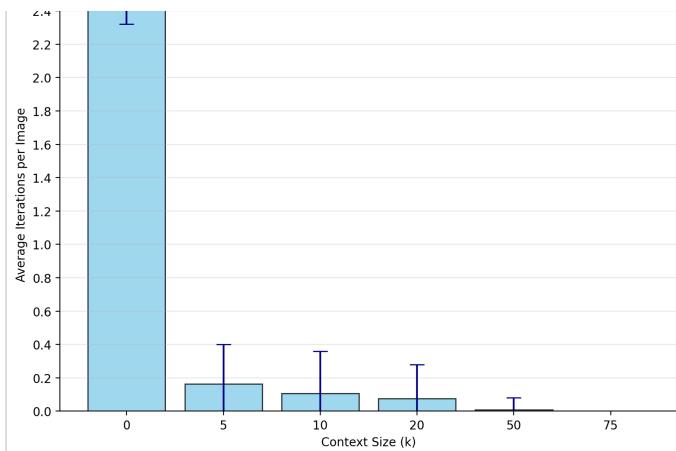


plan_c_avg_iterations_iqr.png

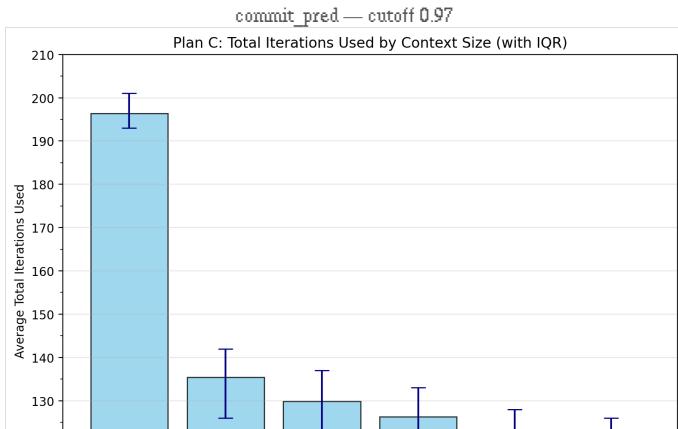
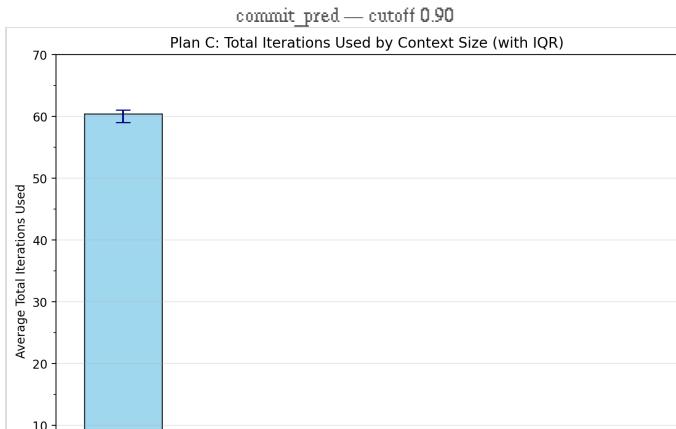
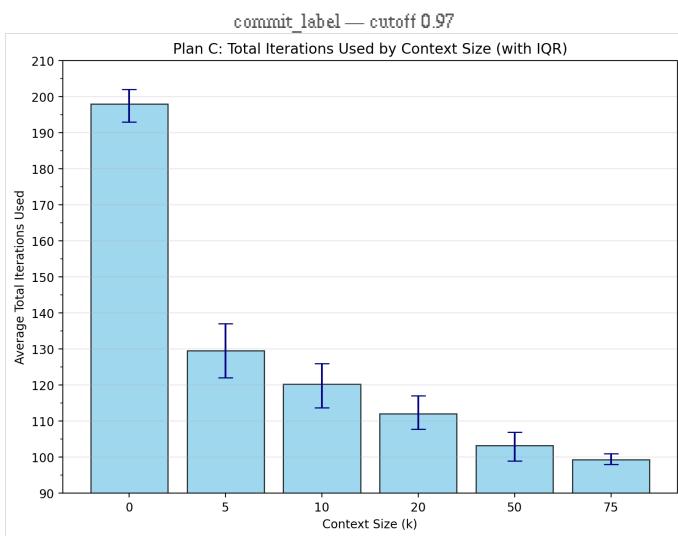
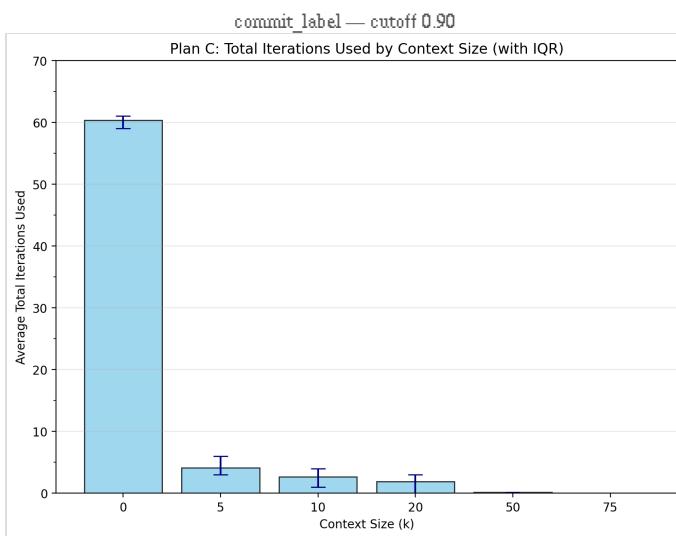


