

```
# plotting both hit and false alarm rates per condition and emotion
(requires loading lima_falseAlarm~cond.R, lima_falseAlarm~cond*em.R,
lima_hit~cond.R, and lima_hit~cond*em.R)
```

```
df_fa = df_plot # run the code in file lima_falseAlarm_cond*em, make
graph for false alarms
```

```
df_hit = df_plot # run the code in file lima_hit~cond*em, make graph
for hits
```

```
# re-label conditions
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```
df_hit$condition = as.character(df_hit$condition)
df_hit$condition[df_hit$condition=='Load 1'] = 'Low load'
df_hit$condition[df_hit$condition=='Load 2'] = 'High load'
df_hit$condition = factor(df_hit$condition,
levels=c('Deliberated','Fast','Low load','High load'))
```

```
df_fa$condition = as.character(df_fa$condition)
df_fa$condition[df_fa$condition=='Load 1'] = 'Low load'
df_fa$condition[df_fa$condition=='Load 2'] = 'High load'
df_fa$condition = factor(df_fa$condition,
levels=c('Deliberated','Fast','Low load','High load'))
```

```
# ...and put the two graphs together
```

```
ggplot (df_hit, aes(x=emotion, y=fit, color=condition,
shape=condition)) +
  geom_point(position=position_dodge(.7), size=3.5) +
  geom_errorbar(aes(ymin=lwr, ymax=upr), position=position_dodge(.
7), width=.5, show.legend=F) +
  geom_point(data=df_fa, position=position_dodge(.7), size=3.5) +
  geom_errorbar(data=df_fa, aes(ymin=lwr, ymax=upr),
position=position_dodge(.7), width=.5, show.legend=F) +
  geom_vline(xintercept=4.5, linetype=2) +
  geom_vline(xintercept=8.5, linetype=2) +
  geom_hline(yintercept=50, linetype=2) +
  scale_color_manual(name='',
values=c('gray70','gray50','gray30','gray10')) +
  scale_shape_manual(name='', values=c(2,17,1,16)) +
  scale_y_continuous(breaks=seq(0,100,by=10)) +
  xlab("") +
  ylab('Percentage of responses') +
  theme_bw () +
  theme(legend.position="top",
        panel.grid=element_blank()) +
  annotate("text", x=.5, y=70, label="A. Hits", hjust=0, size=4,
fontface='bold') +
  annotate("text", x=.5, y=30, label="B. False alarms", hjust=0,
size=4, fontface='bold') +
  annotate("text", x=2.5, y=45, label="Positive", hjust=.5, size=4)
+
  annotate("text", x=6.5, y=45, label="Negative", hjust=.5, size=4)
+
  annotate("text", x=9, y=45, label="Overall", hjust=.5, size=4)
```

```

# ggsave ('pix/hit&falseAlarms~cond*em.jpg', width=16, height=9,
units='cm', dpi=300, scale=1.3)
# ggsave ('pix/hit&falseAlarms~cond*em_40sounds.jpg', width=10,
height=4, units='cm', dpi=300, scale=2)

## alternative: for discarding 30-70%
ggplot (df_hit, aes(x=emotion, y=fit, color=condition,
shape=condition)) +
  geom_point(position=position_dodge(.7), size=3.5) +
  geom_errorbar(aes(ymin=lwr, ymax=upr), position=position_dodge(.
7), width=.5, show.legend=F) +
  geom_point(data=df_fa, position=position_dodge(.7), size=3.5) +
  geom_errorbar(data=df_fa, aes(ymin=lwr, ymax=upr),
position=position_dodge(.7), width=.5, show.legend=F) +
  geom_vline(xintercept=4.5, linetype=2) +
  geom_vline(xintercept=8.5, linetype=2) +
  # geom_hline(yintercept=50, linetype=2) +
  scale_color_manual(name='',
values=c('gray70','gray50','gray30','gray10')) +
  scale_shape_manual(name='', values=c(2,17,1,16)) +
  scale_y_continuous(breaks=seq(0,100,by=5)) +
  xlab("") +
  ylab('Percentage of responses') +
  theme_bw () +
  theme(legend.position="top",
        panel.grid=element_blank()) +
  annotate("text", x=.5, y=80, label="A. Hits", hjust=0, size=4,
fontface='bold') +
  annotate("text", x=.5, y=20, label="B. False alarms", hjust=0,
size=4, fontface='bold') +
  annotate("text", x=2.5, y=50, label="Positive", hjust=.5, size=4)
+
  annotate("text", x=6.5, y=50, label="Negative", hjust=.5, size=4)
+
  annotate("text", x=9, y=50, label="Overall", hjust=.5, size=4)

# ggsave ('pix/hit&falseAlarms~cond*em_gap.jpg', width=16,
height=16, units='cm', dpi=300, scale=1.3)

```