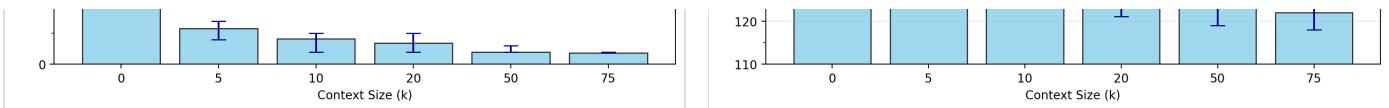
plan_c_avg_iterations_range.png





plan_c_total_iterations.png





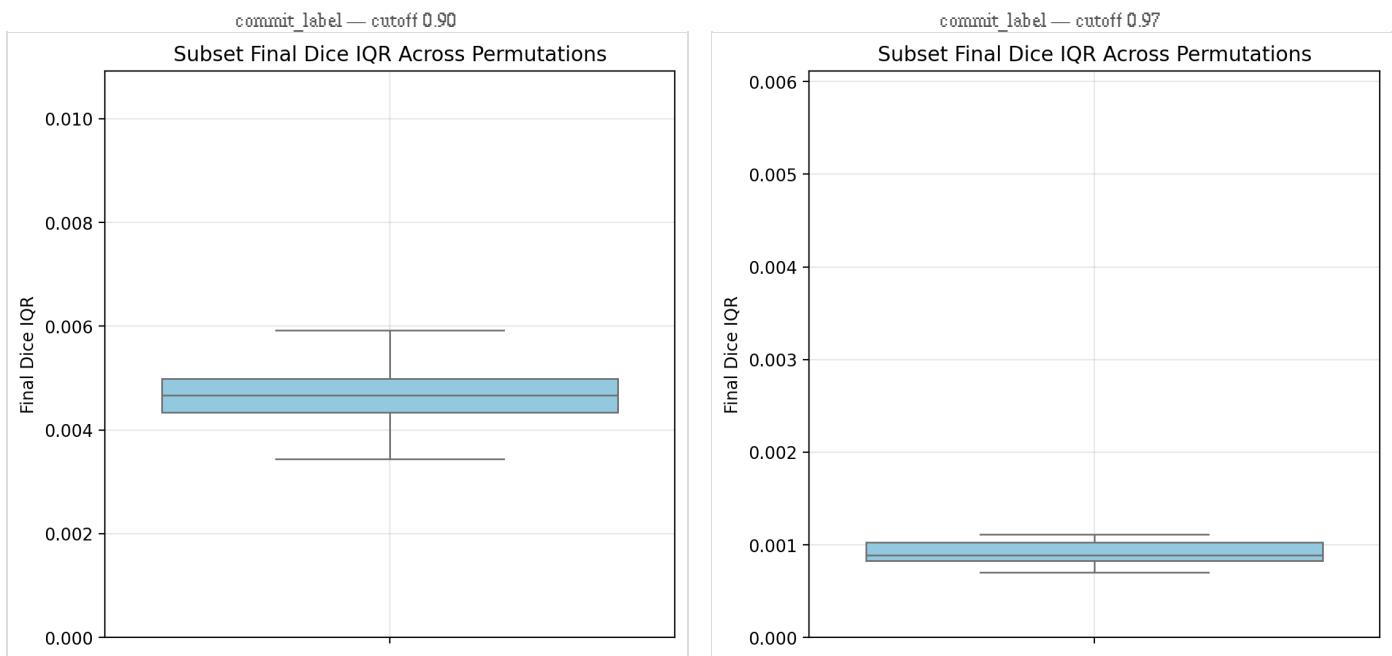
Plan B — Interleaved Label/Pred

In [4]:

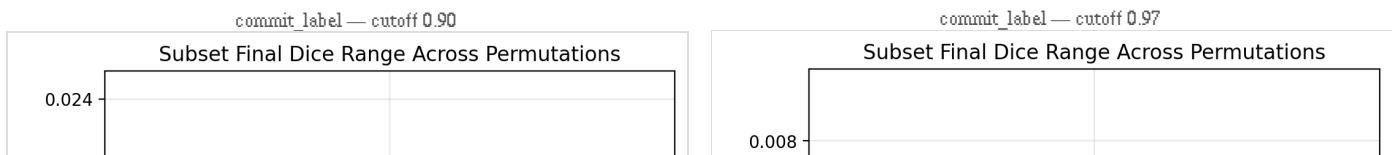
```
label_map = build_pairs_map(plan_b_figures(paths['commit_label_90']), plan_b_figures(paths['commit_label_97']))
pred_map = build_pairs_map(plan_b_figures(paths['commit_pred_90']), plan_b_figures(paths['commit_pred_97']))
show_interleaved('Plan B — Interleaved (commit_label & commit_pred)', label_map, pred_map)
```

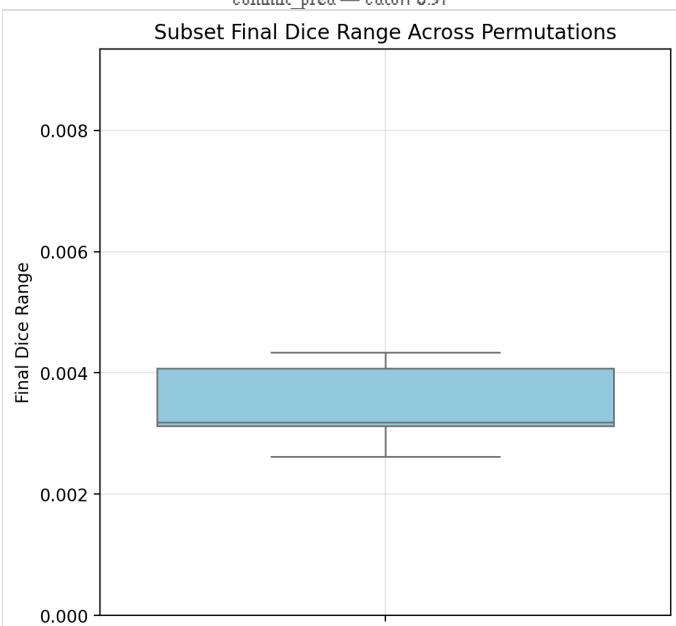
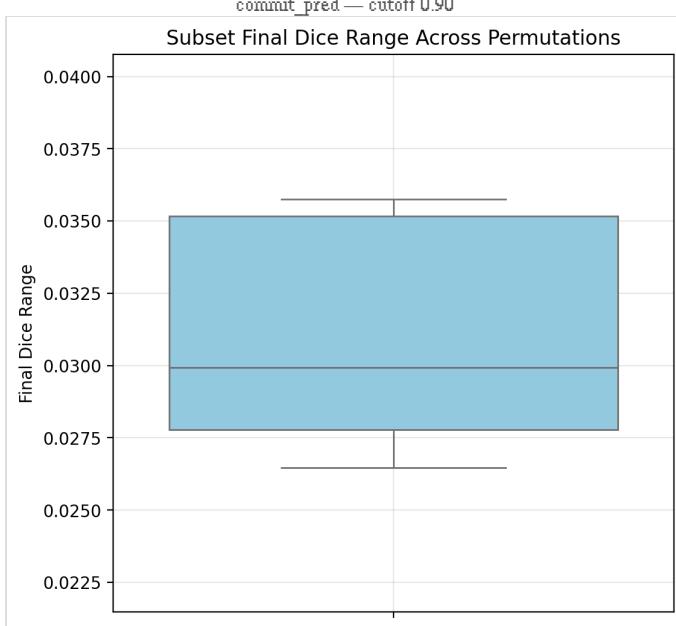
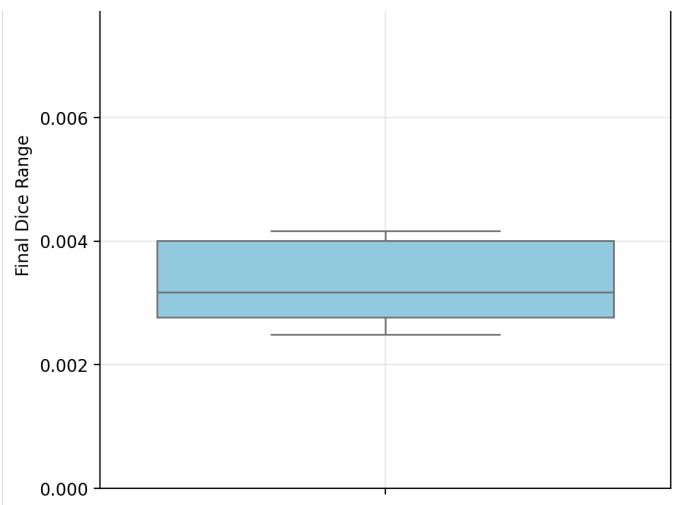
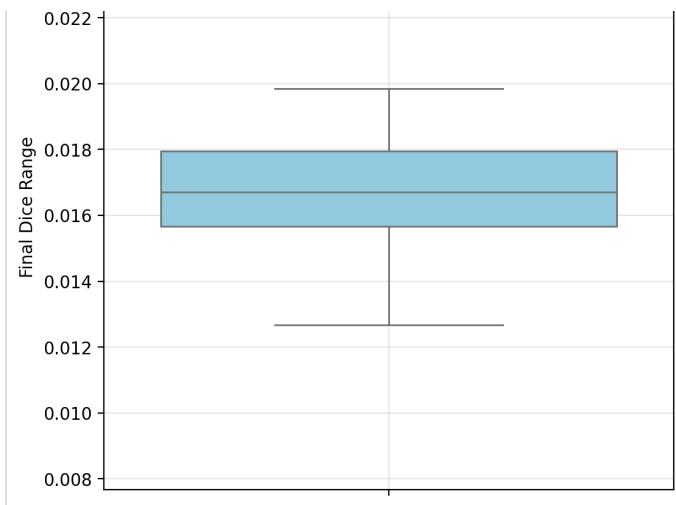
Plan B — Interleaved (commit_label & commit_pred)

`subset_final_dice_iqr.png`

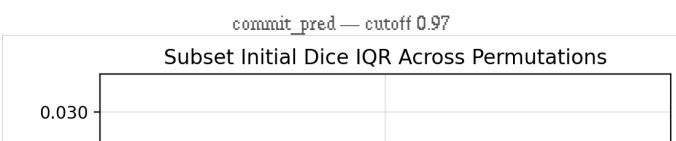
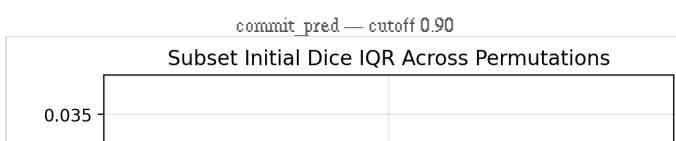
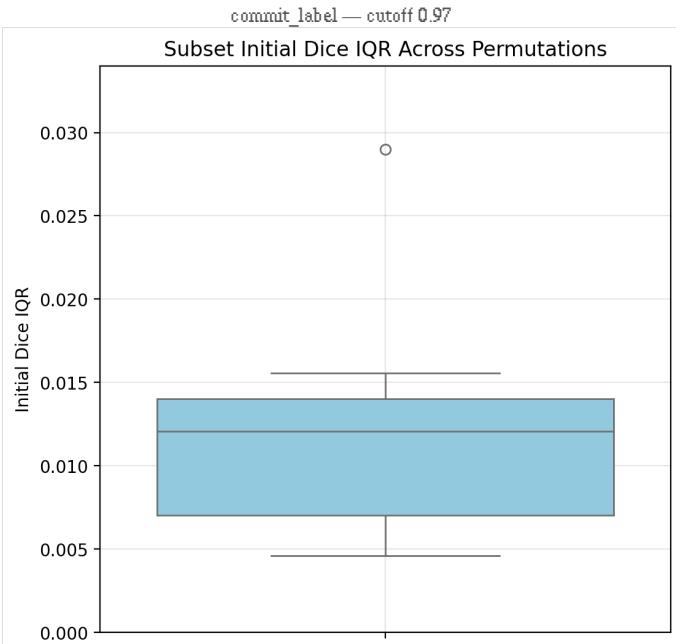
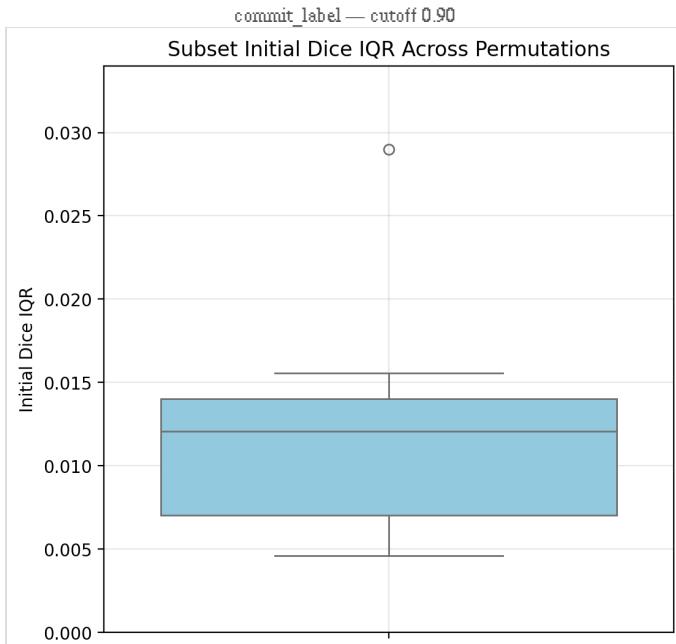


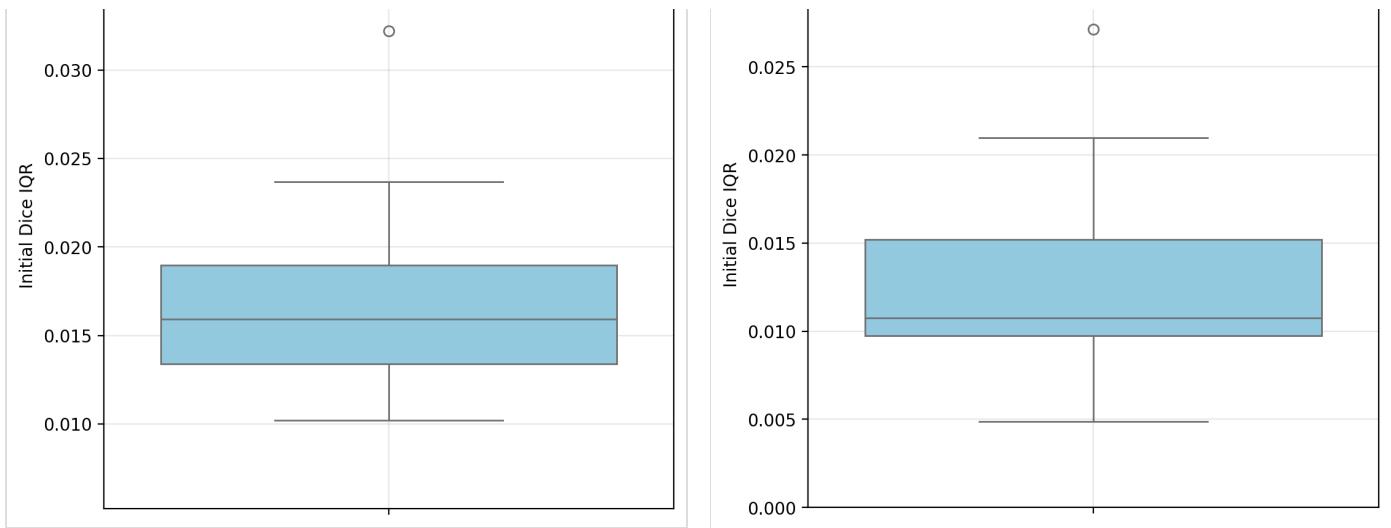
`subset_final_dice_range.png`



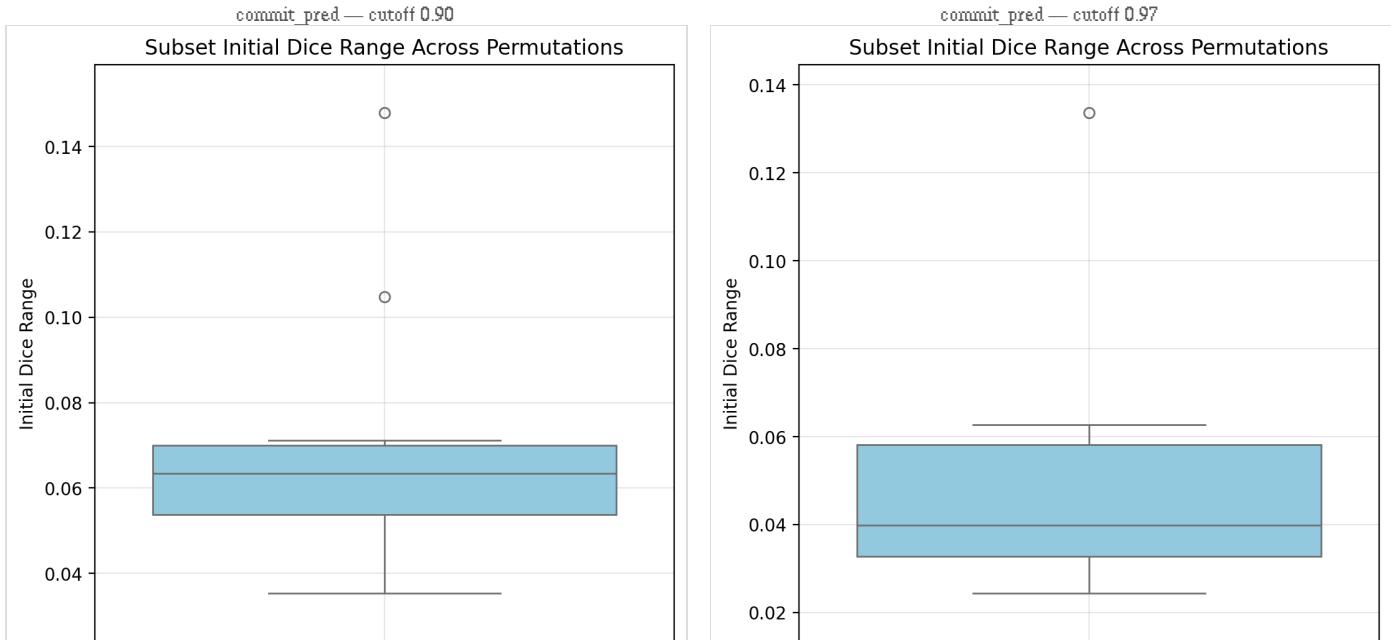
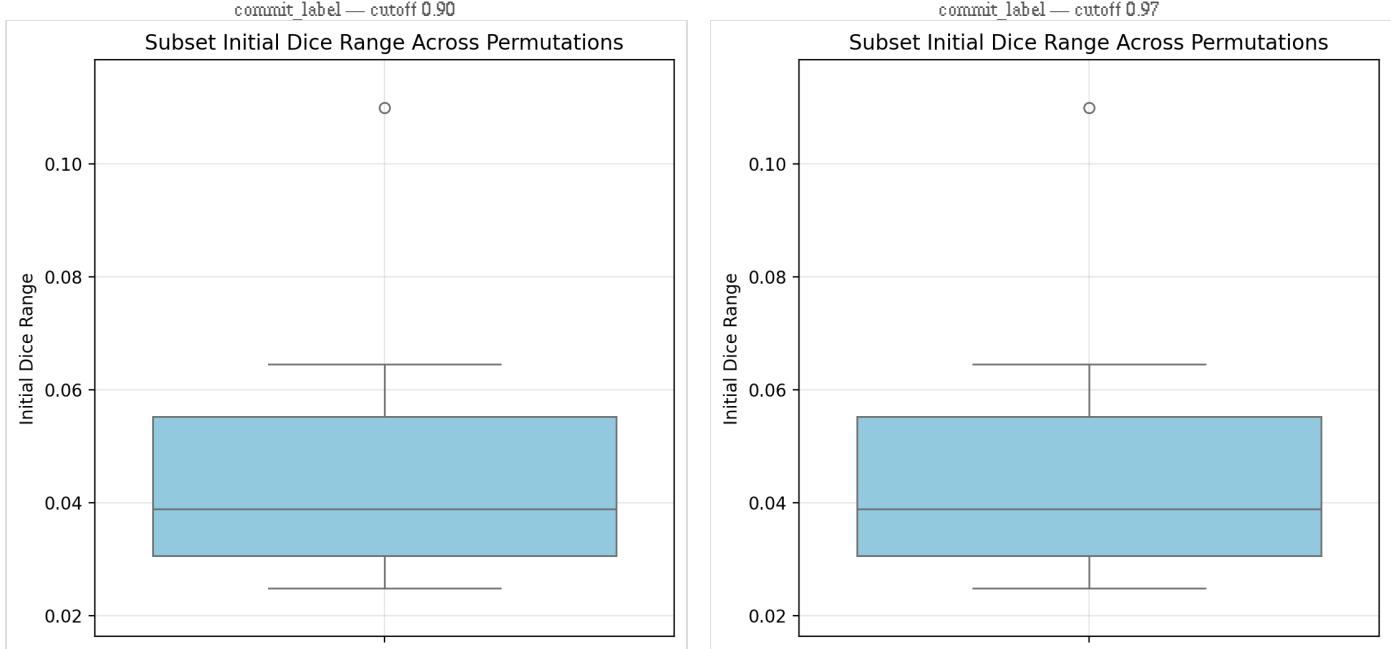


subset_initial_dice_iqr.png



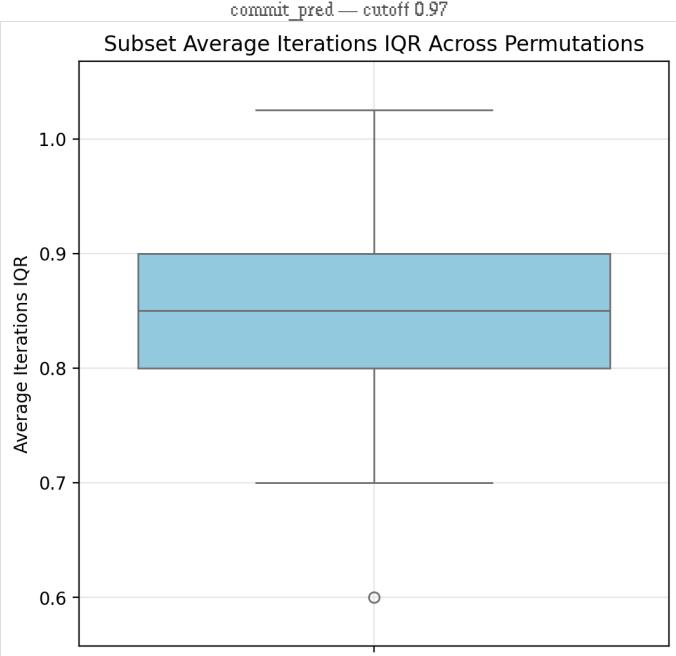
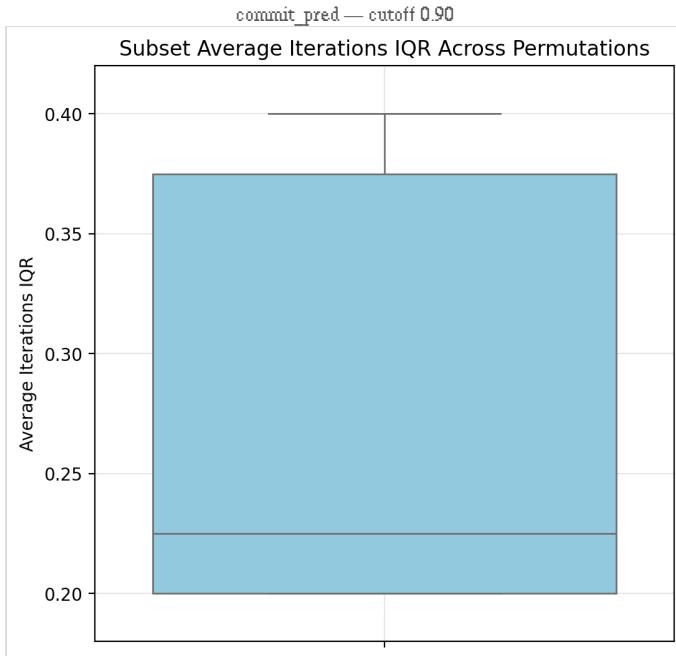
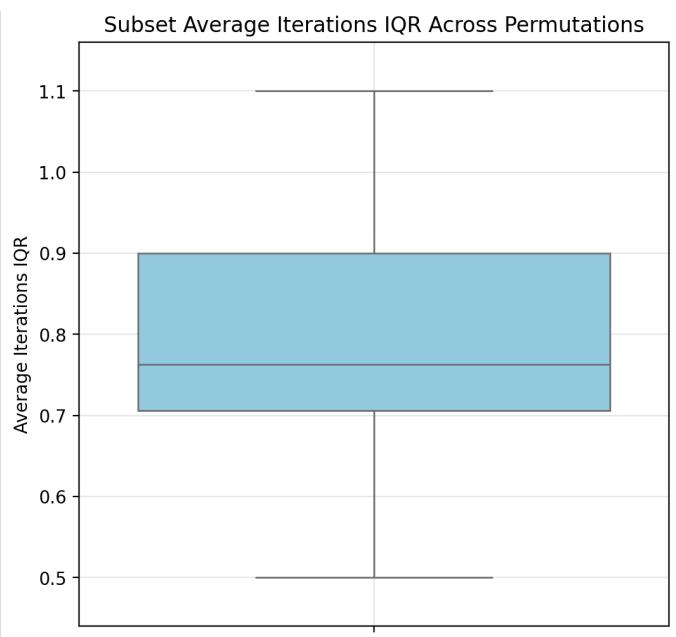
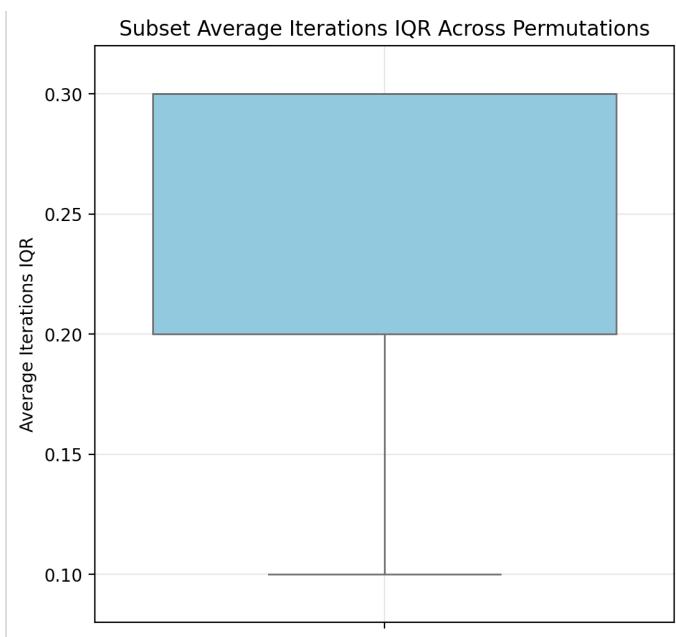


subset_initial_dice_range.png

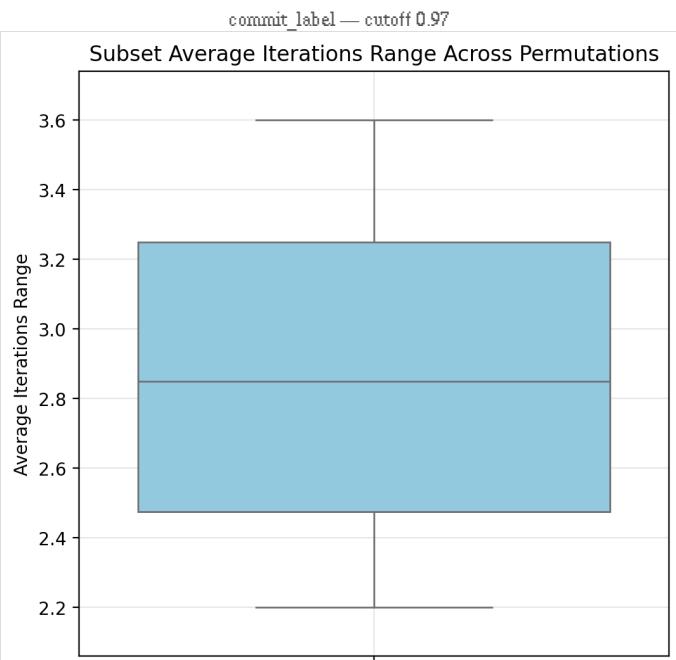
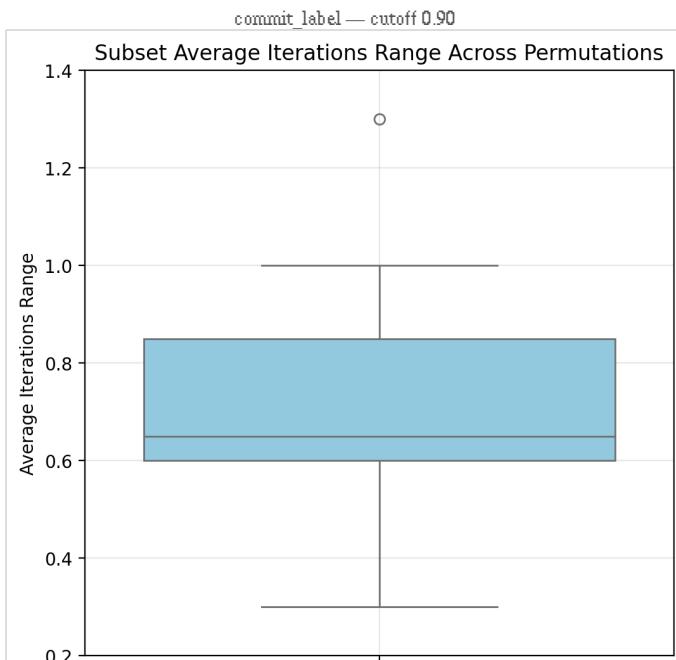


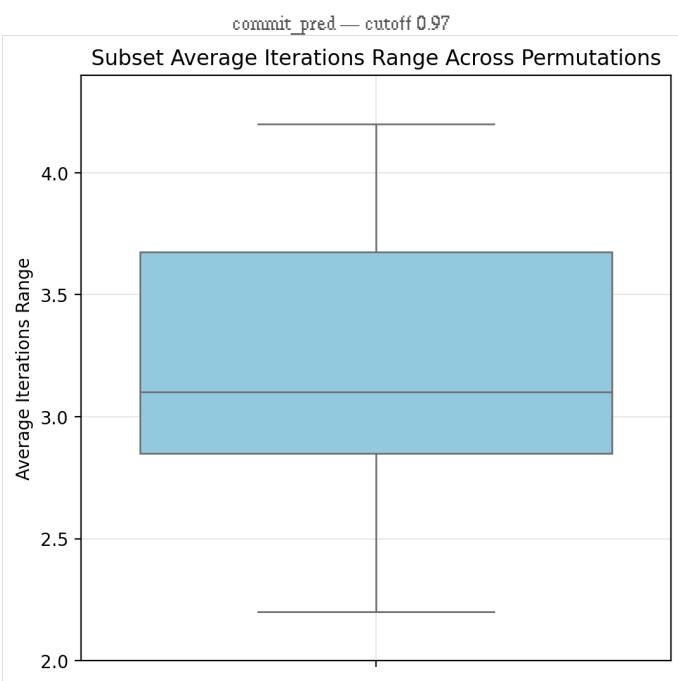
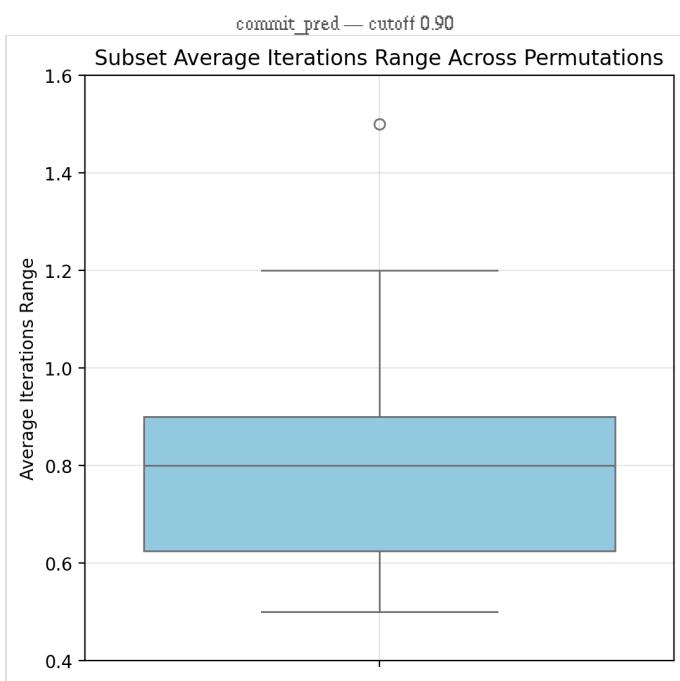
subset_iterations_iqr.png

commit_label — cutoff 0.90 commit_label — cutoff 0.97

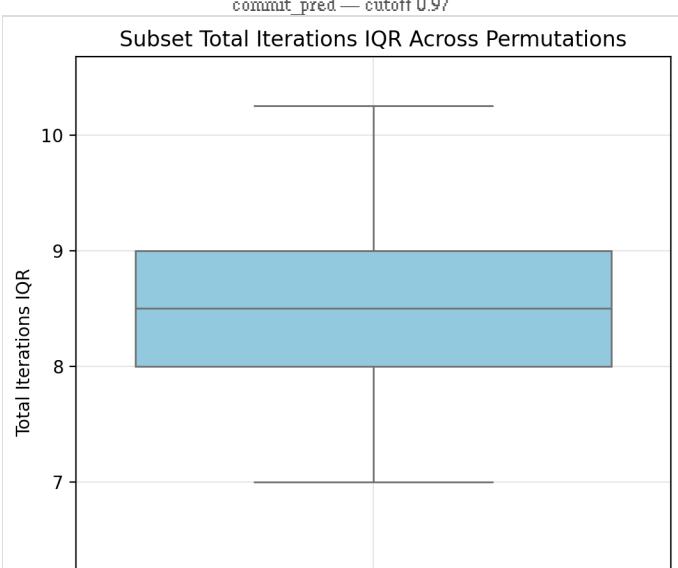
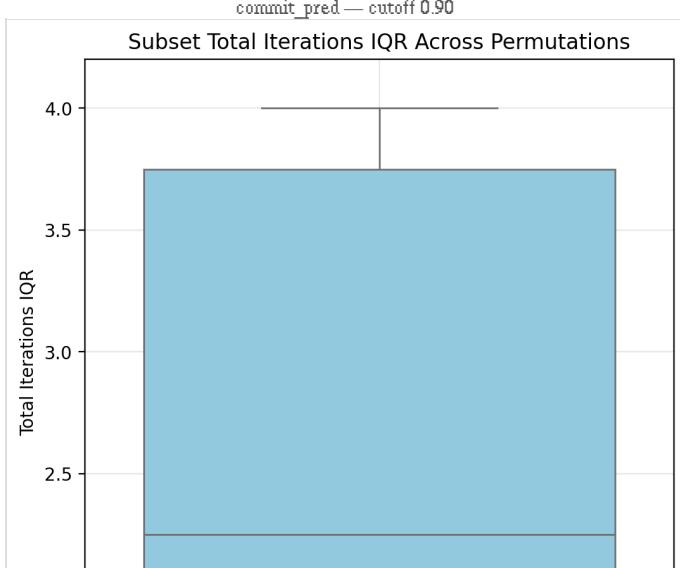
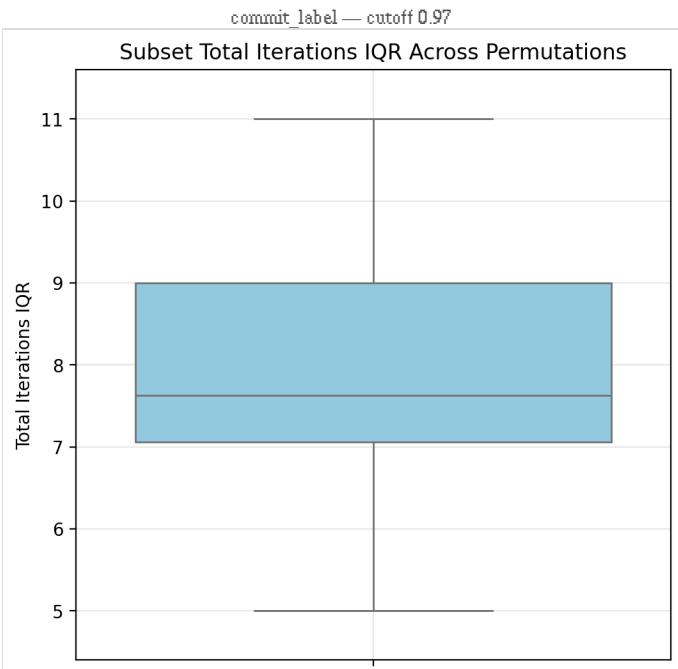
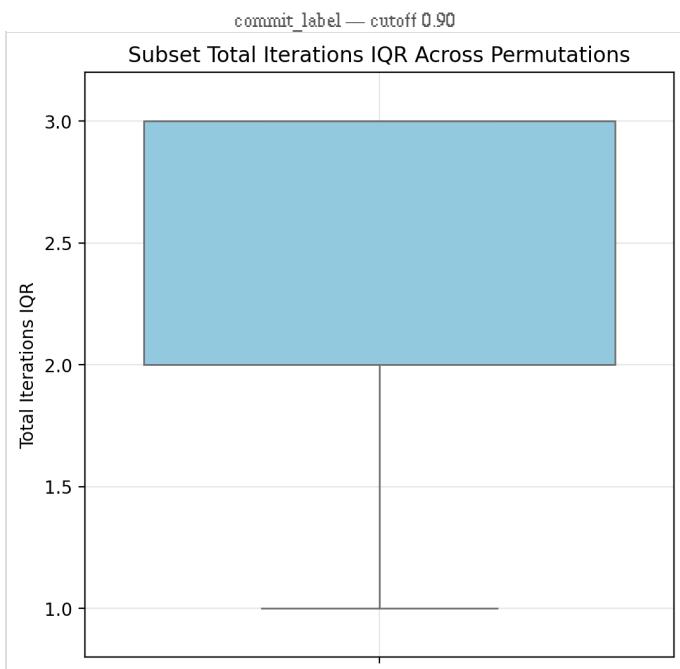


subset_iterations_range.png





subset_iterations_total_iqr.png





subset_iterations_total_range.png

